EDUS042208A





# **Engineering Data**

# **Split Type Air Conditioners**

# - Heat Pump -

# **FTXM-W** Series











# Split Type Air Conditioners FTXM-W Series

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### 1. Lineup

Indoor Unit	Outdoor Unit	Power Supply
FTXM09WVJU9	RXM09WVJU9	
FTXM12WVJU9	RXM12WVJU9	1 phase 200 220 \/ 60 L/z
FTXM18WVJU9	RXM18WVJU9	1 phase, 206 - 230 V, 60 HZ
FTXM24WVJU9	RXM24WVJU9	

Note: Power Supply Intake ; Outdoor Unit



Cautions 1. Air conditioners should not be installed in areas where corrosive gasses, such as acid gas or alkaline gas, are produced. 2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided and

choose an outdoor unit with anti-corrosion treatment.

### 2. Functions

Category	Functions	FTXM-W	/ series
Category	T unctions	09/12 class	18/24 class
Basic Functions	Inverter (with inverter power control)		•
	Operation limit	Refer to	page 26
	Standby electricity saving		
Compressor	Swing compressor	•	•
	Reluctance DC motor	•	
Comfortable Airflow	Power-airflow dual flaps	•	•
	Wide-angle louvers	•	
	Auto-swing (up and down)	•	
	Auto-swing (right and left)	•	
	3-D airflow	•	•
	COMFORT AIRFLOW operation (COANDA flap)	•	
	Draftless airflow in heating	•	
Comfort Control	Auto fan speed	•	•
	Switchable fan speed	•	
	Indoor unit quiet operation	•	
	QUIET OUTDOOR UNIT operation (manual)	•	
	INTELLIGENT EYE operation (auto energy saving)	•	•
	2-area INTELLIGENT FYE operation (focus and comfort)	•	_
	Quick warming function (preheating operation)		•
	Hot-start function	•	•
	Automatic defrosting		•
	Fan ston when thermo-off in cooling		
	Automatic operation (cooling and heating)		
	Program dry function		
	Hybrid cooling (debumidifying function)		
	Fan operation		
l ifestule			
Convenience			
-			
Health and	Titanium anatite deodorizing filter		
Cleanliness	Air filter (prefilter)		
	Wine-clean flat nanel		
		•*1	•*1
	Pemovable drain pan		
Pomoto Control and			
Timer			
	°E/°C abangaoyer P/C temporature diaploy (factory acting: °E)		
	Vireless I AN edepter (huilt in)		
	DIII NET compatible (adapter)	ontion	ontion
Morny Free	Auto restort (after newer failure)		option
(Reliability &	Solf diagnosis with P/C		
Durability)	Anti correction treatment of outdoor heat exchanger		
Llovibility			
riexibility		49.2 ft (15 m)	49.2 π (15 m)
	Iniuiti-spiit/spiit type compatible indoor unit		
Demete Original	rear-round cooling applicable (-20°C(-4°F)) ^2		
Remote Control			•
	Wired	option	option

• : Available

— : Not available

\*1 : Factory setting Off

\*2 : This operation limit is allowed by installing the air direction adjustment grille (option).

# 3. Specifications

	Indoor Unit		FTXM09	9WVJU9	FTXM12WVJU9						
Model	Outdoor Unit		RXM09	WVJU9	RXM12	2WVJU9					
			Cooling	Heating	Cooling	Heating					
Power Supply		Phase	1	φ	1	φ					
		Hz, V	60 Hz, 20	18 - 230 V	60 Hz, 20	08 - 230 V					
Capacity Rated (Min	Max.)	Btu/h	9,000 (4,400 ~ 12,500)	11,000 (4,400 ~ 19,500)	12,000 (4,800 ~ 16,000)	13,600 (4,800 ~ 22,600)					
Power Consumption	(Rated)	W	552 - 552	701 - 701	909 - 909	906 - 906					
Power Factor (Rate	4)	%	92.8 - 92.5	94 7 - 94 6	96.3 - 96.2	96.8 - 96.8					
SEER2 / HSPE2	~)	,,,	27.40	11.20	25.20	10 70					
EER2 (Rated)		Btu/b-\W	16.30		13.20						
COP2 (Pated)			10.00	4.60	13.20	4.40					
Dining Connection	Liquid	in (mm)		4.00		4.40					
Fipling Connection	Cas	in. (mm)	φ 1/4	(0.4)	ψ 1/4	(0.4)					
	Gas	In. (mm)	¢ 3/8	(9.5)	¢ 3/8	3 (9.5)					
	Drain	in. (mm)	φ 5/8	(16)	¢ 5/8	8 (16)					
Max. Interunit Piping	Length	ft (m)	82 (	(25)	82	(25)					
Max. Interunit Heigh	t Difference	ft (m)	65-5/	8 (20)	65-5/	(8 (20)					
Chargeless		ft (m)	49-1/4	4 (15)	49-1/	4 (15)					
Amount of Additiona Refrigerant	I Charge of	oz/ft (g/m)	0.22	(20)	0.22	2 (20)					
Indoor Unit			FTXM09	WVJU9	FTXM1	2WVJU9					
Front Panel Color			White	(N-9.5)	White	(N-9.5)					
Airflow Rates	Н		516 (14.6)	516 (14.6)	558 (15.8)	558 (15.8)					
	М	cfm	339 (9.6)	371 (10.5)	395 (11.2)	413 (11.7)					
	L	(m <sup>3</sup> /min)	251 (7.1)	304 (8.6)	293 (8.3)	339 (9.6)					
	SI		219 (6.2)	251 (7.1)	226 (6.4)	254 (7.2)					
Fan	Type		Cross F	low Fan	Cross E	Flow Fan					
	Speed	Stens	5 Steps (		5 Steps (						
Heat Exchanger	Туре	01003	Multi Slit Ein		Multi Slit Ein	45 Hi XB tubo					
neat Exchanger	Deve v Steres I	on ath (name)	Wulti Silt Fill,		Multi Silt Fill,	φ5 HI AB-tube					
	/ FPI	Lengun (mm)	2 × 16, 1 × 8, 7 1 × 4, 7	704 / 18 704 / 18 704 / 18	2 ^ 10, 1 × 8, 1 × 4,	704 / 18 704 / 18 704 / 18					
Dimensions (H × W	× D)	in. (mm)	11-3/4 × 36-1/4 × 10-1	3/16 (299 × 920 × 275)	11-3/4 × 36-1/4 × 10-1	3/16 (299 × 920 × 275)					
Packaged Dimensio	ns (H × W × D)	in. (mm)	14-15/16 × 39-3/4 × 15-	3/8 (380 × 1.010 × 391)	14-15/16 × 39-3/4 × 15	-3/8 (380 × 1.010 × 391)					
Weight (Mass)	( /	lbs (ka)	29 (	(13)	29	(13)					
Gross Weight (Gros	s Mass)	lbs (kg)	38 (	(18)	38 (18)						
Sound Pressure Lev		dB(A)	13/33/25/22	/3/35/30/25	45/37/29/23 45/39/32/26						
Outdoor Unit		GD(//)	RYMOR	WV III9	RXM12WVJU9						
Casing Color			lyon	White	lvory White						
Casing Color	Tuno		Hormotically So		Ivory White						
Compressor	Madal		nemetically Sea		Hermetically Sealed Swing Type						
Defrigerent Oil	Turne		211478		2Y147BKCX1A						
Reingerant Oli	Туре	(1)	FWS	(0.40)	FW50DA						
		OZ (L)	14.54	(0.43)	14.54	(0.43)					
Refrigerant	Туре		R-	32	R	-32					
	Charge	Ibs (kg)	2.16 (	(0.98)	2.16	(0.98)					
Airflow Rates	H / SL	ctm (m <sup>3</sup> /min)	1,317 / 1,183 (37.3 / 33.5)	1,296 / 922 (36.7 / 26.1)	1,487 / 1,317 (42.1 / 37.3)	1,487/922 (42.1/26.1)					
Fan	Туре		Prop	peller	Pro	peller					
Heat Exchanger	Туре		Waffle Fin, $\phi_7$	7 Hi XSL-tube	Waffle Fin, φ	7 Hi XSL-tube					
	Rows × Stages, I / FPI	Length (mm)	2 × 26,	873 / 18	2 × 26,	873 / 18					
Dimensions (H × W	× D)	in. (mm)	23-7/16 × 33-1/4 × 11-1	3/16 (595 × 845 × 300)	23-7/16 × 33-1/4 × 11-	13/16 (595 × 845 × 300)					
Packaged Dimensio	ns (H × W × D)	in. (mm)	26 × 39-5/8 × 16-15/1	6 (660 × 1,007 × 430)	26 × 39-5/8 × 16-15/16 (660 × 1 007 × 430)						
Weight (Mass)		lbs (ka)	96 (	(44)	96 (44)						
Gross Weight (Gros	s Mass)	lbs (kg)	103	(47)	103 (47)						
Sound Pressure Lev	rel (H / SL)	dB(A)	47/-	49/	49/-	52/					
Conditions Based or	<u>וווווווווווווווווווווווווווווווווווו</u>		Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB) Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB) Piping Length: 25 ft (7.5 m)	Indoor; 70°FDB (21.1°CDB) / 60°FWB (15.6°CWB) Outdoor; 47°FDB (8.3°CDB) / 43°FWB (6.1°CWB) Piping Length: 25 ft (7.5 m)	Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)         Indoor ; 70°FDB (21.1°CDI 60°FWB (15.6°CWB)           Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB)         Outdoor ; 47°FDB (8.3°CC / 43°FWB (6.1°CWB)           Piping Length: 25 ft (7.5 m)         Piping Length: 25 ft (7.5 m)						
Drawing No.			3D142	2// 3A	3D14	2//3A					
Notes			SL: The quiet fan level of the ai	rflow rate setting.	SL: The quiet fan level of the a	irflow rate setting.					

Conversion Formulae kcal/h = kW × 860 Btu/h = kW × 3412 cfm = m<sup>3</sup>/min × 35.3

	Indoor Unit		FTXM18	WVJU9	FTXM24WVJU9						
Model	Outdoor Unit		RXM18	WVJU9	RXM24	WVJU9					
	Outdoor Onit		Cooling	Heating	Cooling	Heating					
Power Supply	,	Phase	1	φ	1	φ					
		Hz, V	60 Hz, 20	8 - 230 V	60 Hz, 20	08 - 230 V					
Capacity Rated (Min.	- Max.)	Btu/h	18.000 (9.000 ~ 22.000)	21.600 (9.000 ~ 30.200)	21.600 (9.000 ~ 26.000)	24,000 (9,000 ~ 32,200)					
Power Consumption	(Rated)	W	1.440 - 1.440	1.758 - 1.758	1.800 - 1.800	1.987 - 1.987					
Power Factor (Rated	)	%	955-954	97.6 - 97.6	97.3 - 97.3	99.0 - 99.0					
SEER2 / HSPE2	/	,,,	22 70	10.00	22.00	10.00					
EER2 (Rated)		Btu/h·W	12.50		12.00						
COP2 (Rated)			-	3.60		3 54					
Diping Connection	Liquid	in (mm)		(6.4)		(6.4)					
	Cas	in. (mm)	ψ 1/ <del>1</del>	(12.7)	ψ 1/ <del>-</del>	(15.0)					
	Drain	in. (mm)	ψ 1/2 (	(12.7)	ψ 5/8	(15.9)					
Max Interupit Diping	Longth	ft (m)	φ 5/8	2 (20)	φ 5/6	2 (20)					
Max. Interunit Piping	Difference	IL (III)	90-1/2	(25)	96-1/	(25)					
Max. Interunit Height	Difference	π (m)	82 (	(25)	82	(25)					
Chargeless		π (m)	49-1/4	4 (15)	49-1/	4 (15)					
Amount of Additional Refrigerant	Charge of	oz/ft (g/m)	0.22	(20)	0.22	(20)					
Indoor Unit			FTXM18	SWVJU9	FTXM24	1WVJU9					
Front Panel Color			White (	(N-9.5)	White	(N-9.5)					
Airflow Rates	Н		777 (22.0)	777 (22.0)	844 (23.9)	844 (23.9)					
	M	cfm	583 (16.5)	558 (15.8)	653 (18.5)	607 (17.2)					
	L	(m <sup>3</sup> /min)	484 (13.7)	466 (13.2)	498 (14.1)	498 (14.1)					
	SL	1	427 (12.1)	413 (11.7)	452 (12.8)	452 (12.8)					
Fan	Туре		Cross F	low Fan	Cross Flow Fan						
	Speed	Steps	5 Steps, C	uiet, Auto	5 Steps, 0	Quiet, Auto					
Heat Exchanger	Type		Multi Slit Fin.	65 Hi XB-tube	Multi Slit Fin.	φ5 Hi XB-tube					
5	Rows × Stages.	Length (mm)	2 × 18.1	884 / 18	2 × 18.	884 / 18					
	/ FPI		1 × 8, 8 1 × 4, 8	84 / 18 84 / 18	1 × 8, 8 1 × 4, 8	884 / 18 884 / 18					
Dimensions (H × W >	< D)	in. (mm)	11-3/4 × 43-5/16 × 10-13	3/16 (299 × 1,100 × 275)	11-3/4 × 43-5/16 × 10-1	3/16 (299 × 1,100 × 275)					
Packaged Dimension	ns (H × W × D)	in. (mm)	15-13/16 × 47-3/4 × 15-	1/2 (401 × 1,212 × 393)	15-13/16 × 47-3/4 × 15-	1/2 (401 × 1,212 × 393)					
Weight (Mass)		lbs (kg)	33 (	(15)	33	(15)					
Gross Weight (Gross	Mass)	lbs (kg)	46 (	(21)	46	(21)					
Sound Pressure Leve	el (H / M / L / SL)	dB(A)	49 / 41 / 36 / 33	49 / 40 / 35 / 32	51 / 44 / 37 / 34 51 / 42 / 37 / 34						
Outdoor Unit			RXM18	WVJU9	RXM24WVJU9						
Casing Color			lvory	White	Ivory White						
Compressor	Туре	-	Hermetically Sea	aled Swing Type	Hermetically Sealed Swing Type						
	Model	-	2Y260B	PBX1A	2Y260BPBX1A						
Refrigerant Oil	Туре		FW6	8DA	FW68DA						
	Charge	oz (L)	30.43	(0.90)	30.43 (0.90)						
Refrigerant	Type		R-	32	R-	32					
Ŭ	Charge	lbs (ka)	2.98 (	(1.35)	2.98	(1.35)					
Airflow Rates	H/SL	cfm (m <sup>3</sup> /min)	2,119 / 1,833 (60.0 / 51.9)	2,062 / 1,773 (58,4 / 50,2)	2,179 / 1,833 (61,7 / 51,9)	2,119 / 1,833 (60.0 / 51.9)					
Fan	Туре		Prop	eller	Pror	peller					
Heat Exchanger	Type		Waffle Fin. 67	' Hi XSL-tube	Waffle Fin. o	7 Hi XSL-tube					
Liout Excitatiget	Rows × Stages,	Length (mm)	2 × 32, 9	920 / 18	2 × 32,	920 / 18					
Dimensions (H × W >	< D)	in. (mm)	28-15/16 × 34-1/4 × 12	-5/8 (735 × 870 × 320)	28-15/16 × 34-1/4 × 12	2-5/8 (735 × 870 × 320)					
Packaged Dimension	ns (H × W × D)	in. (mm)	31-7/8 × 41-9/16 × 18-1	1/4 (810 × 1,056 × 464)	31-7/8 × 41-9/16 × 18-	1/4 (810 × 1,056 × 464)					
Weight (Mass)		lbs (kg)	132	(60)	132	(60)					
Gross Weight (Gross	Mass)	lbs (kg)	143	(65)	143 (65)						
Sound Pressure Leve	el (H / SL)	dB(A)	54 / —	55 / —	55 / —	56/-					
Conditions Based on			Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB) Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB) Piping Length: 25 ft (7.5 m)	Indoor ; 70°FDB (21.1°CDB) / 60°FWB (15.6°CWB) Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6.1°CWB) Piping Length: 25 ft (7.5 m)	Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)         Indoor ; 70°FDB (21.1°CI 60°FWB (15.6°CWB)           Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB)         000°FWB (15.6°CWB)           Piping Length: 25 ft (7.5 m)         Piping Length: 25 ft (7.5 m)						
Drawing No.			3D142	2//4A	3D14	2//4A					
Notes			SL: The quiet fan level of the ai	rflow rate setting.	SL: The quiet fan level of the a	rflow rate setting.					

Conversion Formulae kcal/h = kW × 860 Btu/h = kW × 3412 cfm = m<sup>3</sup>/min × 35.3

### 4. Dimensions

# 4.1 Indoor Unit

### FTXM09/12WVJU9



C:3D129692

#### FTXM18WVJU9



#### FTXM24WVJU9



C:3D129694

#### 4.2 Outdoor Unit RXM09/12WVJU9



#### RXM18WVJU9



#### RXM24WVJU9



3D107983A

# 5. Wiring Diagrams

#### 5.1 Indoor Unit FTXM09/12WVJU9



C:3D129547A

#### FTXM18/24WVJU9

#### NOTE:

WHEN THE MAIN POWER IS TURNED OFF AND THEN BACK ON AGAIN, OPERATION WILL RESUME AUTOMATICALLY.



#### C:3D129548A

#### 5.2 Outdoor Unit RXM09/12WVJU9



C:3D129643B

#### RXM18/24WVJU9



# 6. Piping Diagrams

#### 6.1 Indoor Unit FTXM09/12WVJU9





FTXM18WVJU9

4D132992

4D132956

#### FTXM24WVJU9



4D132994

#### 6.2 Outdoor Unit RXM09/12WVJU9



RXM18WVJU9



3D132216

#### RXM24WVJU9



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# 7. Capacity Tables

#### FTXM09WVJU9 + RXM09WVJU9

#### Cooling (60 Hz, 208 V)

AFR	14.6
BF	0.16

Temp: Celsius / TC, SHC, PI: kW

IND	DOR	OUTDOOR TEMPERATURE (°CDB)																	
EWB	EDB	10 20							30		35				40		46		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	2.95	2.72	0.34	2.70	2.61	0.42	2.46	2.46	0.51	2.33	2.33	0.55	2.32	2.32	0.70	2.30	2.30	0.80
16.0	22.0	3.07	2.67	0.34	2.82	2.57	0.43	2.58	2.47	0.51	2.46	2.42	0.55	2.45	2.41	0.71	2.43	2.41	0.81
18.0	25.0	3.19	2.87	0.35	2.95	2.77	0.43	2.70	2.68	0.51	2.58	2.58	0.55	2.57	2.57	0.71	2.57	2.57	0.81
19.4	26.7	3.25	3.09	0.35	3.01	3.00	0.43	2.76	2.76	0.51	2.64	2.64	0.55	2.64	2.64	0.71	2.64	2.64	0.81
22.0	30.0	3.43	3.00	0.43	3.19	2.92	0.43	2.94	2.84	0.51	2.82	2.80	0.56	2.82	2.80	0.71	2.82	2.80	0.81
24.0	32.0	3.56	2.94	0.44	3.31	2.87	0.44	3.06	2.80	0.52	2.94	2.76	0.56	2.94	2.76	0.72	2.94	2.76	0.82

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

IND	DOR		OUTDOOR TEMPERATURE (°FDB)																
EWB	EDB	50 68						86			95				104		115		
°F	°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	ΡI
57.2	68.0	10.06	9.28	0.34	9.22	8.90	0.42	8.38	8.38	0.51	7.96	7.96	0.55	7.91	7.91	0.70	7.85	7.85	0.80
60.8	71.6	10.47	9.12	0.34	9.64	8.77	0.43	8.80	8.42	0.51	8.38	8.25	0.55	8.35	8.24	0.71	8.31	8.22	0.81
64.4	77.0	10.89	9.79	0.35	10.05	9.46	0.43	9.21	9.14	0.51	8.79	8.79	0.55	8.78	8.78	0.71	8.77	8.77	0.81
67.0	80.0	11.10	10.54	0.35	10.26	10.23	0.43	9.42	9.42	0.51	9.00	9.00	0.55	9.00	9.00	0.71	9.00	9.00	0.81
71.6	86.0	11.72	10.24	0.43	10.88	9.97	0.43	10.04	9.70	0.51	9.62	9.56	0.56	9.62	9.56	0.71	9.62	9.56	0.81
75.2	89.6	12.13	10.04	0.44	11.29	9.79	0.44	10.46	9.54	0.52	10.04	9.42	0.56	10.04	9.42	0.72	10.04	9.42	0.82

# Heating (60 Hz, 208 V) AFR 14.6

14.6

Temp: Celsius / TC, PI: kW

INDOOR		OUTDOOR TEMPERATURE (°CWB)														
EDB	-25 -20				-1	5	-10		-5		0		6		15.5	
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	3.27	1.55	3.33	1.56	3.44	1.57	4.02	1.61	4.61	1.65	5.20	1.69	5.91	1.74	7.14	1.88
21.1	2.93	1.60	3.08	1.61	3.22	1.61	3.82	1.65	4.41	1.69	5.00	1.73	5.72	1.78	6.94	1.92
22.0	2.80	1.62	2.97	1.62	3.14	1.63	3.73	1.67	4.33	1.71	4.92	1.75	5.64	1.80	6.86	1.94
24.0	2.66	1.64	2.87	1.64	3.05	1.65	3.65	1.69	4.25	1.73	4.84	1.76	5.56	1.81	6.78	1.95
25.0	2.59	1.65	2.82	1.65	3.01	1.66	3.61	1.69	4.21	1.73	4.80	1.77	5.52	1.82	6.74	1.96
27.0	2.46	1.67	2.72	1.67	2.93	1.67	3.53	1.71	4.13	1.75	4.72	1.79	5.44	1.84	6.67	1.98

#### Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR	OUTDOOR TEMPERATURE (°FWB)															
EDB	-13 -4			Ę	5	14		23		32		43		60		
°F	TC	PI	TC	PI	TC	PI	TC	ΡI	TC	PI	TC	ΡI	TC	ΡI	TC	PI
59.0	11.15	1.55	11.38	1.56	11.72	1.57	13.73	1.61	15.74	1.65	17.75	1.69	20.17	1.74	24.36	1.88
70.0	10.00	1.60	10.50	1.61	11.00	1.61	13.02	1.65	15.05	1.69	17.07	1.73	19.50	1.78	23.68	1.92
71.6	9.54	1.62	10.15	1.62	10.71	1.63	12.74	1.67	14.77	1.71	16.80	1.75	19.23	1.80	23.41	1.94
75.2	9.08	1.64	9.80	1.64	10.42	1.65	12.46	1.69	14.49	1.73	16.53	1.76	18.96	1.81	23.15	1.95
77.0	8.85	1.65	9.62	1.65	10.28	1.66	12.32	1.69	14.36	1.73	16.39	1.77	18.83	1.82	23.01	1.96
80.6	8.39	1.67	9.27	1.67	9.99	1.67	12.04	1.71	14.08	1.75	16.12	1.79	18.56	1.84	22.74	1.98

#### Cooling (60 Hz, 230 V)

AFR	14.6
BF	0.16

Temp: Celsius / TC, SHC, PI: kW

IND	DOR							OUT	DOOR	TEMP	ERATU	RE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	2.95	2.72	0.34	2.70	2.61	0.42	2.46	2.46	0.51	2.33	2.33	0.55	2.32	2.32	0.70	2.30	2.30	0.80
16.0	22.0	3.07	2.67	0.34	2.82	2.57	0.43	2.58	2.47	0.51	2.46	2.42	0.55	2.45	2.41	0.71	2.43	2.41	0.81
18.0	25.0	3.19	2.87	0.35	2.95	2.77	0.43	2.70	2.68	0.51	2.58	2.58	0.55	2.57	2.57	0.71	2.57	2.57	0.81
19.4	26.7	3.25	3.09	0.35	3.01	3.00	0.43	2.76	2.76	0.51	2.64	2.64	0.55	2.64	2.64	0.71	2.64	2.64	0.81
22.0	30.0	3.43	3.00	0.43	3.19	2.92	0.43	2.94	2.84	0.51	2.82	2.80	0.56	2.82	2.80	0.71	2.82	2.80	0.81
24.0	32.0	3.56	2.94	0.44	3.31	2.87	0.44	3.06	2.80	0.52	2.94	2.76	0.56	2.94	2.76	0.72	2.94	2.76	0.82

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

IND	DOR							OUT	DOOR	TEMP	ERATU	RE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	10.06	9.28	0.34	9.22	8.90	0.42	8.38	8.38	0.51	7.96	7.96	0.55	7.91	7.91	0.70	7.85	7.85	0.80
60.8	71.6	10.47	9.12	0.34	9.64	8.77	0.43	8.80	8.42	0.51	8.38	8.25	0.55	8.35	8.24	0.71	8.31	8.22	0.81
64.4	77.0	10.89	9.79	0.35	10.05	9.46	0.43	9.21	9.14	0.51	8.79	8.79	0.55	8.78	8.78	0.71	8.77	8.77	0.81
67.0	80.0	11.10	10.54	0.35	10.26	10.23	0.43	9.42	9.42	0.51	9.00	9.00	0.55	9.00	9.00	0.71	9.00	9.00	0.81
71.6	86.0	11.72	10.24	0.43	10.88	9.97	0.43	10.04	9.70	0.51	9.62	9.56	0.56	9.62	9.56	0.71	9.62	9.56	0.81
75.2	89.6	12.13	10.04	0.44	11.29	9.79	0.44	10.46	9.54	0.52	10.04	9.42	0.56	10.04	9.42	0.72	10.04	9.42	0.82

#### Heating (60 Hz, 230 V)

AFR 14.6

Temp: Celsius / TC, PI: kW

INDOOR						OL	JTDOOF	R TEMP	ERATU	RE (°CW	′B)					
EDB	-2	25	-2	20	-1	5	-1	0	-:	5	(	)	6	6	15	5.5
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	ΡI	TC	PI
15.0	3.27	1.55	3.33	1.56	3.44	1.57	4.02	1.61	4.61	1.65	5.20	1.69	5.91	1.74	7.14	1.88
21.1	2.93	1.60	3.08	1.61	3.22	1.61	3.82	1.65	4.41	1.69	5.00	1.73	5.72	1.78	6.94	1.92
22.0	2.80	1.62	2.97	1.62	3.14	1.63	3.73	1.67	4.33	1.71	4.92	1.75	5.64	1.80	6.86	1.94
24.0	2.66	1.64	2.87	1.64	3.05	1.65	3.65	1.69	4.25	1.73	4.84	1.76	5.56	1.81	6.78	1.95
25.0	2.59	1.65	2.82	1.65	3.01	1.66	3.61	1.69	4.21	1.73	4.80	1.77	5.52	1.82	6.74	1.96
27.0	2.46	1.67	2.72	1.67	2.93	1.67	3.53	1.71	4.13	1.75	4.72	1.79	5.44	1.84	6.67	1.98

#### Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR						Ol	JTDOOF	R TEMP	ERATU	RE (°FW	/B)					
EDB	-1	3		4	Ę	5	1	4	2	3	3	2	4	3	6	0
°F	TC	ΡI	TC	PI	TC	ΡI	TC	ΡI	TC	PI	TC	PI	TC	ΡI	TC	PI
59.0	11.15	1.55	11.38	1.56	11.72	1.57	13.73	1.61	15.74	1.65	17.75	1.69	20.17	1.74	24.36	1.88
70.0	10.00	1.60	10.50	1.61	11.00	1.61	13.02	1.65	15.05	1.69	17.07	1.73	19.50	1.78	23.68	1.92
71.6	9.54	1.62	10.15	1.62	10.71	1.63	12.74	1.67	14.77	1.71	16.80	1.75	19.23	1.80	23.41	1.94
75.2	9.08	1.64	9.80	1.64	10.42	1.65	12.46	1.69	14.49	1.73	16.53	1.76	18.96	1.81	23.15	1.95
77.0	8.85	1.65	9.62	1.65	10.28	1.66	12.32	1.69	14.36	1.73	16.39	1.77	18.83	1.82	23.01	1.96
80.6	8.39	1.67	9.27	1.67	9.99	1.67	12.04	1.71	14.08	1.75	16.12	1.79	18.56	1.84	22.74	1.98

#### Symbols:

AFR	: Airflow rate	(m³/min.)
BF	: Bypass factor	
EWB	: Entering wet bulb temp.	(°C) / (°F)
EDB	: Entering dry bulb temp.	(°C) / (°F)
TC	: Total capacity	(kW) / (kBtu/h)
SHC	: Sensible heat capacity	(kW) / (kBtu/h)
ΡI	: Power input	(kW)

- Notes:
- shows nominal (rated) capacities and power input (Cooling) and MAX capacities and power input (Heating). 1.
- 2. TC, PI and SHC must be calculated by interpolation using the figures in the above tables. (Figures out of the tables should not be used for calculation.)

- 3. Capacities are based on the following conditions. Corresponding refrigerant piping length : 25 ft (7.5 m) Level difference : 0 ft (0 m)
- 4. Airflow rate (AFR) and Bypass factor (BF) are tabulated above table.

#### FTXM12WVJU9 + RXM12WVJU9

#### Cooling (60 Hz, 208 V)

AFR	15.8
BF	0.16

Temp: Celsius / TC, SHC, PI: kW

IND	OOR							OUT	DOOR	TEMP	ERATU	IRE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	3.93	3.28	0.56	3.60	3.13	0.70	3.28	2.98	0.83	3.11	2.91	0.90	2.96	2.84	1.03	2.81	2.77	1.22
16.0	22.0	4.09	3.22	0.57	3.77	3.08	0.70	3.44	2.94	0.84	3.27	2.87	0.90	3.13	2.81	1.03	2.98	2.75	1.22
18.0	25.0	4.25	3.42	0.57	3.93	3.29	0.71	3.60	3.16	0.84	3.44	3.10	0.91	3.29	3.04	1.04	3.14	2.98	1.23
19.4	26.7	4.34	3.66	0.57	4.01	3.53	0.71	3.68	3.40	0.84	3.52	3.34	0.91	3.37	3.29	1.04	3.22	3.22	1.23
22.0	30.0	4.58	3.54	0.71	4.25	3.43	0.71	3.92	3.32	0.85	3.76	3.26	0.92	3.76	3.26	1.05	3.76	3.26	1.24
24.0	32.0	4.74	3.46	0.72	4.41	3.36	0.72	4.09	3.26	0.85	3.92	3.21	0.92	3.92	3.21	1.05	3.92	3.21	1.24

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

IND	DOR							OUT	DOOR	TEMP	ERATL	IRE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	ΡI
57.2	68.0	13.41	11.20	0.56	12.29	10.68	0.70	11.18	10.17	0.83	10.62	9.92	0.90	10.11	9.69	1.03	9.59	9.46	1.22
60.8	71.6	13.96	10.99	0.57	12.85	10.51	0.70	11.73	10.03	0.84	11.17	9.80	0.90	10.67	9.59	1.03	10.15	9.37	1.22
64.4	77.0	14.52	11.68	0.57	13.40	11.23	0.71	12.28	10.79	0.84	11.72	10.57	0.91	11.22	10.37	1.04	10.72	10.18	1.23
67.0	80.0	14.79	12.47	0.57	13.68	12.04	0.71	12.56	11.61	0.84	12.00	11.40	0.91	11.50	11.22	1.04	11.00	11.00	1.23
71.6	86.0	15.62	12.07	0.71	14.51	11.69	0.71	13.39	11.31	0.85	12.83	11.13	0.92	12.83	11.13	1.05	12.83	11.13	1.24
75.2	89.6	16.18	11.80	0.72	15.06	11.45	0.72	13.94	11.11	0.85	13.38	10.94	0.92	13.38	10.94	1.05	13.38	10.94	1.24

#### Heating (60 Hz, 208 V)

AFR 15.8

#### Temp: Celsius / TC, PI: kW

INDOOR						OL	JTDOOF	R TEMP	ERATU	RE (°CW	′B)					
EDB	-2	25	-2	20	-1	5	-1	0		5	(	)	6	3	15	5.5
O°	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	3.50	1.75	3.86	1.84	4.25	1.94	4.86	2.01	5.48	2.09	6.10	2.16	6.85	2.25	8.27	2.42
21.1	3.14	1.80	3.56	1.90	3.99	1.99	4.61	2.07	5.24	2.14	5.87	2.21	6.62	2.30	8.01	2.42
22.0	2.99	1.82	3.44	1.92	3.88	2.01	4.51	2.09	5.15	2.16	5.78	2.23	6.53	2.32	7.92	2.42
24.0	2.85	1.84	3.32	1.94	3.78	2.04	4.41	2.11	5.05	2.18	5.68	2.25	6.44	2.34	7.82	2.42
25.0	2.78	1.85	3.26	1.95	3.72	2.05	4.36	2.12	5.00	2.19	5.64	2.26	6.40	2.35	7.78	2.42
27.0	2.63	1.88	3.14	1.97	3.62	2.07	4.26	2.14	4.90	2.21	5.54	2.29	6.30	2.37	7.69	2.42

#### Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR						Ol	JTDOOF	R TEMP	ERATU	RE (°FW	/B)					
EDB	-1	3		4	5	5	1	4	2	3	3	2	4	3	6	0
°F	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	PI
59.0	11.93	1.75	13.17	1.84	14.49	1.94	16.59	2.01	18.71	2.09	20.83	2.16	23.38	2.25	28.20	2.42
70.0	10.70	1.80	12.15	1.90	13.60	1.99	15.74	2.07	17.89	2.14	20.03	2.21	22.60	2.30	27.34	2.42
71.6	10.21	1.82	11.74	1.92	13.24	2.01	15.40	2.09	17.56	2.16	19.71	2.23	22.29	2.32	27.01	2.42
75.2	9.71	1.84	11.34	1.94	12.89	2.04	15.06	2.11	17.23	2.18	19.39	2.25	21.98	2.34	26.69	2.42
77.0	9.47	1.85	11.13	1.95	12.71	2.05	14.89	2.12	17.06	2.19	19.23	2.26	21.82	2.35	26.54	2.42
80.6	8.98	1.88	10.73	1.97	12.35	2.07	14.55	2.14	16.74	2.21	18.91	2.29	21.51	2.37	26.23	2.42

#### Cooling (60 Hz, 230 V)

AFR	15.8
BF	0.16

Temp: Celsius / TC, SHC, PI: kW

IND	DOR							OUT	<b>FDOOR</b>	TEMP	ERATU	RE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	ΡI
14.0	20.0	3.93	3.28	0.56	3.60	3.13	0.70	3.28	2.98	0.83	3.11	2.91	0.90	2.96	2.84	1.03	2.81	2.77	1.22
16.0	22.0	4.09	3.22	0.57	3.77	3.08	0.70	3.44	2.94	0.84	3.27	2.87	0.90	3.13	2.81	1.03	2.98	2.75	1.22
18.0	25.0	4.25	3.42	0.57	3.93	3.29	0.71	3.60	3.16	0.84	3.44	3.10	0.91	3.29	3.04	1.04	3.14	2.98	1.23
19.4	26.7	4.34	3.66	0.57	4.01	3.53	0.71	3.68	3.40	0.84	3.52	3.34	0.91	3.37	3.29	1.04	3.22	3.22	1.23
22.0	30.0	4.58	3.54	0.71	4.25	3.43	0.71	3.92	3.32	0.85	3.76	3.26	0.92	3.76	3.26	1.05	3.76	3.26	1.24
24.0	32.0	4.74	3.46	0.72	4.41	3.36	0.72	4.09	3.26	0.85	3.92	3.21	0.92	3.92	3.21	1.05	3.92	3.21	1.24

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

IND	DOR							OUT	<b>FDOOR</b>	TEMP	ERATU	IRE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	ΡI
57.2	68.0	13.41	11.20	0.56	12.29	10.68	0.70	11.18	10.17	0.83	10.62	9.92	0.90	10.11	9.69	1.03	9.59	9.46	1.22
60.8	71.6	13.96	10.99	0.57	12.85	10.51	0.70	11.73	10.03	0.84	11.17	9.80	0.90	10.67	9.59	1.03	10.15	9.37	1.22
64.4	77.0	14.52	11.68	0.57	13.40	11.23	0.71	12.28	10.79	0.84	11.72	10.57	0.91	11.22	10.37	1.04	10.72	10.18	1.23
67.0	80.0	14.79	12.47	0.57	13.68	12.04	0.71	12.56	11.61	0.84	12.00	11.40	0.91	11.50	11.22	1.04	11.00	11.00	1.23
71.6	86.0	15.62	12.07	0.71	14.51	11.69	0.71	13.39	11.31	0.85	12.83	11.13	0.92	12.83	11.13	1.05	12.83	11.13	1.24
75.2	89.6	16.18	11.80	0.72	15.06	11.45	0.72	13.94	11.11	0.85	13.38	10.94	0.92	13.38	10.94	1.05	13.38	10.94	1.24

#### Heating (60 Hz, 230 V)

AFR 15.8

Temp: Celsius / TC, PI: kW

INDOOR						OL	JTDOOF	R TEMP	ERATU	RE (°CW	′B)					
EDB	-2	25	-2	20	-1	5	-1	0	-:	5	(	)	6	6	15	5.5
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	ΡI	TC	PI
15.0	3.50	1.75	3.86	1.84	4.25	1.94	4.86	2.01	5.48	2.09	6.10	2.16	6.85	2.25	8.27	2.43
21.1	3.14	1.80	3.56	1.90	3.99	1.99	4.61	2.07	5.24	2.14	5.87	2.21	6.62	2.30	8.04	2.48
22.0	2.99	1.82	3.44	1.92	3.88	2.01	4.51	2.09	5.15	2.16	5.78	2.23	6.53	2.32	7.95	2.50
24.0	2.85	1.84	3.32	1.94	3.78	2.04	4.41	2.11	5.05	2.18	5.68	2.25	6.44	2.34	7.86	2.52
25.0	2.78	1.85	3.26	1.95	3.72	2.05	4.36	2.12	5.00	2.19	5.64	2.26	6.40	2.35	7.82	2.53
27.0	2.63	1.88	3.14	1.97	3.62	2.07	4.26	2.14	4.90	2.21	5.54	2.29	6.30	2.37	7.72	2.55

#### Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR						Ol	JTDOOF	R TEMP	ERATU	RE (°FW	/B)					
EDB	-1	3		4	5	5	1	4	2	3	3	2	4	3	6	0
°F	TC	ΡI	TC	PI	TC	ΡI	TC	ΡI	TC	PI	TC	PI	TC	ΡI	TC	PI
59.0	11.93	1.75	13.17	1.84	14.49	1.94	16.59	2.01	18.71	2.09	20.83	2.16	23.38	2.25	28.23	2.43
70.0	10.70	1.80	12.15	1.90	13.60	1.99	15.74	2.07	17.89	2.14	20.03	2.21	22.60	2.30	27.45	2.48
71.6	10.21	1.82	11.74	1.92	13.24	2.01	15.40	2.09	17.56	2.16	19.71	2.23	22.29	2.32	27.14	2.50
75.2	9.71	1.84	11.34	1.94	12.89	2.04	15.06	2.11	17.23	2.18	19.39	2.25	21.98	2.34	26.82	2.52
77.0	9.47	1.85	11.13	1.95	12.71	2.05	14.89	2.12	17.06	2.19	19.23	2.26	21.82	2.35	26.67	2.53
80.6	8.98	1.88	10.73	1.97	12.35	2.07	14.55	2.14	16.74	2.21	18.91	2.29	21.51	2.37	26.36	2.55

#### Symbols:

AFR	: Airflow rate	(m³/min.)
BF	: Bypass factor	
EWB	: Entering wet bulb temp.	(°C) / (°F)
EDB	: Entering dry bulb temp.	(°C) / (°F)
TC	: Total capacity	(kW) / (kBtu/h)
SHC	: Sensible heat capacity	(kW) / (kBtu/h)
ΡI	: Power input	(kW)

#### Notes:

shows nominal (rated) capacities and power input (Cooling) and MAX capacities and power input (Heating). 1.

2. TC, PI and SHC must be calculated by interpolation using the figures in the above tables. (Figures out of the tables should not be used for calculation.)

3. Capacities are based on the following conditions. Corresponding refrigerant piping length : 25 ft (7.5 m) Level difference : 0 ft (0 m)

4. Airflow rate (AFR) and Bypass factor (BF) are tabulated above table.

#### FTXM18WVJU9 + RXM18WVJU9

#### Cooling (60 Hz, 208 V)

0 (	, ,
AFR	22.0
BF	0.27

Temp: Celsius / TC, SHC, PI: kW

IND	DOR							OUT	DOOR	TEMP	ERATU	IRE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	5.90	4.52	0.89	5.40	4.28	1.10	4.91	4.05	1.32	4.67	3.93	1.42	4.64	3.92	1.88	4.60	3.90	2.48
16.0	22.0	6.14	4.43	0.90	5.65	4.21	1.11	5.16	3.99	1.32	4.91	3.88	1.43	4.89	3.87	1.89	4.87	3.86	2.49
18.0	25.0	6.38	4.66	0.90	5.89	4.45	1.12	5.40	4.24	1.33	5.15	4.14	1.44	5.15	4.14	1.90	5.14	4.14	2.50
19.4	26.7	6.50	4.93	0.91	6.01	4.73	1.12	5.52	4.53	1.33	5.28	4.43	1.44	5.28	4.43	1.90	5.28	4.43	2.50
22.0	30.0	6.87	4.75	0.92	6.38	4.57	1.13	5.89	4.40	1.34	5.64	4.31	1.45	5.64	4.31	1.91	5.64	4.31	2.51
24.0	32.0	7.11	4.63	1.14	6.62	4.46	1.14	6.13	4.31	1.35	5.88	4.23	1.46	5.88	4.23	1.92	5.88	4.23	2.52

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

IND	DOR							OUT	<b>FDOOR</b>	TEMP	ERATU	JRE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI	TC	SHC	ΡI
57.2	68.0	20.12	15.42	0.89	18.44	14.60	1.10	16.76	13.81	1.32	15.93	13.41	1.42	15.83	13.37	1.88	15.69	13.30	2.48
60.8	71.6	20.95	15.12	0.90	19.27	14.36	1.11	17.59	13.61	1.32	16.76	13.24	1.43	16.70	13.21	1.89	16.61	13.18	2.49
64.4	77.0	21.78	15.88	0.90	20.10	15.17	1.12	18.42	14.48	1.33	17.59	14.14	1.44	17.57	14.13	1.90	17.54	14.12	2.50
67.0	80.0	22.19	16.81	0.91	20.51	16.13	1.12	18.84	15.46	1.33	18.00	15.13	1.44	18.00	15.13	1.90	18.00	15.13	2.50
71.6	86.0	23.43	16.20	0.92	21.76	15.60	1.13	20.08	15.01	1.34	19.24	14.72	1.45	19.24	14.72	1.91	19.24	14.72	2.51
75.2	89.6	24.26	15.78	1.14	22.59	15.23	1.14	20.91	14.70	1.35	20.07	14.43	1.46	20.07	14.43	1.92	20.07	14.43	2.52

#### Heating (60 Hz, 208 V)

AFR 22.0

#### Temp: Celsius / TC, PI: kW

INDOOR						OL	JTDOOF	R TEMP	ERATU	RE (°CW	/B)					
EDB	-2	25	-2	20	-1	5	-1	0		5	(	)	6	6	15	5.5
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	ΡI	TC	ΡI
15.0	5.29	3.01	6.00	3.21	6.75	3.42	7.31	3.38	7.88	3.33	8.46	3.28	9.16	3.23	11.06	3.48
21.1	4.75	3.10	5.54	3.31	6.33	3.52	6.93	3.47	7.53	3.41	8.13	3.36	8.85	3.30	10.75	3.56
22.0	4.52	3.12	5.35	3.35	6.16	3.56	6.78	3.50	7.39	3.45	8.00	3.39	8.73	3.33	10.63	3.59
24.0	3.75	2.44	5.17	3.38	6.00	3.59	6.63	3.54	7.25	3.48	7.87	3.43	8.61	3.36	10.51	3.62
25.0	3.37	2.12	5.08	3.40	5.91	3.61	6.56	3.56	7.18	3.50	7.81	3.44	8.55	3.37	10.44	3.63
27.0	2.60	1.55	4.36	2.74	5.75	3.65	6.41	3.59	7.05	3.53	7.68	3.47	8.42	3.40	10.32	3.66

#### Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR						OI	JTDOOF	R TEMP	ERATUF	RE (°FW	/B)					
EDB	-1	3		4	5	5	1	4	2	3	3	2	4	3	6	0
°F	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	PI	TC	ΡI	TC	ΡI
59.0	18.06	3.01	20.48	3.21	23.02	3.42	24.93	3.38	26.88	3.33	28.85	3.28	31.24	3.23	37.72	3.48
70.0	16.20	3.10	18.90	3.31	21.60	3.52	23.65	3.47	25.70	3.41	27.74	3.36	30.20	3.30	36.68	3.56
71.6	15.42	3.12	18.27	3.35	21.03	3.56	23.14	3.50	25.22	3.45	27.30	3.39	29.78	3.33	36.26	3.59
75.2	12.79	2.44	17.64	3.38	20.47	3.59	22.63	3.54	24.75	3.48	26.86	3.43	29.37	3.36	35.85	3.62
77.0	11.48	2.12	17.32	3.40	20.18	3.61	22.37	3.56	24.52	3.50	26.64	3.44	29.16	3.37	35.64	3.63
80.6	8.86	1.55	14.87	2.74	19.61	3.65	21.86	3.59	24.04	3.53	26.19	3.47	28.74	3.40	35.22	3.66

#### Cooling (60 Hz, 230 V)

AFR	22.0
BF	0.27

Temp: Celsius / TC, SHC, PI: kW

IND	DOR							OUT	<b>FDOOR</b>	TEMP	ERATU	RE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI	TC	SHC	ΡI
14.0	20.0	5.90	4.52	0.89	5.40	4.28	1.10	4.91	4.05	1.32	4.67	3.93	1.42	4.64	3.92	1.88	4.60	3.90	2.48
16.0	22.0	6.14	4.43	0.90	5.65	4.21	1.11	5.16	3.99	1.32	4.91	3.88	1.43	4.89	3.87	1.89	4.87	3.86	2.49
18.0	25.0	6.38	4.66	0.90	5.89	4.45	1.12	5.40	4.24	1.33	5.15	4.14	1.44	5.15	4.14	1.90	5.14	4.14	2.50
19.4	26.7	6.50	4.93	0.91	6.01	4.73	1.12	5.52	4.53	1.33	5.28	4.43	1.44	5.28	4.43	1.90	5.28	4.43	2.50
22.0	30.0	6.87	4.75	0.92	6.38	4.57	1.13	5.89	4.40	1.34	5.64	4.31	1.45	5.64	4.31	1.91	5.64	4.31	2.51
24.0	32.0	7.11	4.63	1.14	6.62	4.46	1.14	6.13	4.31	1.35	5.88	4.23	1.46	5.88	4.23	1.92	5.88	4.23	2.52

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

IND	DOR							OUT	<b>FDOOR</b>	TEMP	ERATU	JRE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	20.12	15.42	0.89	18.44	14.60	1.10	16.76	13.81	1.32	15.93	13.41	1.42	15.83	13.37	1.88	15.69	13.30	2.48
60.8	71.6	20.95	15.12	0.90	19.27	14.36	1.11	17.59	13.61	1.32	16.76	13.24	1.43	16.70	13.21	1.89	16.61	13.18	2.49
64.4	77.0	21.78	15.88	0.90	20.10	15.17	1.12	18.42	14.48	1.33	17.59	14.14	1.44	17.57	14.13	1.90	17.54	14.12	2.50
67.0	80.0	22.19	16.81	0.91	20.51	16.13	1.12	18.84	15.46	1.33	18.00	15.13	1.44	18.00	15.13	1.90	18.00	15.13	2.50
71.6	86.0	23.43	16.20	0.92	21.76	15.60	1.13	20.08	15.01	1.34	19.24	14.72	1.45	19.24	14.72	1.91	19.24	14.72	2.51
75.2	89.6	24.26	15.78	1.14	22.59	15.23	1.14	20.91	14.70	1.35	20.07	14.43	1.46	20.07	14.43	1.92	20.07	14.43	2.52

#### Heating (60 Hz, 230 V)

AFR 22.0

Temp: Celsius / TC, PI: kW

INDOOR						OL	JTDOOF	R TEMP	ERATU	RE (°CW	′B)					
EDB	-2	25	-2	20	-1	5	-1	0		5	(	)	6	6	15	.5
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	ΡI
15.0	5.29	3.01	6.00	3.21	6.75	3.42	7.31	3.38	7.88	3.33	8.46	3.28	9.16	3.23	11.06	3.48
21.1	4.75	3.10	5.54	3.31	6.33	3.52	6.93	3.47	7.53	3.41	8.13	3.36	8.85	3.30	10.75	3.56
22.0	4.52	3.12	5.35	3.35	6.16	3.56	6.78	3.50	7.39	3.45	8.00	3.39	8.73	3.33	10.63	3.59
24.0	3.75	2.44	5.17	3.38	6.00	3.59	6.63	3.54	7.25	3.48	7.87	3.43	8.61	3.36	10.51	3.62
25.0	3.37	2.12	5.08	3.40	5.91	3.61	6.56	3.56	7.18	3.50	7.81	3.44	8.55	3.37	10.44	3.63
27.0	2.60	1.55	4.36	2.74	5.75	3.65	6.41	3.59	7.05	3.53	7.68	3.47	8.42	3.40	10.32	3.66

#### Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR						OI	JTDOOF	R TEMP	ERATUF	RE (°FW	/B)					
EDB	-1	3		4	Ę	5	1	4	2	3	3	2	4	3	6	0
°F	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	PI	TC	ΡI	TC	PI
59.0	18.06	3.01	20.48	3.21	23.02	3.42	24.93	3.38	26.88	3.33	28.85	3.28	31.24	3.23	37.72	3.48
70.0	16.20	3.10	18.90	3.31	21.60	3.52	23.65	3.47	25.70	3.41	27.74	3.36	30.20	3.30	36.68	3.56
71.6	15.42	3.12	18.27	3.35	21.03	3.56	23.14	3.50	25.22	3.45	27.30	3.39	29.78	3.33	36.26	3.59
75.2	12.79	2.44	17.64	3.38	20.47	3.59	22.63	3.54	24.75	3.48	26.86	3.43	29.37	3.36	35.85	3.62
77.0	11.48	2.12	17.32	3.40	20.18	3.61	22.37	3.56	24.52	3.50	26.64	3.44	29.16	3.37	35.64	3.63
80.6	8.86	1.55	14.87	2.74	19.61	3.65	21.86	3.59	24.04	3.53	26.19	3.47	28.74	3.40	35.22	3.66

#### Symbols:

AFR	: Airflow rate	(m³/min.)
BF	: Bypass factor	
EWB	: Entering wet bulb temp.	(°C) / (°F)
EDB	: Entering dry bulb temp.	(°C) / (°F)
TC	: Total capacity	(kW) / (kBtu/h)
SHC	: Sensible heat capacity	(kW) / (kBtu/h)
ΡI	: Power input	(kW)

#### Notes:

1. shows nominal (rated) capacities and power input (Cooling) and MAX capacities and power input (Heating).

2. TC, PI and SHC must be calculated by interpolation using the figures in the above tables.

(Figures out of the tables should not be used for calculation.)

3. Capacities are based on the following conditions. Corresponding refrigerant piping length : 25 ft (7.5 m) Level difference : 0 ft (0 m)

4. Airflow rate (AFR) and Bypass factor (BF) are tabulated above table.

#### FTXM24WVJU9 + RXM24WVJU9

#### Cooling (60 Hz, 208 V)

0 (	, ,
AFR	23.9
BF	0.36

Temp: Celsius / TC, SHC, PI: kW

IND	DOR							OUT	DOOR	TEMP	ERATU	IRE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	7.08	5.05	1.11	6.49	4.74	1.38	5.90	4.44	1.65	5.60	4.30	1.78	5.31	4.15	2.32	4.93	3.97	2.60
16.0	22.0	7.37	4.94	1.12	6.78	4.66	1.39	6.19	4.38	1.66	5.89	4.24	1.79	5.60	4.11	2.33	5.22	3.94	2.61
18.0	25.0	7.66	5.14	1.13	7.07	4.87	1.40	6.48	4.61	1.66	6.18	4.48	1.80	5.89	4.35	2.34	5.51	4.19	2.62
19.4	26.7	7.80	5.38	1.13	7.21	5.12	1.40	6.63	4.87	1.67	6.33	4.75	1.80	6.04	4.63	2.34	5.66	4.47	2.62
22.0	30.0	8.24	5.16	1.15	7.65	4.94	1.41	7.06	4.71	1.68	6.77	4.61	1.81	6.77	4.61	2.35	6.77	4.61	2.63
24.0	32.0	8.53	5.01	1.15	7.94	4.80	1.42	7.35	4.60	1.69	7.06	4.50	1.82	7.06	4.50	2.36	7.06	4.50	2.64

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

IND	OOR							OUT	<b>FDOOR</b>	TEMP	PERATL	JRE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI	TC	SHC	ΡI
57.2	68.0	24.14	17.22	1.11	22.13	16.18	1.38	20.12	15.16	1.65	19.11	14.66	1.78	18.11	14.17	2.32	16.82	13.55	2.60
60.8	71.6	25.14	16.87	1.12	23.12	15.89	1.39	21.11	14.94	1.66	20.11	14.47	1.79	19.11	14.01	2.33	17.81	13.43	2.61
64.4	77.0	26.13	17.52	1.13	24.12	16.61	1.40	22.11	15.72	1.66	21.10	15.28	1.80	20.10	14.86	2.34	18.80	14.31	2.62
67.0	80.0	26.63	18.36	1.13	24.62	17.48	1.40	22.61	16.62	1.67	21.60	16.20	1.80	20.60	15.79	2.34	19.30	15.26	2.62
71.6	86.0	28.12	17.62	1.15	26.11	16.84	1.41	24.10	16.09	1.68	23.09	15.71	1.81	23.09	15.71	2.35	23.09	15.71	2.63
75.2	89.6	29.12	17.10	1.15	27.11	16.39	1.42	25.09	15.70	1.69	24.09	15.36	1.82	24.09	15.36	2.36	24.09	15.36	2.64

#### Heating (60 Hz, 208 V)

AFR 23.9

#### Temp: Celsius / TC, PI: kW

INDOOR						OL	JTDOOF	R TEMP	ERATUR	RE (°CW	/B)					
EDB	-2	25	-2	20	-1	5	-1	0		5	(	)	6	6	15	5.5
°C	TC	ΡI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	ΡI	TC	ΡI
15.0	5.88	3.39	6.67	3.60	7.50	3.80	8.02	3.73	8.55	3.65	9.10	3.57	9.76	3.48	11.79	3.76
21.1	5.28	3.50	6.15	3.70	7.03	3.91	7.61	3.82	8.18	3.74	8.75	3.66	9.44	3.56	11.46	3.84
22.0	5.03	3.54	5.95	3.75	6.85	3.95	7.44	3.86	8.03	3.78	8.61	3.69	9.31	3.59	11.33	3.87
24.0	4.21	2.81	5.74	3.79	6.68	3.96	7.28	3.90	7.88	3.82	8.47	3.73	9.18	3.62	11.20	3.90
25.0	3.78	2.45	5.64	3.81	6.61	3.96	7.20	3.92	7.80	3.83	8.40	3.75	9.11	3.64	11.14	3.92
27.0	2.92	1.78	4.90	3.14	6.46	3.96	7.03	3.96	7.65	3.87	8.26	3.78	8.98	3.67	11.01	3.95

#### Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR						OI	JTDOOF	R TEMP	ERATUF	RE (°FW	/B)					
EDB	-1	3		4	Ę	5	1	4	2	3	3	2	4	3	6	0
°F	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	PI
59.0	20.07	3.39	22.76	3.60	25.58	3.80	27.36	3.73	29.19	3.65	31.05	3.57	33.31	3.48	40.22	3.76
70.0	18.00	3.50	21.00	3.70	24.00	3.91	25.95	3.82	27.90	3.74	29.86	3.66	32.20	3.56	39.11	3.84
71.6	17.17	3.54	20.30	3.75	23.37	3.95	25.39	3.86	27.39	3.78	29.38	3.69	31.76	3.59	38.66	3.87
75.2	14.38	2.81	19.60	3.79	22.80	3.96	24.83	3.90	26.88	3.82	28.90	3.73	31.31	3.62	38.22	3.90
77.0	12.90	2.45	19.24	3.81	22.54	3.96	24.55	3.92	26.62	3.83	28.66	3.75	31.09	3.64	38.00	3.92
80.6	9.95	1.78	16.71	3.14	22.03	3.96	23.99	3.96	26.11	3.87	28.19	3.78	30.64	3.67	37.55	3.95

#### Cooling (60 Hz, 230 V)

AFR	23.9
BF	0.36

Temp: Celsius / TC, SHC, PI: kW

IND	OOR							OUT	DOOR	TEMP	ERATU	IRE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	ΡI
14.0	20.0	7.08	5.05	1.11	6.49	4.74	1.38	5.90	4.44	1.65	5.60	4.30	1.78	5.31	4.15	2.32	4.93	3.97	2.60
16.0	22.0	7.37	4.94	1.12	6.78	4.66	1.39	6.19	4.38	1.66	5.89	4.24	1.79	5.60	4.11	2.33	5.22	3.94	2.61
18.0	25.0	7.66	5.14	1.13	7.07	4.87	1.40	6.48	4.61	1.66	6.18	4.48	1.80	5.89	4.35	2.34	5.51	4.19	2.62
19.4	26.7	7.80	5.38	1.13	7.21	5.12	1.40	6.63	4.87	1.67	6.33	4.75	1.80	6.04	4.63	2.34	5.66	4.47	2.62
22.0	30.0	8.24	5.16	1.15	7.65	4.94	1.41	7.06	4.71	1.68	6.77	4.61	1.81	6.77	4.61	2.35	6.77	4.61	2.63
24.0	32.0	8.53	5.01	1.15	7.94	4.80	1.42	7.35	4.60	1.69	7.06	4.50	1.82	7.06	4.50	2.36	7.06	4.50	2.64

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

IND	DOR							OUT	<b>FDOOR</b>	TEMP	ERATU	IRE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	24.14	17.22	1.11	22.13	16.18	1.38	20.12	15.16	1.65	19.11	14.66	1.78	18.11	14.17	2.32	16.82	13.55	2.60
60.8	71.6	25.14	16.87	1.12	23.12	15.89	1.39	21.11	14.94	1.66	20.11	14.47	1.79	19.11	14.01	2.33	17.81	13.43	2.61
64.4	77.0	26.13	17.52	1.13	24.12	16.61	1.40	22.11	15.72	1.66	21.10	15.28	1.80	20.10	14.86	2.34	18.80	14.31	2.62
67.0	80.0	26.63	18.36	1.13	24.62	17.48	1.40	22.61	16.62	1.67	21.60	16.20	1.80	20.60	15.79	2.34	19.30	15.26	2.62
71.6	86.0	28.12	17.62	1.15	26.11	16.84	1.41	24.10	16.09	1.68	23.09	15.71	1.81	23.09	15.71	2.35	23.09	15.71	2.63
75.2	89.6	29.12	17.10	1.15	27.11	16.39	1.42	25.09	15.70	1.69	24.09	15.36	1.82	24.09	15.36	2.36	24.09	15.36	2.64

#### Heating (60 Hz, 230 V)

AFR 23.9

Temp: Celsius / TC, PI: kW

INDOOR		OUTDOOR TEMPERATURE (°CWB)														
EDB	-2	25	-2	20	-1	15	-1	0		5	(	)	6	3	15	.5
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	ΡI
15.0	5.88	3.39	6.67	3.60	7.50	3.80	8.02	3.73	8.55	3.65	9.10	3.57	9.76	3.48	11.79	3.76
21.1	5.28	3.50	6.15	3.70	7.03	3.91	7.61	3.82	8.18	3.74	8.75	3.66	9.44	3.56	11.46	3.84
22.0	5.03	3.54	5.95	3.75	6.85	3.95	7.44	3.86	8.03	3.78	8.61	3.69	9.31	3.59	11.33	3.87
24.0	4.21	2.81	5.74	3.79	6.66	3.99	7.28	3.90	7.88	3.82	8.47	3.73	9.18	3.62	11.20	3.90
25.0	3.78	2.45	5.64	3.81	6.57	4.01	7.20	3.92	7.80	3.83	8.40	3.75	9.11	3.64	11.14	3.92
27.0	2.92	1.78	4.90	3.14	6.39	4.06	7.03	3.96	7.65	3.87	8.26	3.78	8.98	3.67	11.01	3.95

#### Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR		OUTDOOR TEMPERATURE (°FWB)														
EDB	-1	3		4	Ę	5	1	4	2	3	3	2	4	3	6	0
°F	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI
59.0	20.07	3.39	22.76	3.60	25.58	3.80	27.36	3.73	29.19	3.65	31.05	3.57	33.31	3.48	40.22	3.76
70.0	18.00	3.50	21.00	3.70	24.00	3.91	25.95	3.82	27.90	3.74	29.86	3.66	32.20	3.56	39.11	3.84
71.6	17.17	3.54	20.30	3.75	23.37	3.95	25.39	3.86	27.39	3.78	29.38	3.69	31.76	3.59	38.66	3.87
75.2	14.38	2.81	19.60	3.79	22.74	3.99	24.83	3.90	26.88	3.82	28.90	3.73	31.31	3.62	38.22	3.90
77.0	12.90	2.45	19.24	3.81	22.42	4.01	24.55	3.92	26.62	3.83	28.66	3.75	31.09	3.64	38.00	3.92
80.6	9.95	1.78	16.71	3.14	21.79	4.06	23.99	3.96	26.11	3.87	28.19	3.78	30.64	3.67	37.55	3.95

#### Symbols:

AFR	: Airflow rate	(m³/min.)
BF	: Bypass factor	
EWB	: Entering wet bulb temp.	(°C) / (°F)
EDB	: Entering dry bulb temp.	(°C) / (°F)
тс	: Total capacity	(kW) / (kBtu/h)
SHC	: Sensible heat capacity	(kW) / (kBtu/h)
ΡI	: Power input	(kW)
PI	: Power input	(kW)

#### Notes:

shows nominal (rated) capacities and power input (Cooling) and MAX capacities and power input (Heating). 1.

2. TC, PI and SHC must be calculated by interpolation using the figures in the above tables. (Figures out of the tables should not be used for calculation.)

3. Capacities are based on the following conditions. Corresponding refrigerant piping length : 25 ft (7.5 m) Level difference : 0 ft (0 m)

4. Airflow rate (AFR) and Bypass factor (BF) are tabulated above table.

### 7.1 Capacity Correction Factor by the Length of Refrigerant Piping (Reference)

The cooling capacity and the heating capacity of the unit have to be corrected in accordance with the length of refrigerant piping — the distance between the indoor unit and the outdoor unit.

#### 7.1.1 09/12 Class



7.1.2 18 Class



#### 7.1.3 24 Class



**Note:** The graphs show the factor when additional refrigerant of the proper quantity is charged.

## 8. Operation Limit



3D133582A

### 9. Sound Level

### 9.1 Measuring Location



**Notes:** 1. Operation sound is measured in an anechoic chamber.

2. The operation sound measuring method is based on JIS standard.

#### 9.2 Indoor Unit FTXM09WVJU9





SCALE	60Hz 208/230V (H)	60Hz 208/230V (L)
A	43	30

OPERATING	OPERATING CONDITIONS								
POWER SOURCE	60Hz 208/230V(H)								
JIS ST	ANDARD								
OO 60H	z 208/230V(H)								
OO 60H:	z 208/230V(L)								
HEATING									

C:3D133574

#### FTXM12WVJU9





45 ( B.G.N IS ALREADY RECTIFIED )

32

SCALE

Α

OPERATING CONDITIONS							
POWER SOU	RCE	60Hz	208/230V(H)				
JIS STANDARD							
0—0	60Hz	208/	230V(H)				
00	60Hz	208/	230V(L)				
HEATING							

#### FTXM18WVJU9



_ (u	5/			
	60Hz	POWER SOURCE 60Hz 208/230V(H)	POWEF	OV(H)
V	208/230V	JIS STANDARD		
_	(L)	O-O 60Hz 208/230V(H)	0	
	30	OO 60Hz 208/230V(L)	0	
REC	TIFIED )	COOLING	COOLIN	



SCALE	60Hz 208/230V (H)	60Hz 208/230V (L)	
A	49	35	

OPERATING CONDITIONS							
POWER SOU	RCE	60Hz	208/230V(H)				
JIS STANDARD							
00	60Hz	208/	230V(H)				
00	60Hz	208/	230V(L)				
HEATING							

C:3D133576

#### FTXM24WVJU9

SCALE

А

( B.G.N IS ALREADY

49



( B.G.N IS ALREADY RECTIFIED )

		HEATING
OCTAVE BAND SOUND PRESSURE LEVEL dB(0dB=0,0002 µ bar)	80 70 60 50 40 30 20	106         212         425         550         1700         3400         6500           106         212         425         550         1700         3400         6500           106         212         425         550         1700         3400         6500           106         106         106         106         106         106         106           106         106         106         106         106         106         106           106         106         106         106         106         106         106           106         106         106         106         106         106         106         106           107         105         500         1000         2000         4000         8000           107         125         500         1000         2000         4000         8000           107         125         500         1000         2000         4000         8000           107         125         500         1000         2000         4000         8000

	OVER ALL(di	3)	
SCALE	60Hz 208/230V (H)	60Hz 208/230V (L)	POWE
A	51	37	
( B.G.N IS	HEATIN		

OPERATING CONDITIONS							
POWER SO	JRCE	60Hz	208/230V(H)				
JIS STANDARD							
0—0	60Hz	208/3	230V(H)				
00	60Hz	208/2	230V(L)				
HEATING							

#### 9.3 Outdoor Unit RXM09WVJU9





C:3D133580

#### RXM12WVJU9





#### RXM18WVJU9





C:3D133617

#### RXM24WVJU9





# **10. Electric Characteristics**

Indoor Unit	Outdoor Unit	Power Supply			Compressor	OFM			IFM			
		Hz - Volts	Voltage Range	MCA	MFA	RLA	Нр	W	FLA	Нр	W	FLA
FTXM09WVJU9	RXM09WVJU9	60 Hz - 208 V 60 Hz - 230 V	Max. 60 Hz, 253 V Min. 60 Hz, 187 V	12.3	15	12.00	0.05	37	0.31	0.04	27	0.25
FTXM12WVJU9	RXM12WVJU9	60 Hz - 208 V 60 Hz - 230 V	Max. 60 Hz, 253 V Min. 60 Hz, 187 V	12.3	15	12.00	0.05	37	0.31	0.04	27	0.25
FTXM18WVJU9	RXM18WVJU9	60 Hz - 208 V 60 Hz - 230 V	Max. 60 Hz, 253 V Min. 60 Hz, 187 V	18.8	20	18.25	0.16	123	0.58	0.08	61	0.46
FTXM24WVJU9	RXM24WVJU9	60 Hz - 208 V 60 Hz - 230 V	Max. 60 Hz, 253 V Min. 60 Hz, 187 V	19.8	20	19.25	0.16	123	0.58	0.08	61	0.46

#### Symbols:

MCA	: Min. circuit amps	(A)
MFA	: Max. fuse amps	(A)
RLA	: Rated load amps	(A)
OFM	: Outdoor fan motor	
IFM	: Indoor fan motor	
FLA	: Full load amps	(A)
W / Hp	: Fan motor rated output	(W)

#### Notes:

- 1. RLA is the max current that comes in cooling operation and heating operation.
- 2. Maximum allowable voltage variation between phases is 2%.
- 3. Select wire size based on the larger value of MCA.
- 4. Instead of fuse, use circuit breaker.

 Be sure to install an earth/ground leak detector. (This unit uses an inverter, which means that an earth/ground leak detector capable of handling high harmonics must be used in order to prevent malfunctioning of the earth/ground leak detector.)

C: 3D141931

# 11. Installation Manual

### 11.1 FTXM09/12/18/24WVJU9

#### EDUS042208A

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The pictures in this document are for illustrative purposes only.

# **Safety Considerations**

Refer also to the General Safety Considerations in the separate booklet.

i	Read the precautions in this manual carefully before operating the unit.
<u>A2L</u>	This appliance is filled with R32.

Read these **Safety Considerations for Installation** carefully before installing an air conditioner or heat pump. After completing the installation, make sure that the unit operates properly during the startup operation.

Instruct the user on how to operate and maintain the unit. Inform users that they should store this installation manual with the operation manual for future reference.

Always use a licensed installer or contractor to install this product. Improper installation can result in water or refrigerant leakage, electric shock, fire, or explosion.

### Meanings of DANGER, WARNING, CAUTION, and NOTE Symbols:

	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
CAUTION	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
	Indicates situations that may result in equipment or property-damage accidents only.

#### 

• Refrigerant gas is heavier than air and replaces oxygen. A massive leak can lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.

- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death. Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.
- If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas may produce toxic gas if it comes into contact with fire. Exposure to this gas could cause severe injury or death.
- After completing the installation work, check that the refrigerant gas does not leak throughout the system.
- Do not install unit in an area where flammable materials are present due to risk of explosions that can cause serious injury or death.
- Safely dispose all packing and transportation materials in accordance with federal/state/local laws or ordinances. Packing materials such as nails and other metal or wood parts, including plastic packing materials used for transportation may cause injuries or death by suffocation.

#### 

- Only qualified personnel licensed or certified in their jurisdiction must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in water leakage, electric shock, or fire.
- Pipe work and installation shall be in compliance with national codes (ASHRAE15 or IRC).
- When installing the unit in a small room, take measures to keep the refrigerant concentration from exceeding allowable safety limits. Excessive refrigerant leaks, in the event of an accident in a closed ambient space, can lead to oxygen deficiency.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in water leakage, electric shock, fire, or the unit falling.
- Install the air conditioner or heat pump on a foundation strong enough that it can withstand the weight of the unit. A foundation of insufficient strength may result in the unit falling and causing injuries.
- Take into account strong winds, typhoons, or earthquakes when installing. Improper installation may result in the unit falling and causing accidents.

- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel licensed or certified in their jurisdiction according to local, state, and national regulations. An insufficient power supply capacity or improper electrical construction may lead to electric shock or fire.
- Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.
- When wiring, position the wires so that the electrical wiring box cover can be securely fastened. Improper positioning of the electrical wiring box cover may result in electric shock, fire, or the terminals overheating.
- · Before touching electrical parts, turn off the unit.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Securely fasten the outdoor unit terminal cover (panel). If the terminal cover/panel is not installed properly, dust or water may enter the outdoor unit causing fire or electric shock.
- When installing or relocating the system, keep the refrigerant circuit free from substances other than the specified refrigerant (R32) such as air. Any presence of air or other foreign substance in the refrigerant circuit can cause an abnormal pressure rise or rupture, resulting in injury.
- Do not change the setting of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may occur.
- When installing or relocating the air conditioner, do not let any other substances besides R32, such as air, enter the refrigerant circuit. The presence of air or foreign matter in the refrigerant circuit causes an abnormal pressure rise, which may result in equipment damage and even injury.
- Do not use means to accelerate the defrosting process (if possible) or to clean, other than those recommended by the manufacturer.
- The appliance must be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Do not pierce or burn.
- · Be aware that refrigerants may not contain an odor.
- Comply with national gas regulations.

#### ACAUTION -

- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- Wear adequate personal protective equipment (protective gloves, safety glasses,...) when installing, maintaining or servicing the system.
- The heat exchanger fins are sharp enough to cut. To avoid injury, wear gloves or cover the fins while working around them.
- Do not touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
- Install drain piping to ensure proper drainage. Improper drain piping may result in water leakage and property damage.
- Insulate piping to prevent condensation.
- Be careful when transporting the product.

- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- Do not use a charging cylinder. Using a charging cylinder may cause the refrigerant to deteriorate.
- Refrigerant R32 in the system must be kept clean, dry, and tight.
- (a) Clean and Dry -- Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.
  (b) Tight -- R32 does not contain any chlorine, does not
- (b) Tight -- R32 does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth's protection again harmful ultraviolet radiation. R32 can contribute to the greenhouse effect if it is released. Therefore take proper measures to check for the tightness of the refrigerant piping installation. Read the chapter *Refrigerant Piping Work* and follow the procedures.
- The indoor unit is for R32. See the catalog for outdoor models that can be connected. Normal operation is not possible when connected to non-compatible outdoor units.
- Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit far away from fluorescent lamps as much as possible.
- Indoor units are for indoor installation only. Outdoor units can be installed either outdoors or indoors.
- Do not install the air conditioner or heat pump in the following locations:
- (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen.
  - Plastic parts may deteriorate and fall off or result in water leakage.
- (b) Where corrosive gas, such as sulfurous acid gas, is produced. Corroding copper pipes or soldered parts may result i

Corroding copper pipes or soldered parts may result in refrigerant leakage.

- (c) Near machinery emitting electromagnetic waves. Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
- (d) Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled. Operating the unit in such conditions can cause a fire.
- Take adequate measures to prevent the outdoor unit from being used as a shelter by small animals. Small animals making contact with electrical parts can cause malfunctions, smoke, or fire. Instruct the user to keep the area around the unit clean.
- Servicing shall be performed only as recommended by the manufacturer and licensed or certified in their jurisdiction.

#### <u> ∧</u>NOTE -

- The indoor unit should be positioned where the unit and interunit wires (outdoor to indoor) are at least 3.3ft (1m) away from any televisions or radios. (The unit may cause interference with the picture or sound.) Depending on the radio waves, a distance of 3.3ft (1m) may not be sufficient to eliminate the noise.
- Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
- Only use tools for R32 or R410A, such as a gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.
- If the conventional refrigerant and refrigerator oil are mixed in R32, the refrigerant may deteriorate.
- As maximum allowable pressure is 604psi (4.17MPa), the wall thickness of field-installed pipes should be selected in accordance with the relevant local, state, and national regulations.

FTN005(R32)-U


# **Choosing an Installation Site**

• Before choosing the installation site, obtain user approval.

### 1. Indoor unit

- The indoor unit should be positioned in a place where:
- 1) the restrictions on the installation requirements specified in "Indoor Unit Installation Diagram" on page 4 are met,
- 2) both the air inlet and air outlet are unobstructed,
- 3) the unit is not exposed to direct sunlight,
- 4) Install so that drainage occurs easily,
- 5) the unit is away from sources of heat or steam,
- 6) there is no source of machine oil vapor (this may shorten the indoor unit service life),
- 7) cool/warm air is circulated throughout the room,
- 8) the unit is away from electronic ignition type fluorescent lamps (inverter or rapid start type) as they may affect the remote controller range,
- 9) the unit is at least 3.3ft (1m) away from any television or radio set (the unit may cause interference with the picture or sound),
- 10) no laundry equipment is nearby.

### **2.** Wireless remote controller

• Turn on all the fluorescent lamps in the room, if any, and find a location where the remote controller signals are properly received by the indoor unit (within 23ft (7m)).



# **Indoor Unit Installation Diagram**

#### CAUTION -

- Do not hit or violently push the INTELLIGENT EYE sensor. This can lead to damage and malfunction.
- Do not place large objects near the INTELLIGENT EYE sensor. Also keep heating units or humidifiers outside the sensor's detection area.



# **Indoor Unit Installation**

### **1.** Installing the mounting plate

The mounting plate should be installed on a wall which can support the weight of the indoor unit.

1)Temporarily secure the mounting plate to the wall, make sure that the plate is completely level, and mark the drilling points on the wall.

2)Secure the mounting plate to the wall with screws.

Recommended mounting plate retention spots and dimensions

#### 09/12 class



\* Depending on the model, the actual distance between the liquid pipe end and gas pipe end may differ from the distance between those symbols on the mounting plate (the distance listed in this manual). Always measure the actual distance between the liquid pipe end and gas pipe end before installing refrigerant pipes.

### 2. Drilling a wall hole and installing wall embedded pipe

#### MARNING

For metal frame or metal board walls, be sure to use a wall embedded pipe and wall hole cover in the feed-through hole to prevent possible heat, electric shock, or fire.

- Be sure to caulk the gaps around the pipes with caulking material. (to prevent condensation caused by intrusion of air from outside or within the wall)

  - 2) Insert a wall embedded pipe into the hole.
  - 3) Insert a wall hole cover into wall pipe.
  - After completing refrigerant piping, wiring, and drain piping, caulk the pipe hole gap with putty.

# 3. Installing the indoor unit

#### CAUTION -

When unpacking and installing the product, do not strongly press the flaps. (The flap shafts may become deformed.)

Inside Wall embedded pipe (field supply) Wall hole cover (field supply)	Outside  Caulking  (field sup	l oply)
Even if a wall hole cover is	09/12 class	φ2-9/16" (65mm)
outdoor and indoor sides	18/24 class	φ3-1/8" (80mm)
nin putty.		



In the case of bending or curing refrigerant pipes, keep the following precautions in mind. Abnormal sound may be generated if improper work is conducted.

- Do not strongly press the refrigerant pipes onto the bottom frame.
- Do not strongly press the refrigerant pipes on the front grille, either.

#### 3-1. Right-side, right-back, or right-bottom piping

- 1) Attach the drain hose to the underside of the refrigerant pipes with adhesive vinyl tape.
- 2) Wrap the refrigerant pipes and drain hose together with an  $(\!\!R\!)$  insulation tape.
- 3) Pass the drain hose and refrigerant pipes through the wall hole, then position the indoor unit on the mounting plate hooks, using the  $\bigtriangleup$  markings at the top of the indoor unit as a guide.
- 4) Open the front panel, then open the service lid.
- (Refer to "Service lid" on page 4.)
- 5) Pass the inter-unit wire from the outdoor unit through the feed-through wall hole and then through the back of the indoor unit. Pull them through the front side. Bend the ends of cable tie wires upward for easier work in advance. (If the interunit wire ends are to be stripped first, bundle wire ends with adhesive tape.)
- 6) Press the bottom frame of the indoor unit with both hands until it is firmly caught by the (A) mounting plate hooks. Make sure that the wires do not catch on the edge of the indoor unit.





Hang indoor unit's hook here





### 4. Wiring

Refer to the installation manual for the outdoor unit also.

#### MARNING -

- Do not use tapped wires, extension cords, or starburst connections, as they may cause overheating, electric shock, or fire.
- Do not use locally purchased electrical parts inside the product. (Do not branch the power for the drain pump, etc., from the terminal block.) Doing so may cause electric shock or fire.
- Do not connect the power wire to the indoor unit. Doing so may cause electric shock or fire.



#### **Indoor Unit Installation** 5. Drain piping 1) Connect the drain hose, as described on the right. • Avoid placing the end of the drain hose in a drainage location that could Make a downward slope cause bad odors or corrosive gas to flow backward into the outlet. • The drainage water may change color due to bacteria or other Leave a gap of 1-15/16 inches (50mm) or more at the end of the outlet organisms. Place in a location where the flow of drainage water will not Ъſ cause a problem. With the end of the hose Getting highe Containing waves in the drain outlet • Minimize the number of bends in the drain hose as much as possible. If bending the drain hose, bend it gently. 2) Remove the air filters and transfer some water to the indoor heat exchanger by pouring water into the drain pan. 3) Make sure that water flows out of the drain hose. 4) If drain hose extension or embedded drain piping is required, use appropriate parts that match the hose front end. Figure of hose front end · When drain hose requires extension, obtain an extension hose with an inner diameter of 5/8 inch (16mm). Indoor unit Extension drain hose Be sure to thermally insulate the indoor section of the drain hose extension hose. mmkn 1111 Drain hose supplied with the indoor unit Heat insulation tube (field supply) · When connecting a rigid polyvinyl chloride pipe \$11/16" (nominal diameter 1/2 inch (13mm)) directly to the drain hose attached to the indoor unit as with 6 embedded piping work, use any commercially available drain socket (nominal diameter 1/2 inch Commercially available Drain hose supplied with Commercially available (13mm)) as a joint. the indoor unit drain socket rigid polyvinyl chloride pipe (nominal diameter 1/2 inch (nominal diameter 1/2 inch (13mm)) (13mm))

# **Refrigerant Piping Work**

#### MARNING .

- Do not apply mineral oil on flared part.
- Prevent mineral oil from getting into the system as this would reduce the service life of the units.
- Never use piping which has been used for previous installations. Only use parts which are delivered with this unit.
- Never install a dryer to this R32 unit in order to guarantee its service life.
- The drying material may dissolve and damage the system.
- Improper flaring may result in refrigerant gas leakage.

### 1. Flaring the pipe end

- 1) Cut the pipe end with a pipe cutter.
- 2) Remove burrs with the cut surface facing downward, so that the filings do not enter the pipe.



3) Put the flare nut on the pipe.

- 4) Flare the pipe.
- 5) Check that the flaring has been done correctly.

# 2. Refrigerant piping

#### CAUTION -



flare mouth with tape to keep dirt

and water out.

Gas pipe

Gas pipe

insulation

Finishing tape

- Use the flare nut fixed to the main unit. (This is to prevent the flare nut from cracking as a result of deterioration over time.)
- To prevent gas leakage, apply refrigeration oil only to the inner surface of the flare. (Use refrigeration oil for R32 or R410A.)
- Use a torque wrench when tightening the flare nuts to prevent damage to the flare nuts and gas leakage.





#### Selection of copper and heat insulation materials

When using commercial copper pipes and fittings, observe the following: • Insulation material: Polyethylene foam

- Heat transfer rate: 0.041 to 0.052WmK (0.024 to 0.030Btu/tth°F (0.035 to 0.045kcal/mh°C)) Be sure to use insulation that is designed for use with HVAC Systems.
- ACR Copper only.
- Be sure to insulate both the gas and liquid piping and observe the insulation dimensions as below.

	Piping size	Minimum bend radius	Piping thickness	Thermal insulation size	Thermal insulation thickness
Gas side	O.D. 3/8 inch (9.5mm)	1-3/16 inch (30mm) or more	0.031 inch (0.8mm) (C1220T-O)	I.D. 15/32-19/32 inch (12-15mm)	
	O.D. 1/2 inch (12.7mm)	1-9/16 inch (40mm) or more	0.031 inch (0.8mm) (C1220T-O)	I.D. 9/16-5/8 inch (14-16mm)	13/32 inch
	O.D. 5/8 inch (15.9mm)	1-15/16 inch (50mm) or more	0.039 inch (1.0mm) (C1220T-O)	I.D. 5/8-13/16 inch (16-20mm)	(10mm) Min.
Liquid side	O.D. 1/4 inch (6.4mm)	1-3/16 inch (30mm) or more	0.031 inch (0.8mm) (C1220T-O)	I.D. 5/16-13/32 inch (8-10mm)	

• Use separate thermal insulation pipes for gas and liquid refrigerant pipes.

• Using finishing tape, bundle and wrap the indoor unit piping and drain hose together so that the drain hose is below the other piping.

Liquid pipe

Liquid pipe

insulation

Drain hose





# **Trial Operation and Testing**

### 1. Trial operation and testing

• Trial operation should be carried out in either COOL or HEAT operation.

- 1-1. Measure the supply voltage and make sure that it is within the specified range.
- 1-2. In COOL operation, select the lowest programmable temperature; in HEAT operation, select the highest programmable temperature.
- 1-3. Carry out the trial operation following the instructions in the operation manual to ensure that all functions and parts, such as the movement of the flaps, are working properly.
  - To protect the air conditioner, restart operation is disabled for 3 minutes after the system has been turned off.
- 1-4. After trial operation is complete, set the temperature to a normal level (78°F to 82°F (26.0°C to 28.0°C) in COOL operation, 68°F to 75°F (20.0°C to 24.0°C) in HEAT operation).
- When operating the air conditioner in COOL operation in winter, or HEAT operation in summer, set it to the trial operation mode using the following method.

2) Press , select ", and press for confirmation.

- 3) Press () to turn on the system.
- Trial operation will stop automatically after about 30 minutes. To stop the operation, press 0.

• Some of the functions cannot be used in the trial operation mode.



- The air conditioner draws a small amount of power in its standby mode. If the system is not to be used for some time after
- installation, shut off the circuit breaker to eliminate unnecessary power consumption.
- If the circuit breaker trips to shut off the power to the air conditioner, the system will restore the original operation mode when the circuit breaker is turned on again.

### 2. Test items

Test items	Symptom	Check
Indoor and outdoor units are installed securely.	Fall, vibration, noise	
No refrigerant gas leaks.	Incomplete cooling/heating function	
Refrigerant gas and liquid pipes and indoor drain hose extension are thermally insulated.	Water leakage	
Draining line is properly installed.	Water leakage	
System is properly grounded.	Electrical leakage	
Only specified wires are used for all wiring, and all wires are connected correctly.	No operation or burn damage	
Indoor or outdoor unit's air inlet or air outlet are unobstructed.	Incomplete cooling/heating function	
Stop valves are opened.	Incomplete cooling/heating function	
Indoor unit properly receives remote control commands.	No operation	
Attached SSID sticker with release paper (1 pc.) is given to the user.	Unable to connect to wireless LAN	

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The pictures in this document are for illustrative purposes only.

# **Safety Considerations**

Refer also to the General Safety Considerations in the separate booklet.

i	Read the precautions in this manual carefully before operating the unit.
A2L	This appliance is filled with R32.

Read these **Safety Considerations for Installation** carefully before installing an air conditioner or heat pump. After completing the installation, make sure that the unit operates properly during the startup operation.

Instruct the user on how to operate and maintain the unit. Inform users that they should store this installation manual with the operation manual for future reference.

Always use a licensed installer or contractor to install this product. Improper installation can result in water or refrigerant leakage, electric shock, fire, or explosion.

electric shock, fire, or explosion. Meanings of DANGER, WARNING, CAUTION, and NOTE Symbols:

Anger	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
MARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
<u>∧</u> NOTE	Indicates situations that may result in equipment or property damage accidents only.
A DANGER	

 Refrigerant gas is heavier than air and replaces oxygen. A massive leak can lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.

1

- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death.
   Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.
- If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas may produce toxic gas if it comes into contact with fire. Exposure to this gas could cause severe injury or death.
- After completing the installation work, check that the refrigerant gas does not leak throughout the system.
- Do not install unit in an area where flammable materials are present due to risk of explosions that can cause serious injury or death.
- Safely dispose all packing and transportation materials in accordance with federal/state/local laws or ordinances. Packing materials such as nails and other metal or wood parts, including plastic packing materials used for transportation may cause injury or death by suffocation.

#### 🕂 WARNING -

- Only qualified personnel licensed or certified in their jurisdiction must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in water leakage, electric shock, or fire.
- Pipe work and installation shall be in compliance with national codes (ASHRAE15 or IRC).
- When installing the unit in a small room, take measures to keep the refrigerant concentration from exceeding allowable safety limits. Excessive refrigerant leaks, in the event of an accident in a closed ambient space, can lead to oxygen deficiency.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in water leakage, electric shock, fire, or the unit falling.
- Install the air conditioner or heat pump on a foundation strong enough that it can withstand the weight of the unit. A foundation of insufficient strength may result in the unit falling and causing injury.

- Take into account strong winds, typhoons, or earthquakes when installing. Improper installation may result in the unit falling and causing accidents.
- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel licensed or certified in their jurisdiction according to local, state, and national regulations. An insufficient power supply capacity or improper electrical construction may lead to electric shock or fire.
- Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.
- When wiring, position the wires so that the protection plate can be securely fastened. Improper positioning of the protection plate may result in electric shock, fire, or the terminals overheating.
- Before touching electrical parts, turn off the unit.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Securely fasten the outdoor unit protection plate. If the protection plate is not installed properly, dust or water may enter the outdoor unit causing fire or electric shock.
- When installing or relocating the system, keep the refrigerant circuit free from substances other than the specified refrigerant (R32) such as air. Any presence of air or other foreign substance in the refrigerant circuit can cause an abnormal pressure rise or rupture, which may result in equipment damage and even injury.
- Do not change the setting of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may occur.
- Do not use means to accelerate the defrosting process (if possible) or to clean, other than those recommended by the manufacturer.
- The appliance must be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Do not pierce or burn.
- Be aware that refrigerants may not contain an odor.
- · Comply with national gas regulations.

### 

- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- Wear adequate personal protective equipment (protective gloves, safety glasses,...) when installing, maintaining or servicing the system.
- The heat exchanger fins are sharp enough to cut. To avoid injury, wear gloves or cover the fins while working around them.
- Do not touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
- Install drain piping to ensure proper drainage. Improper drain piping may result in water leakage and property damage.
- Insulate piping to prevent condensation.
- · Be careful when transporting the product.

- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- Do not use a charging cylinder. Using a charging cylinder may cause the refrigerant to deteriorate.
- Refrigerant R32 in the system must be kept clean, dry, and tight.
  (a) Clean and Dry -- Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.
- (b) Tight -- R32 does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth's protection again harmful ultraviolet radiation. R32 can contribute to the greenhouse effect if it is released. Therefore take proper measures to check for the tightness of the refrigerant piping installation. Read the chapter *Refrigerant Piping* and follow the procedures.
- The outdoor unit is for R32. See the catalog for indoor models that can be connected. Normal operation is not possible when connected to non-compatible indoor units.
- Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit far away from fluorescent lamps as much as possible.
- Do not install the air conditioner or heat pump in the following locations:
- (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen.
   Plastic parts may deteriorate and fall off or result in water leakage.
- (b) Where corrosive gas, such as sulfurous acid gas, is produced. Corroding copper pipes or soldered parts may result in refrigerant leakage.
- (c) Near machinery emitting electromagnetic waves. Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
- (d) Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled. Operating the unit in such conditions can cause a fire.
- Take adequate measures to prevent the outdoor unit from being used as a shelter by small animals. Small animals making contact with electrical parts can cause malfunctions, smoke, or fire. Instruct the user to keep the area around the unit clean.
- Servicing shall be performed only as recommended by the manufacturer and licensed or certified in their jurisdiction.

### 

- The outdoor unit should be positioned where the unit and power supply wires (breaker panel to outdoor unit) are at least 10ft (3m) away from any televisions or radios. (The unit may cause interference with the picture or sound.)
   Depending on the radio waves, a distance of 10ft (3m) may not be sufficient to eliminate the noise.
- Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
- Only use tools for R32 or R410A, such as a gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.
- If the conventional refrigerant and refrigerator oil are mixed in R32, the refrigerant may deteriorate.
- As maximum allowable pressure is 604psi (4.17MPa), the wall thickness of field-installed pipes should be selected in accordance with the relevant local, state, and national regulations.

RN006(R32)-U

# Accessories

· · · · · · · · · · · · · · · · · · ·			
Drain socket		B Drain cap (1)	
This is at the bottom of the packaging.	1		6
© Drain cap (2)		D Refrigerant charge label	
	3	$\begin{array}{c} \blacksquare \\ \hline \blacksquare \\ \blacksquare \\$	1
(E) Installation manual	1	(F) General safety considerations	1
© Warranty	1		

# **Precautions for Selecting a Location**

- 1) Choose a place solid enough to bear the weight and vibration of the unit, where the operating sound will not be amplified.
- 2) Choose a location where the air discharged from the unit or the operating sound will not cause a nuisance to the neighbors of the user.
- 3) Avoid locations, such as near bedrooms, where the operating sound may cause disturbance.
- 4) There must be sufficient space to carry the unit into and out of the site.
- 5) There must be sufficient space for air passage and no obstructions around the air inlet and the air outlet.
- 6) The site must not be prone to flammable gas leaks in the surrounding area.
- 7) In coastal areas or other places with a salty atmosphere or one containing sulfate gas, corrosion may shorten the life of the air conditioner.
- Since water will flow from the drain of the outdoor unit, do not place anything under the unit which must be kept away from moisture.
- 9) A location where flammable gas does not leak. Position at least 6-5/8ft (2m) from propane gas cylinders.

#### NOTE

Cannot be installed suspended from a ceiling or stacked.

### ACAUTION -

When operating the air conditioner in a low outdoor ambient temperature, be sure to follow the instructions described below.

- To prevent exposure to wind, install the outdoor unit with its suction side facing the wall.
- Never install the outdoor unit at a site where the suction side may be exposed directly to wind.
- To prevent exposure to wind, it is recommended to install a baffle plate on the air discharge side of the outdoor unit.
- In heavy snow areas, select an installation site where the snow will not affect the unit.
- If there is a likelihood of snow accumulating on the outdoor unit, attach a snow protection hood.
- In high humidity areas or heavy snow areas, it is recommended to attach a drain pan heater to prevent ice build-up from the bottom frame.





Install the unit high enough off the ground to prevent burying in snow.

# **Precautions on Installation**

- Check the strength and level of the installation surface so that the unit does not cause any operating vibrations or noise after installation.
- Fix the unit in place securely using foundation bolts, as in the figure. (Prepare 4 sets of 5/16 inch (M8) or 3/8 inch (M10) foundation bolts, nuts and washers; all sold separately.)
- It is best to screw in the foundation bolts until their ends are 3/4 inch (20mm) from the foundation surface.

3/4" (20mm)	

# **Outdoor Unit Installation Diagram**



# **Installation Space Requirements**

- Position the unit on a horizontal surface. Any tilt in the unit should be 3° or less to the horizontal.
- Where a wall or other obstacle is in the path of the outdoor unit's intake or exhaust airflow, follow the installation space requirements below.
- For any of the below installation patterns, the wall height on the outlet side should be 47-1/4 inch (1200mm) or less.
- Secure as much installation space around the unit as the location allows, as more space will result in more efficient operation.



# **Outdoor Unit Installation**

### **1.** Installing the outdoor unit

- When installing the outdoor unit, refer to "Precautions for Selecting a Location" on page 3 and the "Outdoor Unit Installation Diagram" on page 4.
- If drain work is necessary, follow the procedures below.

### **2.** Drain work

### 

5

- In cold areas, do not use a drain socket, drain caps (1, 2) and a drain hose with the outdoor unit. (Drain water may freeze, impairing heating performance.)
  - If the drain port is covered by a mounting base or floor surface, place additional foot bases of at least 1-1/4 inch (30mm) in height under the outdoor unit's feet.
  - 1) Attach B drain cap (1) and C drain cap (2).

2) Attach (A) drain socket.

• When attaching (A) drain socket to the bottom frame, make sure to connect the drain hose to the drain socket first.



### 3. Flaring the pipe end

#### WARNING

- Do not apply mineral oil to the flare.
- Prevent mineral oil from getting into the system as this would reduce the service life of the units.
- Never use piping which has been used for previous installations. Only use parts which are delivered with this unit.
- Never install a dryer to this R32 unit in order to guarantee its service life.
- The drying material may dissolve and damage the system.
- Improper flaring may result in refrigerant gas leakage.

### 

- Do not reuse joints which have been used once already.
  - 1) Cut the pipe end with a pipe cutter.
  - Remove burrs with the cut surface facing downward, so that the filings do not enter the pipe.
  - 3) Put the flare nut on the pipe.
  - 4) Flare the pipe.
  - 5) Check that the flaring has been done correctly.



Set exactly at the p	ositi	on shown below.		
	Ν	Flare tool for R32 or R410A	Convention	al flare tool
		Clutch-type	Clutch-type (Rigid-type)	Wing-nut type (Imperial-type)
	Α	0-0.020 inch (0-0.5mm)	0.039-0.059 inch (1.0-1.5mm)	0.059-0.079 inch (1.5-2.0mm)

# 4. Refrigerant piping

#### 

- Use the flare nut fixed to the main unit. (This is to prevent the flare nut from cracking as a result of deterioration over time.)
- To prevent gas leakage, apply refrigeration oil only to the inner surface of the flare. (Use refrigeration oil for R32 or R410A.)
- Use a torque wrench when tightening the flare nuts to prevent damage to the flare nuts and gas leakage.
- Align the centers of both flares and tighten the flare nuts 3 or 4 turns by hand, then tighten them fully with a spanner and a torque wrench.



# **Outdoor Unit Installation**

#### Cautions on pipe handling

- Protect the open end of the pipe from dust and moisture.
- All pipe bends should be as gentle as possible. Use a pipe bender for bending.

#### Selection of copper and heat insulation materials

- When using commercial copper pipes and fittings, observe the following:
- Insulation material: Polyethylene foam
  Host transfor rate: 0.041 to 0.052W/mK (0.02)
- Heat transfer rate: 0.041 to 0.052W/mK (0.024 to 0.030Btu/fth°F) (0.035 to 0.045kcal/mh°C)
- Be sure to use insulation that is designed for use with HVAC Systems.
- ACR Copper only.
- Be sure to insulate both the gas and liquid piping and observe the insulation dimensions as below.

	Piping size	Minimum bend radius	Piping thickness	Thermal insulation size	Thermal insulation thickness
Gas side	O.D. 3/8 inch (9.5mm)	1-3/16 inch (30mm) or more	0.031 inch (0.8mm) (C1220T-O)	I.D. 15/32-19/32 inch (12-15mm)	13/32 inch
Liquid side	O.D. 1/4 inch (6.4mm)	1-3/16 inch (30mm) or more	0.031 inch (0.8mm) (C1220T-O)	I.D. 5/16-13/32 inch (8-10mm)	(10mm) Min.

• Use separate thermal insulation pipes for gas and liquid refrigerant pipes.

 Using finishing tape, bundle and wrap the indoor unit piping and drain hose together so that the drain hose is below the other piping.



Be sure to

place a cap

If no flare cap is available, cover

the flare mouth with tape to

keep dirt and water out.

### 5. Pressure test and evacuating system

#### 

- Make sure that air or any matter other than refrigerant (R32) does not get into the refrigeration cycle.
- If refrigerant gas leaks should occur, ventilate the room as soon and as much as possible.
- R32, as well as other refrigerants, should always be recovered and never be released directly into the environment.
- Use tools for R32 or R410A (such as the gauge manifold, charging hose, or vacuum pump adapter).

#### 

It is highly recommended that you do not open/close the stop valves when the outdoor temperature is below -5°F (-21°C) as this may result in refrigerant leakage.

- When piping work is complete, it is necessary to perform a pressure test and evacuate system with a vacuum pump.
- If using additional refrigerant, purge the air from the refrigerant pipes and indoor unit using a vacuum pump, then charge additional refrigerant.
- Use a hexagonal wrench (3/16 inch (4mm)) to operate the stop valve rod.
- All refrigerant pipe joints should be tightened with a torque wrench to the specified tightening torque.



- Pressurize the liquid pipe and gas pipe from the service ports of each stop valve to 604psi (4.17MPa) (do not pressurize more than 604psi (4.17MPa)) for 1 hour minimum, 24 hours recommended. If there is a pressure drop, check for leaks, make repairs and perform the pressure test again.
- 2) Connect the gauge manifold's charging hose to the gas stop valve's service port.
- Fully open the low-pressure valve (Lo) on the gauge manifold and fully close the high-pressure valve (Hi). (High-pressure valve will require no further operation.)
- 4) Evacuate system using vacuum pump to below 500 microns for 1 hour minimum.
- 5) Close the low-pressure valve (Lo) on the gauge manifold and stop vacuum pumping. (Maintain this condition for a few minutes to make sure that the compound pressure gauge pointer does not swing back.)<sup>\*1</sup>
- 6) Remove the valve caps from the liquid stop valve and gas stop valve.
- 7) To open the liquid stop valve, turn the rod of the valve 90° counter-clockwise using a hexagonal wrench. Close it after 5 seconds, and check for gas leakage. Using soapy water, check for gas leakage from the indoor unit's flare and outdoor unit's flare and valve rods. After the check is complete, wipe all soapy water off.\*2
- 8) Disconnect the charging hoses from the service port for the gas stop valve, then fully open the liquid and gas stop valves. (Do not attempt to turn the valve rods further than they can go.)
- 9) Tighten the valve caps and service port caps for the liquid and gas stop valves with a torque wrench to the specified torques.
  - Refer to "4. Refrigerant piping" on page 6 for details.
- \*1 If the compound pressure gauge pointer swings back, the refrigerant may have water content or there may be a loose pipe joint.
  - Check all pipe joints and retighten nuts as needed, then repeat steps 3) through 5).
- \*2 Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks.
  - A halide torch (or any other detector using a naked flame) shall not be used.

Do not use substances containing chlorine and electronic leak detection for gas leak detection.

# Wiring

### 

- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death.
- Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.
- Do not use tapped wires, extension cords, or starburst connections, as they may cause overheating, electric shock, or fire.
- Do not use locally purchased electrical parts inside the product. (Do not branch the power for the drain pump, etc., from the terminal block.) Doing so may cause electric shock or fire.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Use an all-pole disconnection type circuit breaker with at least 1/8 inch (3mm) between the contact point gaps.
- When carrying out wiring, take care not to pull at the conduit.
- Do not connect the power wire to the indoor unit. Doing so may cause electric shock or fire.
- Do not turn on the circuit breaker until all work is completed.

### 

#### Precautions to be taken for power supply wiring

Recommend stranded cable for interunit wiring. Local code always supersedes recommendation.



Arrow view A

• If solid core wire must be used, be sure to curl the end of the lead. Improper work may cause heat and fire.



- 1) Strip the insulation from the wire (3/4 inch (20mm)).
- 2) Connect the inter-unit wires between the indoor and outdoor units so that the terminal numbers match. Tighten the terminal screws securely. It is recommended that a slot-head screwdriver be used to tighten the screws.



#### NOTE

Take care to ensure that all wiring between indoor unit and outdoor unit has a consistent connection. Any splices can cause communication errors.



[Method of mounting conduit]

- A protection plate is fixed for protection from the high-voltage section.
- 1) Dismount the stop valve cover by removing the screw.
- 2) Dismount the protection plate by removing the 3 screws.
- 3) Dismount the conduit mounting cover by removing the 3 screws.
- 4) Pass wires through the conduit and secure them with a lock nut.
- 5) After completing the work, reattach the stop valve cover, the protection plate, and the conduit mounting cover to its original position.



#### Ground

This air conditioner must be grounded. For grounding, follow all local, and state electrical codes.

# **Facility Setting** (cooling at low outdoor temperature)

#### 

Make sure to turn the power OFF before removing the protection plate.

- . If the outdoor unit is installed where the heat exchanger of the unit is exposed to direct wind, provide a windbreak wall.
- . Intermittent noises may be produced by the indoor unit due to the outdoor fan turning on and off when using facility settings.
- Do not place humidifiers or other items which might raise the humidity in rooms where facility settings are being used. A humidifier might cause dew condensation from the indoor unit outlet vent.
- Cutting jumper 4 (J4) sets the indoor fan tap to the highest position. Notify the user about this.

# Facility Setting (cooling at low outdoor temperature)

This function is designed for facilities such as equipment or computer rooms. It is never to be used in a residence or office where people occupy the space.

- Cutting jumper 4 (J4) on the circuit board will extend the operation range to 14°F (-10°C). Installing an air direction adjustment grille (sold separately) will further extend the operation range to -4°F (-20°C). In these cases, the unit will stop operating if the outdoor temperature falls below -4°F (-20°C), restarting once the temperature rises above this level.
  - 1) Remove the top plate of the outdoor unit. (4 screws)
  - 2) Remove the Electric wiring box cover.
  - 3) Cut the jumper (J4) of the PCB inside.



# When attaching the drain pan heater

#### 

Make sure to turn the power OFF before performing work.

In high humidity areas or heavy snow areas, it is recommended to attach a drain pan heater to prevent ice build-up from the bottom frame.

- 1) Attach the drain pan heater in accordance with the installation manual included with the drain pan heater.
- 2) Remove the top plate of the outdoor unit. (4 screws)
- 3) Remove the Electric wiring box cover.
- 4) Cut the jumper (J9) of the PCB inside.





Indoor and outdoor units are installed securely.	Fall, vibration, noise	
No refrigerant gas leaks.	Incomplete cooling/heating function	
Refrigerant gas and liquid pipes and indoor drain hose extension are thermally insulated.	Water leakage	
Draining line is properly installed.	Water leakage	
System is properly grounded.	Electrical leakage	
Only specified wires are used for all wiring, and all wires are connected correctly.	No operation or burn damage	
Indoor or outdoor unit's air inlet or air outlet are unobstructed.	Incomplete cooling/heating function	
Stop valves are opened.	Incomplete cooling/heating function	
Indoor unit properly receives remote control commands.	No operation	

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The pictures in this document are for illustrative purposes only.

# **Safety Considerations**

Refer also to the General Safety Considerations in the separate booklet.

i	Read the precautions in this manual carefully before operating the unit.
A2L	This appliance is filled with R32.

Read these **Safety Considerations for Installation** carefully before installing an air conditioner or heat pump. After completing the installation, make sure that the unit operates properly during the startup operation.

Instruct the user on how to operate and maintain the unit. Inform users that they should store this installation manual with the operation manual for future reference.

Always use a licensed installer or contractor to install this product. Improper installation can result in water or refrigerant leakage, electric shock fire, or explosion

Meanings of DANGER, WARNING, CAUTION, and NOTE Symbols:

Anger	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
MARNING ·······	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
<u>∧</u> NOTE	Indicates situations that may result in equipment or property damage accidents only.
A DANGER	

 Refrigerant gas is heavier than air and replaces oxygen. A massive leak can lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.

1

- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death.
   Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.
- If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas may produce toxic gas if it comes into contact with fire. Exposure to this gas could cause severe injury or death.
- After completing the installation work, check that the refrigerant gas does not leak throughout the system.
- Do not install unit in an area where flammable materials are present due to risk of explosions that can cause serious injury or death.
- Safely dispose all packing and transportation materials in accordance with federal/state/local laws or ordinances. Packing materials such as nails and other metal or wood parts, including plastic packing materials used for transportation may cause injury or death by suffocation.

#### 🕂 WARNING -

- Only qualified personnel licensed or certified in their jurisdiction must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in water leakage, electric shock, or fire.
- Pipe work and installation shall be in compliance with national codes (ASHRAE15 or IRC).
- When installing the unit in a small room, take measures to keep the refrigerant concentration from exceeding allowable safety limits. Excessive refrigerant leaks, in the event of an accident in a closed ambient space, can lead to oxygen deficiency.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in water leakage, electric shock, fire, or the unit falling.
- Install the air conditioner or heat pump on a foundation strong enough that it can withstand the weight of the unit. A foundation of insufficient strength may result in the unit falling and causing injury.

- Take into account strong winds, typhoons, or earthquakes when installing. Improper installation may result in the unit falling and causing accidents.
- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel licensed or certified in their jurisdiction according to local, state, and national regulations. An insufficient power supply capacity or improper electrical construction may lead to electric shock or fire.
- Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.
- When wiring, position the wires so that the service lid can be securely fastened. Improper positioning of the service lid may result in electric shock, fire, or the terminals overheating.
- · Before touching electrical parts, turn off the unit.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Securely fasten the outdoor unit service lid. If the service lid is not installed properly, dust or water may enter the outdoor unit causing fire or electric shock.
- When installing or relocating the system, keep the refrigerant circuit free from substances other than the specified refrigerant (R32) such as air. Any presence of air or other foreign substance in the refrigerant circuit can cause an abnormal pressure rise or rupture, which may result in equipment damage and even injury.
- Do not change the setting of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may occur.
- Do not use means to accelerate the defrosting process (if possible) or to clean, other than those recommended by the manufacturer.
- The appliance must be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Do not pierce or burn.
- · Be aware that refrigerants may not contain an odor.
- · Comply with national gas regulations.

#### CAUTION -

- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- Wear adequate personal protective equipment (protective gloves, safety glasses,...) when installing, maintaining or servicing the system.
- The heat exchanger fins are sharp enough to cut. To avoid injury, wear gloves or cover the fins while working around them.
- Do not touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
- Install drain piping to ensure proper drainage. Improper drain piping may result in water leakage and property damage.
- Insulate piping to prevent condensation.
- Be careful when transporting the product.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.

- Do not use a charging cylinder. Using a charging cylinder may cause the refrigerant to deteriorate.
- Refrigerant R32 in the system must be kept clean, dry, and tight.
  (a) Clean and Dry -- Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.
- (b) Tight -- R32 does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth's protection again harmful ultraviolet radiation. R32 can contribute to the greenhouse effect if it is released. Therefore take proper measures to check for the tightness of the refrigerant piping installation. Read the chapter *Refrigerant Piping* and follow the procedures.
- The outdoor unit is for R32. See the catalog for indoor models that can be connected. Normal operation is not possible when connected to non-compatible indoor units.
- Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit far away from fluorescent lamps as much as possible.
- Do not install the air conditioner or heat pump in the following locations:
- (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen. Plastic parts may deteriorate and fall off or result in water leakage.
- (b) Where corrosive gas, such as sulfurous acid gas, is produced.
  - Corroding copper pipes or soldered parts may result in refrigerant leakage.
- (c) Near machinery emitting electromagnetic waves. Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
- (d) Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled. Operating the unit in such conditions can cause a fire.
- Take adequate measures to prevent the outdoor unit from being used as a shelter by small animals. Small animals making contact with electrical parts can cause malfunctions, smoke, or fire. Instruct the user to keep the area around the unit clean.
- Servicing shall be performed only as recommended by the manufacturer and licensed or certified in their jurisdiction.

#### 

- The outdoor unit should be positioned where the unit and power supply wires (breaker panel to outdoor unit) are at least 10ft (3m) away from any televisions or radios. (The unit may cause interference with the picture or sound.)
   Depending on the radio waves, a distance of 10ft (3m) may not be sufficient to eliminate the noise.
- Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
- Only use tools for R32 or R410A, such as a gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.
- If the conventional refrigerant and refrigerator oil are mixed in R32, the refrigerant may deteriorate.
- As maximum allowable pressure is 604psi (4.17MPa), the wall thickness of field-installed pipes should be selected in accordance with the relevant local, state, and national regulations.

RN006(R32)-U

# Accessories



# **Precautions for Selecting a Location**

- 1) Choose a place solid enough to bear the weight and vibration of the unit, where the operating sound will not be amplified.
- 2) Choose a location where the air discharged from the unit or the operating sound will not cause a nuisance to the neighbors of the user.
- 3) Avoid locations, such as near bedrooms, where the operating sound may cause disturbance.
- 4) There must be sufficient space to carry the unit into and out of the site.
- 5) There must be sufficient space for air passage and no obstructions around the air inlet and the air outlet.
- 6) The site must not be prone to flammable gas leaks in the surrounding area.
- In coastal areas or other places with a salty atmosphere or one containing sulfate gas, corrosion may shorten the life of the air conditioner.
- Since water will flow from the drain of the outdoor unit, do not place anything under the unit which must be kept away from moisture.
- 9) A location where flammable gas does not leak. Position at least 6-5/8ft (2m) from propane gas cylinders.

#### NOTE

Cannot be installed suspended from a ceiling or stacked.

#### 

When operating the air conditioner in a low outdoor ambient temperature, be sure to follow the instructions described below.

- To prevent exposure to wind, install the outdoor unit with its suction side facing the wall.
- Never install the outdoor unit at a site where the suction side may be exposed directly to wind.
- To prevent exposure to wind, it is recommended to install a baffle plate on the air discharge side of the outdoor unit.
- In heavy snow areas, select an installation site where the snow will not affect the unit.
- If there is a likelihood of snow accumulating on the outdoor unit, attach a snow protection hood.
- In high humidity areas or heavy snow areas, it is recommended to attach a drain pan heater to prevent ice build-up from the bottom frame.

Construct a large canopy.
 Construct a pedestal.



Install the unit high enough off the ground to prevent burying in snow.

# **Precautions on Installation**

- Check the strength and level of the installation surface so that the unit does not cause any operating vibrations or noise after installation.
- Fix the unit in place securely using foundation bolts, as in the figure. (Prepare 4 sets of 5/16 inch (M8) or 3/8 inch (M10) foundation bolts, nuts and washers; all sold separately.)
- It is best to screw in the foundation bolts until their ends are 3/4 inch (20mm) from the foundation surface.

3,4" (20mm)	

# **Outdoor Unit Installation Diagram**



# **Installation Space Requirements**

- Position the unit on a horizontal surface. Any tilt in the unit should be 3° or less to the horizontal.
- Where a wall or other obstacle is in the path of the outdoor unit's intake or exhaust airflow, follow the installation space requirements below.
- For any of the below installation patterns, the wall height on the outlet side should be 47-1/4 inch (1200mm) or less.
- Secure as much installation space around the unit as the location allows, as more space will result in more efficient operation.



# **Outdoor Unit Installation**

### **1.** Installing the outdoor unit

- When installing the outdoor unit, refer to "Precautions for Selecting a Location" on page 3 and the "Outdoor Unit Installation Diagram" on page 4.
- If drain work is necessary, follow the procedures below.

### **2.** Drain work

### 

- In cold areas, do not use a drain socket, drain caps (1, 2) and a drain hose with the outdoor unit. (Drain water may freeze, impairing heating performance.)
  - If the drain port is covered by a mounting base or floor surface, place additional foot bases of at least 1-1/4 inch (30mm) in height under the outdoor unit's feet.
  - 1) Attach B drain cap (1) and C drain cap (2).

2) Attach (A) drain socket.

• When attaching (A) drain socket to the bottom frame, make sure to connect the drain hose to the drain socket first.



### 3. Flaring the pipe end

#### 

- Do not apply mineral oil to the flare.
- · Prevent mineral oil from getting into the system as this would reduce the service life of the units.
- Never use piping which has been used for previous installations. Only use parts which are delivered with this unit.
- Never install a dryer to this R32 unit in order to guarantee its service life.
- The drying material may dissolve and damage the system.
- · Improper flaring may result in refrigerant gas leakage.

### 

- · Do not reuse joints which have been used once already.
  - 1) Cut the pipe end with a pipe cutter.
  - 2) Remove burrs with the cut surface facing downward, so that the filings do not enter the pipe.
  - 3) Put the flare nut on the pipe.
  - 4) Flare the pipe.
  - 5) Check that the flaring has been done correctly.



Set exactly at the p	ositio	on shown below.		
	$\square$	Flare tool for R32 or R410A	Conventional flare tool	
		Clutch-type	Clutch-type (Rigid-type)	Wing-nut type (Imperial-type)
A		0-0.020 inch (0-0.5mm)	0.039-0.059 inch (1.0-1.5mm)	0.059-0.079 inch (1.5-2.0mm)

# 4. Refrigerant piping

- Use the flare nut fixed to the main unit. (This is to prevent the flare nut from cracking as a result of deterioration over time.)
- To prevent gas leakage, apply refrigeration oil only to the inner surface of the flare. (Use refrigeration oil for R32 or R410A.)
- Use a torque wrench when tightening the flare nuts to prevent damage to the flare nuts and gas leakage.
- Align the centers of both flares and tighten the flare nuts 3 or 4 turns by hand, then tighten them fully with a spanner and a torque wrench.



Piping connection			valve cap			Service port cap
	Flare nut			Width across flats		8–10-7/8lbf • ft
Gas	side	Liquid side	11/16 inch (17mm)	1-1/16 inch (27mm)	1-3/16 inch (30mm)	(10.7-14.7N • m)
1/2 inch (12.7mm)	5/8 inch (15.9mm)	1/4 inch (6.4mm)	10-1/2-12-5/8lbf • ft	35-3/8-44-1/8lbf • ft	16-5/8-20-1/4lbf • ft	
36-1/2-44-1/2lbf • ft	45-5/8-55-5/8lbf • ft	10-1/2-12-3/4lbf • ft	(14.2-17.2N • m)	(48.0-59.8N • m)	(22.5-27.5N • m)	
(49.5-60.3N • m)	(61.8-75.4N • m)	(14.2-17.2N • m)				



- When piping work is complete, it is necessary to perform a pressure test and evacuate system with a vacuum pump.
- If using additional refrigerant, purge the air from the refrigerant pipes and indoor unit using a vacuum pump, then charge additional refrigerant.
- Use a hexagonal wrench (3/16 inch (4mm)) to operate the stop valve rod.
- All refrigerant pipe joints should be tightened with a torque wrench to the specified tightening torque.



- Pressurize the liquid pipe and gas pipe from the service ports of each stop valve to 604psi (4.17MPa) (do not pressurize more than 604psi (4.17MPa)) for 1 hour minimum, 24 hours recommended. If there is a pressure drop, check for leaks, make repairs and perform the pressure test again.
- 2) Connect the gauge manifold's charging hose to the gas stop valve's service port.
- Fully open the low-pressure valve (Lo) on the gauge manifold and fully close the high-pressure valve (Hi). (High-pressure valve will require no further operation.)
- 4) Evacuate system using vacuum pump to below 500 microns for 1 hour minimum.
- 5) Close the low-pressure valve (Lo) on the gauge manifold and stop vacuum pumping. (Maintain this condition for a few minutes to make sure that the compound pressure gauge pointer does not swing back.)<sup>\*1</sup>
- 6) Remove the valve caps from the liquid stop valve and gas stop valve.
- 7) To open the liquid stop valve, turn the rod of the valve 90° counter-clockwise using a hexagonal wrench. Close it after 5 seconds, and check for gas leakage. Using soapy water, check for gas leakage from the indoor unit's flare and outdoor unit's flare and valve rods. After the check is complete, wipe all soapy water off.\*2
- 8) Disconnect the charging hoses from the service port for the gas stop valve, then fully open the liquid and gas stop valves. (Do not attempt to turn the valve rods further than they can go.)
- 9) Tighten the valve caps and service port caps for the liquid and gas stop valves with a torque wrench to the specified torques.
  - Refer to "4. Refrigerant piping" on page 6 for details.
- \*1 If the compound pressure gauge pointer swings back, the refrigerant may have water content or there may be a loose pipe joint.
  - Check all pipe joints and retighten nuts as needed, then repeat steps 3) through 5).
- \*2 Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks.
  - A halide torch (or any other detector using a naked flame) shall not be used.

Do not use substances containing chlorine and electronic leak detection for gas leak detection.

# Wiring

### 

- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death.
- Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.
- Do not use tapped wires, extension cords, or starburst connections, as they may cause overheating, electric shock, or fire.
- Do not use locally purchased electrical parts inside the product. (Do not branch the power for the drain pump, etc., from the terminal block.) Doing so may cause electric shock or fire.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Use an all-pole disconnection type circuit breaker with at least 1/8 inch (3mm) between the contact point gaps.
- When carrying out wiring, take care not to pull at the conduit.
- Do not connect the power wire to the indoor unit. Doing so may cause electric shock or fire.
- Do not turn on the circuit breaker until all work is completed.

### 

#### Precautions to be taken for power supply wiring

Recommend stranded cable for interunit wiring. Local code always supersedes recommendation.



Arrow view A

• If solid core wire must be used, be sure to curl the end of the lead. Improper work may cause heat and fire.



- 1) Strip the insulation from the wire (3/4 inch (20mm)).
- 2) Connect the inter-unit wires between the indoor and outdoor units so that the terminal numbers match. Tighten the terminal screws securely. It is recommended that a slot-head screwdriver be used to tighten the screws.



#### NOTE

Take care to ensure that all wiring between indoor unit and outdoor unit has a consistent connection. Any splices can cause communication errors.



[Method of mounting conduit]

- 1) Dismount the service lid by removing the 2 screws.
- 2) Pass wires through the conduit and secure them with a lock nut.
- 3) After completing the work, reattach the service lid to its original position.



#### Ground

This air conditioner must be grounded. For grounding, follow all local, and state electrical codes.

# Facility Setting (cooling at low outdoor temperature)

#### MARNING ·

• Make sure to turn the power OFF before removing the service lid.

### 

- If the outdoor unit is installed where the heat exchanger of the unit is exposed to direct wind, provide a windbreak wall.
- Intermittent noises may be produced by the indoor unit due to the outdoor fan turning on and off when using facility settings.
- Do not place humidifiers or other items which might raise the humidity in rooms where facility settings are being used. A humidifier might cause dew condensation from the indoor unit outlet vent.
- Activating the facility setting sets the indoor fan tap to the highest position.
- Notify the user about this.

# This function is designed for facilities such as equipment or computer rooms. It is never to be used in a residence or office where people occupy the space.

 Turning on SW5-3 on the PCB will extend the operation range to 14°F (-10°C). Installing an air direction adjustment grille (sold separately) will further extend the operation range to -4°F (-20°C). In these cases, the unit will stop operating if the outdoor temperature falls below -4°F (-20°C), restarting once the temperature rises above this level.



# When attaching the drain pan heater

#### 

Make sure to turn the power OFF before performing work.

# In high humidity areas or heavy snow areas, it is recommended to attach a drain pan heater to prevent ice build-up from the bottom frame.

- 1) Attach the drain pan heater in accordance with the installation manual included with the drain pan heater.
- 2) Dismount the service lid by removing the 2 screws.
- 3) Remove the switch cover (1 screw).
- 4) Turn on SW6-1 on the PCB.



# **Pump Down Operation**

In order to protect the environment, be sure to pump down when relocating or disposing of the unit.

- 1) Remove the valve caps from the liquid stop valve and gas stop valve.
- 2) Begin forced cooling operation.
- 3) After 5 to 10 minutes, close the liquid stop valve with a hexagonal wrench.
- 4) After 2 to 3 minutes, close the gas stop valve and stop forced cooling operation.
- 5) Attach the valve caps once procedures are complete.



#### Forced cooling operation

#### ■Using the indoor unit ON/OFF switch

Press the indoor unit ON/OFF switch for at least 5 seconds. (The operation will start.)

 Forced cooling operation will stop automatically after about 15 minutes. To stop the operation, press the indoor unit ON/OFF switch.

#### ■Using the indoor unit's remote controller

- 1) Press Treep , Treep and Mode at the same time.
- 2) Press [mp], select " 7 ", and press [Mode] for confirmation.
- 3) Press Mode and select the COOL operation.
- 4) Press (b) to turn on the system.
- Forced cooling operation will stop automatically after about 30 minutes. To stop the operation, press ( )

# **Trial Operation and Testing**

• When trial operation is conducted directly after the circuit breaker is turned on, in some cases no air will be output for about 15 minutes in order to protect the air conditioner.

### **1.** Trial operation and testing

Refer to the installation manual for the indoor unit.

### 2. Test items

Test items	Symptom	Check
Indoor and outdoor units are installed securely.	Fall, vibration, noise	
No refrigerant gas leaks.	Incomplete cooling/heating function	
Refrigerant gas and liquid pipes and indoor drain hose extension are thermally insulated.	Water leakage	
Draining line is properly installed.	Water leakage	
System is properly grounded.	Electrical leakage	
Only specified wires are used for all wiring, and all wires are connected correctly.	No operation or burn damage	
Indoor or outdoor unit's air inlet or air outlet are unobstructed.	Incomplete cooling/heating function	
Stop valves are opened.	Incomplete cooling/heating function	
Indoor unit properly receives remote control commands.	No operation	

# 12. Operation Manual

# 12.1 FTXM09/12/18/24WVJU9

#### **Read Before Operation**

# **Safety Considerations**

Refer also to the General Safety Considerations in the separate booklet.

	Read the precautions in this manual carefully before operating the unit.	
A2L	This appliance is filled with R32.	

Read these **Safety Considerations for Operations** carefully before operating an air conditioner or heat pump. Make sure that the unit operates properly during the startup

operation. Instruct the user on how to operate and maintain the unit. Inform users that they should store this operation manual with the installation manual for future reference. Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
<u>∧</u> NOTE	Indicates situations that may result in equipment or property-damage accidents only.

### – 🕂 DANGER -

- Do not install the unit in an area where flammable materials are present due to risk of explosion resulting in serious injury or death.
- Any abnormalities in the operation of the air conditioner or heat pump, such as smoke or fire, could result in severe injury or death. Turn off the power and contact your dealer immediately.
- Refrigerant gas may produce toxic gas if it comes into contact with fire, such as from a fan heater, stove, or cooking device.
   Exposure to this gas could cause severe injury or death.
- For refrigerant leakage, consult your dealer. Refrigerant gas is heavier than air and replaces oxygen. A massive leak could lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- If equipment utilizing a burner is used in the same room as the air conditioner or heat pump, there is the danger of oxygen deficiency which could lead to an asphyxiation hazard resulting in serious injury or death. Be sure to ventilate the room sufficiently to avoid this hazard.
- Safely dispose of the packing materials. Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.

• Tear apart and throw away plastic packaging bags so that children will not play with them. Children playing with plastic bags face the danger of death by suffocation.

### – 🕂 WARNING -

- Contact your dealer for repair and maintenance. Improper repair and maintenance may result in water leakage, electric shock, and fire. Only use accessories made by Daikin that are specifically designed for use with the equipment and have them installed by a professional.
- Contact your dealer to move and reinstall the air conditioner or heat pump. Incomplete installation may result in water leakage, electric shock, and fire.
- Never let the indoor unit or the remote controller get wet. Water can cause an electric shock or a fire.
- Never use flammable spray such as hair spray, lacquer, or paint near the unit. Flammable spray may cause a fire.
- When a fuse blows out, never replace it with one of incorrect ampere ratings or different wires. Always replace any blown fuse with a fuse of the same specification.
- Never remove the fan guard of the unit. A fan rotating at high speed without the fan guard is very dangerous.
- Never inspect or service the unit by yourself. Contact a qualified service person to perform this work.
- Turn off all electrical power before doing any maintenance to avoid the risk of serious electric shock; never sprinkle or spill water or liquids on the unit.
- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- The heat exchanger fins are sharp enough to cut. To avoid injury wear gloves or cover the fins while working around them.
- Do not put a finger or other objects into the air inlet or air outlet. The fan is rotating at high speed and will cause injury.
- Check the unit foundation for damage on a continuous basis, especially if it has been in use for a long time. If left in a damaged condition the unit may fall and cause injury.
- Placing a flower vase or other containers with water or other liquids on the unit could cause a shock or fire if a spill occurs.
- Do not touch the air outlet or horizontal blades while the swing flap is in operation because fingers could get caught and injured.
- Never touch the internal parts of the controller. Do not remove the front panel because some parts inside are dangerous to touch. To check and adjust internal parts, contact your dealer.
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.
- The appliance must be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance or an operating electric heater).
- Do not pierce or burn.
- · Be aware that refrigerants may not contain an odor.
### **Read Before Operation**

### - A CAUTION -

- Do not use the air conditioner or heat pump for any other purposes other than comfort cooling or heating.
   Do not use the unit for cooling precision instruments, food, plants, animals or works of art.
- Do not place items under the indoor unit as they may be damaged by condensates that may form if the humidity is above 80% or if the drain outlet gets blocked.
- Before cleaning, stop the operation of the unit by turning the power off or by pulling the supply cord out from its receptacle. Otherwise, an electric shock and injury may result.
- Do not wash the air conditioner or heat pump with excessive water. An electric shock or fire may result.
- Avoid placing the controller in a spot which may be splashed with water. Water entering the controller may cause an electric shock or damage the internal electronic parts.
- Do not operate the air conditioner or heat pump when using a room-fumigation type of insecticide.
   Failure to observe this could cause the chemicals to be deposited in the unit and can endanger the health of those who are hypersensitive to chemicals.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- The appliance is not intended for use by young children or infirm persons without supervision.
- The remote controller should be kept away from children so they cannot play with it.
- · Consult with the installation contractor for cleaning.
- Incorrect cleaning of the inside of the air conditioner or heat pump could make the plastics parts break and cause water leakage or electric shock.
- Do not touch the air inlet or aluminum fin of the air conditioner or heat pump as they can cut and cause injury.
- Do not place objects in direct proximity of the outdoor unit. Do not let leaves and other debris accumulate around the unit. Leaves are a hotbed for small animals which can enter the unit. Once inside the unit, animals can cause the unit to malfunction, and cause smoke or fire when they make contact with electrical parts.

## — 🕂 NOTE -

- Never press the button of the remote controller with a hard, pointed object. The remote controller may be damaged.
- Never pull or twist the electric wire of the remote controller. It may cause the unit to malfunction.
- Do not place appliances that produce open flames in places that are exposed to the airflow of the unit or under the indoor unit. It may cause incomplete combustion or deformation of the unit due to the heat.
- Do not expose the controller to direct sunlight. The LCD display can become discolored and may fail to display the data.

- Do not wipe the controller operation panel with benzene, thinner, chemical dust cloth, etc. The panel may get discolored or the coating can peel off. If it is heavily dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the panel clean. Then wipe it with another dry cloth.
- Dismantling of the unit, disposal of the refrigerant, oil, and additional parts, should be done in accordance with the relevant local, state, and national regulations.
- Operate the air conditioner or heat pump in a sufficiently ventilated area and not surrounded by obstacles. Do not use the air conditioner or heat pump in the following places.
  - a. Places with a mist of mineral oil, such as cutting oil.
  - b. Locations such as coastal areas where there is a lot of salt in the air.
  - c. Locations such as hot springs where there is a lot of sulfur in the air.
  - d. Locations such as factories where the power voltage varies a lot.
  - e. In cars, boats, and other vehicles.
  - f. Locations such as kitchens where oil may splatter or where there is steam in the air.
  - g. Locations where equipment produces electromagnetic waves.
  - h. Places with an acid or alkaline mist.
  - i. Places where fallen leaves can accumulate or where weeds can grow.
- Take snow protection measures. Contact your dealer for the details of snow protection measures, such as the use of a snow protection hood.
- Do not attempt to do electrical work or grounding work unless you are licensed to do so. Consult with your dealer for electrical work and grounding work.
- Pay attention to operating sound. Be sure to use the following places:
  - Places that can sufficiently withstand the weight of the air conditioner or heat pump yet can suppress the operating sound and vibration.
  - b. Places where warm air from the air outlet of the outdoor unit or the operating sound of the outdoor unit does not annoy neighbors.
- Make sure that there are no obstacles close to the outdoor unit. Obstacles close to the outdoor unit may drop the performance of the outdoor unit or increase the operating sound of the outdoor unit.
- Consult your dealer if the air conditioner or heat pump in operation generates unusual noise.
- Make sure that the drainpipe is installed properly to drain water. If no water is discharged from the drainpipe while the air conditioner or heat pump is in the cooling mode, the drainpipe may be clogged with dust or dirt and water leakage from the indoor unit may occur. Stop operating the air conditioner or heat pump and contact your dealer.
- Do not spray the air conditioner unit with any deodorizers, etc. It may cause the unit to malfunction.

FTP002(R32)-U









**Read Before Operation** 

# Names of Parts

# Wireless LAN connection adapter

The Wireless LAN connection adapter function requires the Daikin Comfort Control App for connecting to the air conditioner and controlling it via your smartphone or tablet over your network.

### Attention

- Wireless LAN sends and receives data using radio waves so there is a risk of transmitted data being subject to eavesdropping and illegal access. When using wireless LAN, manage the SSID/KEY of the wireless LAN connection adapter, the SSID/KEY of the wireless router, and the app login information so that they will not be known to others, and ensure that you have an adequate understanding of the risks involved. Page 6 In the case that the product is accessed and operated illegally, turn off the wireless LAN connection adapter function. Page 40
   Do not use this product near a microwave oven. (This can affect wireless LAN communications.)
- This product cannot be directly connected to the communication line of a telecommunications carrier (internet service provider, etc.). When connecting to the internet, be sure to connect via a device such as a router.

When the wireless LAN connection adapter function is turned on, the right side of the air conditioner may become slightly warm, but this is not an abnormality.

### [About the SSID and KEY]

• The [SSID] and [KEY] shown on the serial number sticker are necessary when connecting the air conditioner to a smartphone via wireless LAN.

# \land WARNING

- While the Wireless LAN connection adapter operates, it may affect persons using cardiac pacemakers or defibrillators.
- This product may cause electromagnetic interference.
- While the Wireless LAN connection adapter operates, it may affect automatic doors or fire alarm equipment. This product may cause faulty behavior of the equipment.

## Configuration

- The user is responsible for providing the following items before using this product:
  - Smartphone or tablet PC
  - Internet line and communicating device (Modem/router or similar device)
  - Wireless LAN access point
  - Application name: [Daikin Comfort Control App] (free)
    - For details on the installation method for the Daikin Comfort Control App, please see Page 35.



### Wireless LAN connection adapter lamp (Orange)

• The Wireless LAN connection adapter lamp lights when connecting to a router (Wireless LAN access point). Please see > Page 35.

Display

For Wireless LAN connection adapter operation, please see >Page 40

# \Lambda WARNING

When operating an air conditioner from outside the home, it is not possible to check the air conditioner or the surroundings of the air conditioner, or the state of the people in the room. Therefore, make sure to adequately check for safety before use. In some cases, there is a risk of death, severe injury, or property damage.

### Check the following in advance (while at home)

- Timer settings or reservations that other users may have made. (There is a risk of causing harm to the health of people, animals, or plants in the home if operation starts and stops unexpectedly)
- There are no signs of abnormality in the air conditioning. Harm will not be caused to people or to the room if there is a change in airflow. (For example, that there are no objects nearby that might blow over) (There is a risk of objects falling due to airflow and causing fire, bodily injury, or staining of household items)
- Check the following before/while operating a unit from outside the home
- If you know that there is someone at home, inform the person when turning the air conditioner on or off from outside the home. (If someone at home is standing on something such as a stool, the air conditioner turning on or off unexpectedly could surprise them and cause them to fall or topple over. Additionally, a sudden change in the indoor/outdoor temperature could harm the health of people at home)
   The air conditioner can be turned off and temperature adjustment can be made using a remote controller in the home.
- Do not use the function if the only people at home are persons who are unable to make adjustments to temperature or other settings themselves, such as young children, disabled persons, or elderly persons.
- Regularly check the settings and operating status of the air conditioner. (Sudden changes in indoor/outdoor temperature pose a health hazard. There is a risk of harm to animals and plants)
- If an error occurs during operation, immediately turn off the air conditioner and contact your dealer.
- Double check the display to confirm that the power is off.
- 9

**Read Before Operation** 

# **Preparation Before Operation**

# 

Incorrect handling of batteries can result in injury from battery leakage, rupturing or heating, or lead to equipment failure. Please observe the following precautions and use safely.

- If the alkaline solution from the batteries should get in the eyes, do not rub the eyes. Instead, immediately flush the eyes with tap water and seek the attention of a medical professional.
- Keep batteries out of reach of children. In the event that batteries are swallowed, seek the immediate attention of a medical professional.
- Do not expose batteries to heat or fire. Do not disassemble or modify batteries. The insulation or gas release vent inside the battery may be damaged, resulting in battery leakage, rupturing, or heating.







### Basic Operation

# AUTO · DRY · COOL · HEAT · FAN Operation

The air conditioner operates with the operation mode of your choice. From the next time on, the air conditioner will operate with the same operation mode.

## To start operation

- **1.** Press mode and select an operation mode.
  - Each pressing of the button changes the mode setting in sequence.



\* 8



# **2.** Press ()

- " **ON** " is displayed on the LCD.
- The OPERATION lamp lights green.



Display

### To stop operation



- " ON " disappears from the LCD.
- The OPERATION lamp goes off.

# NOTE

### Notes on AUTO operation

• In AUTO operation, the system selects an appropriate operation mode (COOL or HEAT) based on the indoor temperature and starts the operation.

.....

• The system automatically reselects setting at a regular interval to bring the indoor temperature to the user-setting level.

#### Note on DRY operation

• Eliminates humidity while maintaining the indoor temperature as much as possible. It automatically controls temperature and airflow rate, so manual adjustment of these functions is unavailable.











**Useful Functions** 

### NOTE

# Notes on CLEAN operation

- The flaps may sometimes close to increase the drying effect inside the air conditioner.
- CLEAN operation automatically dries the inside of the air conditioner each time after COOL and DRY operation is stopped.
- CLEAN operation may not be performed if the COOL or DRY operation time is short.
- If CLEAN operation does not suit your preference, set operation to "Off". Page 17

### Relation between CLEAN operation and indoor unit lamps

Air conditioner	LCD	CLEAN lamp	
Operating (OPERATION lamp lights up)	CLEAN is "ON"	Lights up	
	CLEAN is "OFF"	Goes off	
Not operating (OPERATION lamp goes off)		Goes off	
	CLEAN is "ON"	Lights up (Clean is "Operating")	
	CLEAN is "OFF"	Goes off	



Useful Functions

## How INTELLIGENT EYE operation works

The INTELLIGENT EYE sensor detects human movement and adjusts the right and left airflow direction. If no one is in the room for more than 20 minutes, the operation automatically changes to energy saving operation. The INTELLIGENT EYE sensor works differently depending on the situation.

### [Example]



The airflow direction may differ from the illustrated direction depending on the actions and movements of the people in the areas.

# INTELLIGENT EYE operation is useful for energy saving

#### **Energy saving operation**

- If no presence detected in the room for 20 minutes, the energy saving operation will start, and the INTELLIGENT EYE lamp goes off.
- If human movement is detected again, the INTELLIGENT EYE lamp lights up and energy saving operation terminates
- This operation changes the temperature by -3.6°F (-2.0°C) in HEAT / +3.6°F (+2.0°C) in COOL / +3.6°F (+2.0°C) in DRY operation from the set temperature.
- When the room temperature exceeds 86°F (30.0°C), the operation changes the temperature by +1.8°F (+1.0°C) in COOL / +1.8°F (+1.0°C) in DRY operation from the set temperature.
- · This operation decreases the airflow rate slightly in FAN operation only.

# NOTE

### Notes on INTELLIGENT EYE operation



If the air conditioner is in INTELLIGENT EYE operation and the mode "Do not blow directly on people" is selected, the louvers adjust the airflow
direction if there are people in the sensing areas of the INTELLIGENT EYE so that the leftward or rightward airflow will not be directed to the people.
If no people are detected in either area 1 or 2 for 20 minutes, the air conditioner switches to the energy-saving mode with the set temperature
shifted by 3.6°F (2.0°C).

The air conditioner may switch to the energy-saving operation even if there are people in the areas.

- This may occur depending on the clothes the people are wearing, if there is no movement of the people in the areas.
- The airflow direction from the louvers will be leftward if there are people in both areas 1 and 2. The air will also flow left if there is a person right in front of the sensor as the sensor judges that there are people in both areas.
- Due to the position of the sensor, people might be exposed to the airflow of the indoor unit if they are close to the front side of the indoor unit. If there are people close to the front side of the indoor unit or in both areas, it is recommended to use the COMFORT AIRFLOW and INTELLIGENT EYE operations simultaneously. Using both modes together, the air conditioner will not direct the airflow towards the people.
- The sensor could also mistakenly detect pets, sunlight, fluttering curtains and light reflected off of mirrors as passers-by.
- The sensor may not detect moving objects further than 23ft (7m) away. (Please see the application range)
- Sensor detection sensitivity changes according to the indoor unit location, the speed of passers-by, temperature range, etc.
- NIGHT SET mode Page 27 will not switch on during use of INTELLIGENT EYE operation.





# **Useful Functions COMFORT AIRFLOW Operation** The flow of air will be in the upward direction while in COOL and DRY operation and in the downward direction while in HEAT operation, which will provide a comfortable airflow that will not come in direct contact with people. 1 Airflow direction : Upward Airflow direction : Downward (ceiling spread airflow) (floor spread airflow) COOL and DRY operation HEAT operation To start COMFORT AIRFLOW operation Press ( ). • " 🕼 " appears on the LCD. COOL and DRY **HEAT** operation **FAN** operation operation Flaps direction Goes up Goes down Not available Airflow rate AUTO To cancel COMFORT AIRFLOW operation Comforl Press again. • " 🕼 " disappears from the LCD. • The flaps will return to the memory position from before COMFORT AIRFLOW operation. NOTE Notes on COMFORT AIRFLOW Operation The airflow rate will be set to AUTO. • If the upward and downward airflow direction is selected, the COMFORT AIRFLOW function will be canceled. Priority is given to the function of whichever button is pressed last. 23



### **Useful Functions**

ECONO

# **ECONO / QUIET OUTDOOR UNIT** Operation 1 CD



ECONO operation enables efficient operation by limiting the maximum power consumption.

This function is useful to prevent the circuit breaker from tripping when the unit operates alongside other appliances on the same circuit.

QUIET OUTDOOR UNIT operation lowers the noise level of the outdoor unit by changing the frequency and fan speed of the outdoor unit. This function is convenient during the night-time operation.



## Press and select the desired mode.

• Each time Time is pressed, a different setting option is displayed on the LCD.



# To cancel operation



# Press 🗔 until no icon is displayed.

### NOTE

### Notes on ECONO operation

- This operation is performed with lower power and therefore may not provide a sufficient cooling (heating) effect.
- Pressing 🛞 causes the settings to be canceled, and " 🏹 " disappears from the LCD.
- If the power consumption level is already low, switching to ECONO operation will not reduce the power consumption.

#### Notes on QUIET OUTDOOR UNIT operation

- Even if the operation is stopped by using the remote controller or the indoor unit ON/OFF switch when using QUIET OUTDOOR UNIT operation, " from " will remain displayed on the remote controller.
- QUIET OUTDOOR UNIT operation will not reduce the frequency nor fan speed if they already are operating at reduced levels.
- This operation is performed with lower power and therefore may not provide a sufficient cooling (heating) effect.

### Possible combinations of ECONO / QUIET OUTDOOR UNIT operation and basic operations

	Operation mode					
	AUTO	DRY	COOL	HEAT	FAN	
ECONO	✓	✓	✓	✓	-	
QUIET OUTDOOR UNIT	✓	-	✓	✓	-	







TIMER Operation

### 

Up to 4 timer settings can be saved for each day of the week. This is convenient to adapt the WEEKLY TIMER to your family's life style.

### Setting example of the WEEKLY TIMER

The same timer settings are used from Monday through Friday, while different timer settings are used for the weekend.



• Up to 4 reservations per day and 28 reservations per week can be set using the WEEKLY TIMER. The effective use of the copy mode simplifies timer programing.

• The use of ON-ON-ON settings, for example, makes it possible to schedule operating mode and set temperature changes. Furthermore, by using OFF-OFF-OFF settings, only the turn off time of each day can be set. This will turn off the air conditioner automatically if you forget to turn it off.
































	When the Need Arises		
Troubleshoot	ing		
Before making an inquiry or a reques If the problem persists, consult your c	t for repair, please check the following. lealer.		
Not a problem This case is not a prob	lem. Check Please check again before requesting repairs.		
The air conditioner does r	not operate		
Case	Description / what to check		
OPERATION lamp is off.	<ul> <li>PERATION lamp is off.</li> <li>Has the circuit breaker been tripped or the fuse blown?</li> <li>Is there a power failure?</li> <li>Are batteries set in the remote controller?</li> </ul>		
OPERATION lamp is blinking.	Turn off the power with the circuit breaker and restart operation with the remote controller. If the OPERATION lamp is still blinking, check the error code and consult your dealer. Page 49, 50		
The air conditioner sudde	nly stops operating		
The air conditioner sudde	Description / what to check		
The air conditioner sudde Case OPERATION lamp is on.	Description / what to check                ✓             • To protect the system, the air conditioner may stop operating after sudden large voltage fluctuations. It automatically resumes operation in about 3 minutes.		

# The air conditioner does not stop operating

Case	Description / what to check			
The air conditioner continues operating even after operation is	<ul> <li>Immediately after the air conditioner is stopped</li> <li>The outdoor unit fan continues rotating for about another 1 minute to protect the system.</li> <li>While the air conditioner is not in operation</li> <li>When the outdoor temperature is high, the outdoor unit fan may start rotating to protect the system.</li> </ul>			
stopped.	CLEAN operation is being performed. It is possible to stop CLEAN operation while it is in progress. (If this does not suit your preferences, set CLEAN to "Off".)			

## Wireless LAN connection

When this happens	Explanation and where to check		
The device (air conditioner) cannot be found on the device list screen.	<ul> <li>Carry out connection setting again.</li> <li>Move the router (wireless LAN access point) close to the indoor unit. Page 35-40</li> <li>There is a possibility that you are using an unsupported smart phone or router (wireless LAN access point). For details, refer to the web site. Page 35-40</li> </ul>		
Even if the wireless LAN connection adapter lamp is lit, operation from outside the home is not possible.	Communication between the router and the internet connection may not be working.     Please confirm.		

When the Need Arises

# Troubleshooting

## The room does not cool down / warm up

Case	Description / what to check			
Air does not come out.	<ul> <li>In HEAT operation         <ul> <li>To prevent the release of cold air, air does not come out directly after operation is started. Please wait 1 to 4 minutes.</li> <li>During defrosting operation, hot air does not flow out of the indoor unit.</li> </ul> </li> <li>When the air conditioner operates immediately after the circuit breaker is turned on         <ul> <li>The air conditioner is preparing to operate. Wait for about 3 to 10 minutes.</li> </ul> </li> </ul>			
Air does not come out / Air comes out.	<ul> <li>Is the airflow rate setting appropriate?</li> <li>Is the airflow rate setting low, such as "Indoor unit quiet" or "Airflow rate 1"? Increase the airflow rate setting.</li> <li>Is the set temperature appropriate?</li> <li>Is the adjustment of the airflow direction appropriate?</li> <li>Is the airflow rate set to AUTO in COOL operation?</li> <li>Or is the unit operating in DRY operation?</li> <li>When the room temperature reaches the set temperature, the airflow rate will decrease to a gentle breeze in order to prevent over-cooling and overheating. When the room temperature deviates from the set temperature again, the gentle breeze will stop and the airflow will become stronger. Also, if the room temperature stabilizes near the set temperature, the airflow rate may repeatedly alter between strong and weak. (The unit may appear to be operating and stopping repeatedly, but this is not the case.)</li> </ul>			
Air comes out.	<ul> <li>Is there any furniture directly under or beside the indoor unit?</li> <li>Is the air conditioner in ECONO operation or QUIET OUTDOOR UNIT operation? Page 25</li> <li>Are the air filters dirty?</li> <li>Is there anything blocking the air inlet or air outlet of the indoor unit or outdoor unit?</li> <li>Is a window or door open?</li> <li>Is an exhaust fan turning?</li> <li>Depending on the room conditions, number of occupants, or outdoor temperature and humidity, the set temperature may not be reached.</li> </ul>			

## Water or mist comes out

Case	Description / what to check		
Mist comes out of the indoor unit.	• This happens when the air in the room is cooled into mist by the cold airflow during COOL or other operation.		
Water is leaking from the indoor unit.	• If the drain hose is crushed or clogged, water from the indoor unit may be unable to drain and start leaking. Stop operation of the unit immediately and contact your dealer.		

## **Remote controller**

Case	Description / what to check		
The unit does not receive signals from the remote controller or has a limited operating range.	<ul> <li>The batteries may be exhausted. Replace both batteries with new dry batteries AAA.LR03 (alkaline). For details, refer to "Preparation Before Operation". Page 10</li> <li>Signal communication may be disabled if an electronic-starter-type fluorescent lamp (such as inverter-type lamps) is in the room. Consult your dealer if that is the case.</li> <li>The remote controller may not function correctly if the transmitter is exposed to direct sunlight.</li> <li>Is there a device in the room that redirects remote controller signals? Some appliances such as TV speakers are equipped with these devices. If there is such a device in the room, the signals it emits may interfere with signals from the remote controller, preventing reception.</li> <li>Infrared rays from smartphones and game consoles may interfere with signals from the remote controller, preventing reception.</li> </ul>		
LCD is faint, is not working, or the display is erratic.	<ul> <li>The batteries may be exhausted. Replace both batteries with new dry batteries AAA.LR03 (alkaline). For details, refer to "Preparation Before Operation". Page 10</li> </ul>		

Remote controller				
Case		Description /	what to check	
" ⊄⁄⊐ " on the LCD is blinking and the remote controller cannot be operated.	Battery power has run Replace both batteries Leaving exhausted bat leakage, rupturing or h (Even when the ⊄/2 is l	out. at the same time t teries in the remote eating, or lead to e blinking, the OFF b	with new size AAA.LR03 (alkaline) batteries. e controller can result in injury due to battery equipment failure. sutton remains functional.)	
Other electric devices start operating.	• If the remote controller dealer.	activates other ele	ectric devices, move them away or consult your	
Air has an odor				
Case		Description /	what to check	
	The room odor absorb We recommend you to	ed in the unit is dis have the indoor ur	charged with the airflow. nit cleaned. Please consult your dealer.	
The air conditioner gives off an odor.	<ul> <li>The indoor unit is blowing out room odor it has absorbed (the smell of walls or carpeting, furniture, clothes, and so on).</li> <li>If the air conditioner has been used for a long time, there is a chance that a dirty heat exchanger or fan are emitting an odor.</li> <li>We recommend you to have the indoor unit cleaned. Please consult your dealer.</li> <li>Do not spray the air conditioner unit with any dependences.</li> </ul>			
Display lamps				
Case		Description /	what to check	
	<ul> <li>Is the display brightnes</li> </ul>	s set to "Off"?		
The OPERATION lamp is off, but the air conditioner is operating.	CLEAN operation is being performed. It is possible to stop CLEAN operation while it is in progress.			
The display lamps on the main unit are dark.	Is the display brightness set to "Low"?			
Others	1			
Case		Description /	what to check	
The air conditioner suddenly starts behaving strangely during operation.	The air conditioner may malfunction due to lightning or radio. If the air conditioner malfunctions, turn off the power with the circuit breaker and restart the operation with the remote controller.			
The WEEKLY TIMER does not operate according to the settings.	Check if the ON/OFF TIMER and the WEEKLY TIMER are set to the same time.     Change or deactivate the settings in the ON/OFF TIMER. ▶Page 26, 27			
The ON/OFF TIMER does not operate according to the settings.	Check if the ON/OFF TIMER and the WEEKLY TIMER are set to the same time.     Change or deactivate the settings in the WEEKLY TIMER. Page 29			
The ceiling and walls around the indoor unit are black and dirty.	• Due to the circulation pattern of the air and static electricity, the air conditioner is causing airborne dirt and dust to stick to walls and other surfaces. Depending on the wallpaper type, dirt may adhere more easily. A thorough cleaning of the area around the air conditioner is recommended.			
Notes on the operating conditions	ther than these listed is the table	Mode	Operating conditions	
<ul> <li>If operation continues under any conditions other than those listed in the table,         <ul> <li>A safety device may activate to stop the operation.</li> <li>Dew may form on the indoor unit and drip from it when COOL or DRY operation is selected.</li> <li>*1 Turning on switch SW on the outdoor unit PCB will extend the cooling operation range to 14°F (-10.0°C). Installing an air direction adjustment grille (sold separately) will further extend the operation range to -4°F (-20.0°C). Please consult your dealer.</li> </ul> </li> </ul>		COOL / DRY	Outdoor temperature: 50*1-115°F (10.0*1-46.0°           *1 −4°F (−20.0°C) if an air direction adjustme grille (sold separately) is installed.           Indoor temperature: 64-90°F (18.0-32.0°C)           Indoor tumidity: 80% max.	
			Outdoor temperature: 5*2-75°F (-15.0*2-24.0°C	



CODE

00 UA When the Need Arises

MEANING

NORMAL INDOOR-OUTDOOR UNIT COMBINATION FAULT

U2       DPOP VOLVAGE OF MANN CIRCUIT VOLVONCAGE         VIE       FALLEY CONTROL OF TRANSMISSION SETTMENN NOOR UNIT AND OUTDOOR UNIT)         VIE       FALLEY CONTROL OF TRANSMISSION SETTMENN NOOR UNIT AND OUTDOOR UNIT)         VIE       FALLEY VIEXTOCHAR LEW TRANSMISSION SETTMENN NOOR UNIT)         VIET       G4       FALLEY VIEXTOCHAR LEW TRANSMISSION SETTMENN NOOR         VIET       G4       FALLEY VIEXTOCHAR LEW TRANSMISSION         VIET       G4       FALLEY VIEXTOCHAR LEW TRANSMISSION NITENAL TEMPERATURE         VIET       G4       FALLEY VIEXTOCHAR LEW TRANSMISSION NITENAL TEMPERATURE         VIET       G4       FALLEY VIEXTOCHAR LEW FRATURE SENSOR         VIET       G4       FALLEY VIEXTOCHAR LEW FRATURE SENSOR         VIET       <	STSTEM	00	REFRIGERANT SHORIAGE	
Wide Fallule OF TRANSMISSION (BETWEEN INDOOR UNIT)         INDOOR       44       HIGH PRESSURE (MIRAL OF INFECTEUP PROTECTOR         UNIT       64       FAULTY SUCTORIA INTERVERTURE SENSOR         CC       FAULTY SUCTORIA INTERVERTURE SENSOR         COUNCHEST OF AULT       FEG         COUNCHEST OF SUCTOR       FEG         CUTDOOR       FEG         CUTDOR       FER         CUTDOR       FER         CUTOR       FER         CUTRUE       FEE<		U2	DROP VOLTAGE OR MAIN CIRCUIT OVERVOLTAGE	
NOOOR       A1       INDOOR PCB DEPECTIVENESS         UNT       C4       FAIL MOTOR FAULT         UNT       C4       FAIL MOTOR FAULT         C6       FAIL MOTOR FAULT       FAIL MOTOR FAULT         C7       CALLTY HUMOTOR PERDER/ENDER/ENDEROR         C8       COUNDER-EATING SWITCHING ERED         C9       CRUIT BOARD FAULT         C9       FG         C9       FG         C9       FG         C9       FG         C9       CRUIT BOARD FAULT         C9       FG         C9       FG         C9       FG         C9       CRUIT BOARD FAULT         C9       FAULTY SUCTION AIR TEMPERATURE SENSOR         L10		U4	FAILURE OF TRANSMISSION (BETWEEN INDOOR UNIT AND OUTDOOR UNIT)	
NINGOR       As       FINITH PRESUME CONTROL ON FRALEZ-UP PROTECTOR         UNT       C3       FAULTY HEAT EXCHANGER TEMPERATURE SENSOR         C4       FAULTY HEAT EXCHANGER TEMPERATURE SENSOR         C5       CICCUMPESSOR CONTROL ON FRALE         C6       FAULTY HEAT EXCHANGER TEMPERATURE SENSOR         C6       FAULTY HEAT EXCHANGER TEMPERATURE SENSOR         C6       FAULTY HEAT EXCHANGER TEMPERATURE SENSOR         C7       CFANATOR FAULT         C8       OLOPPESSOR CONTROL ON FREE         C9       FOR HOR MOTOR FAULT         C9       CORPESSOR CONTROL ON FREE         C9       FOR HOR MOTOR FAULT         C9       CORPESSOR CONTROL ON FREE         C9       FOR HOR MOTOR FAULT         C9       FOR HOR MOTOR FAULT         C9       OPERATION HAIT DUE TO CONTROL ON FREE         C9       FOR HOR MOTOR FAULT         C9       OPERATION HAIT DUE TO CAULTY POSITION DETECTION SENSOR         C9       FAULTY SUCTION ART FEMPERATURE SENSOR         C9       FA		A1	INDOOR PCB DEFECTIVENESS	
INDOOR       A6       FANLIN' BLATCON AIR TEMPERATURE SENSOR         INIT       C6       FAULTY SUCTON AIR TEMPERATURE SENSOR         IS       C6       FAULTY SUCTON AIR TEMPERATURE SENSOR         IS       C6       FAULTY SUCTON AIR TEMPERATURE SENSOR         IS       C6       FAULTY COMPESSOR         IS       C6       CHOUTY SOATON HER TEMPERATURE SENSOR         IS       C1       COMPARISON         IS       C1       COMPARISON INTERNAL TEMPERATURE         IS       FAULTY INTERNO FAULT       PIE         INT       H6       CERTICAL MARTINE DUE TO FAULTY POSITION DETECTION SENSOR         INT       H6       CERTICAL MARTINE SENSOR         IS       FAULTY INTERNET MEREATURE SENSOR       C1         IS       FAULTY INVERTER CIRCUTH HEAT SINK TEM		A5	HIGH PRESSURE CONTROL OR FREEZE-UP PROTECTOR	
UNIT       CX       FALITY HEAT EXCHANGER TEMPERATURE SENSOR         CC       FAULTY HUMOTH SENSOR         CC       FAULTY HUMOTH SENSOR         CC       FAULTY HUMOTH SENSOR         C3       CHCUTT BOARD FAULT         C4       COULING EXERSION (CHCA) SYMPED         C5       FAULTY HUMOTH SENSOR         C4       COULING EXERSION (CHCA) SYMPED         C5       FAULTY COMPRESSION START UP         C5       FAULTY COMPRESSION START UP         C7       CC FAULTY COMPRESSION START UP         C7       CC FAULTY COMPRESSION START UP         C8       OVERCURRENT INPUT         C8       OVERCURRENT INPUT         C8       OVERCURRENT INPUT         C8       OVERCURRENT INPUT         C9       DESIGNATION CONTROL (IN COOLING)         C0	INDOOR	A6	FAN MOTOR FALLET	
UNIT       CS       FAULTY SUCTON ART TEMPERATURE SENSOR         EA       COOLING-HEATING SWITCH (HPS) ACTIVATED         EA       COOLING-HEATING SWITCH (HPS) ACTIVATED         ES       HIGH PRESSURE SOUTON (ART UP         ES       OPERATION HAIT DUE TO COMPACE SPIE CONTROL         ES       OPERATION HAIT DUE TO COMPACESSOR INTERNAL TEMPERATURE         UNT       HIGH PRESSURE CONTROL (IN COMPACE SPIE TENTION SENSOR         UNT       HIGH PRESSURE CONTROL (IN COMPACES)         HIGH PRESSURE CONTROL (IN COMPACES)       SENSOR         UNT       HIGH SUPERATURE SENSOR         HIGH PRESSURE CONTROL (IN COMPACES)       SENSOR         HIGH TEMPERATURE SENSOR       HIGH TEMPERATURE	LINUT	C4		
Victor       Figure 1         Victor       Victor         <		 		
CC       PALA THAT WIT IS STRUCT.         CC       CONTROL TO BARD PALAT         CS       HIGH PRESSURE SWITCH (MPS) ACTIVATED         CS       CONTROL ON PRESSO STATU UP         CS       CONTROL TO SATO PALAT         ES       CONTROL TO SATO PALAT         ES       OVERCURRENT INPUT         ES       OVERCURRENT SINOL         UNIT       ES         ES       OVERCURRENT SINOL         HIGH HRESSUME CONTROL IN COLONAL       DET CONTROL IN COLONAL         UNIT       ES       OPERATIONIAL         HIGH HRESSUME CONTROL IN COLONAL       DET CONTROL IN COLONAL         UNIT       HIGH OPERATIONIAL       DET COMPANT SENSOR         JA       FAULTY MORTH EXAMPLE SENSOR         JA       FAULTY MORTH EXAMPLE SENSOR         JA       FAULTY MORTH EXAMPLE SENSOR         Li       GUTPUT OVERCURRENT         HIGH ENDERATION HAMP IS ON.       HIGH ENDERATION HAMP IS ON.         Ithe OPERATION HAMP IS ADE AND HAMP IS ADE A		09	FAULT VULNIDE V CENOD	
EA       COOLING-HEARING SWITCHING LEHROH         ES       CHICUTE BOARDAULT         ES       CHICUTE BOARDAULT         ES       FRALTUR         ES       CORCUMENT IN HUT         ES       OPERATION HANDUE TO COMPRESSON INTERNAL TEMPERATURE         UNT       FS       HIGH HESSUE CONTROL IN COOLING)         HIGH HESSUE CONTROL IN COOLING       ENGON         UNT       FS       OPERATION HANDUE TO FAULTY POSITION DETECTION SENSOR         UNT       FS       OPERATION HANDUE TO CAULTY POSITION DETECTION SENSOR         HIGH HESSUE CONTROL IN COOLING)       ELECTROL HANDUE TO CAULTY POSITION ENTERNAL TEMPERATURE         UNT       FS       FRALTY USUCTION AND THE TAULTE SENSOR         JS       FRALTY USUCTION AND TEME FAULTINE SENSOR         JS       FRALTY UNERTER CIRCUT HEATSINK         LI       HOTPUT OVER CIRCUT HEATSINK TEMPERATURE SENSOR         JS       FRALTY UNERTER CIRCUT HEATSINK TEMPERATURE SENSOR         LI       HE OPERATION Iamp is ON.         If the OPERATION Iamp does not blink after operating for a w		00	FAULIY HUMIDITY SENSOR	
E1       CIRCUIT BOARD FALLY         E2       HIGH PHESSURE SON OVERLOADD STARTED         E2       FIGH PHESSURE SON OVERLOADD STARTED         E3       HIGH PHESSURE SON OVERLOADD STARTED         E3       HIGH PHESSURE CONTROL IN COOLING         E4       HIGH PHESSURE CONTROL IN COOLING         E4       HIGH PHESSURE CONTROL INCOLUNG         E4       HIGH PHESSURE CONTROL INCOLUNG         UNT       H6       OPERATION HAIT DUE TO CAMPLESSON SON INTERNAL TEMPERATURE         UNT       H6       OPERATION HAIT DUE TO CAMPLESSON SON INTERNAL TEMPERATURE         UNT       H6       OPERATION HAIT DUE TO CAMPLESSON SON INTERNAL TEMPERATURE         UNT       H6       OPERATION HAIT DUE TO FAILTY POSITION DETECTION SENSOR         UNT       H6       OPERATION HAIT DUE TO FAILTY POSITION DETECTION SENSOR         UNT       H6       OPERATION HAIT DUE TO FAILTY POSITION DETECTION SENSOR         UNT       H6       OPERATION HAIT DUE TO FAILTY POSITION DETECTION SENSOR         UNT       H6       OPERATION HAIT DUE TO FAILTY POSITION DETECTION SENSOR         Lis       ELECTRICAL PARTS HEAT FAULT       ELECTRICAL PARTS HEAT FAULT         Lis       ELECTRICAL PARTS HEAT FAULT       ELECTRICAL PARTS HEAT FAULT         Lis       ELECTRICAL PARTS HEAT FAULT       HEAT FAULTY HUDU		EA	COOLING-HEATING SWITCHING ERROR	
ES       HIGH PRESSURE SWITCH (HPS) ACTIVATED         ES       OUTDOOR         ES       OVERCUMPRESSOR START UP         HS       OVERCUMPRESSOR START         HS       OVERCUMPRESSOR START         HS       OVERCUMPRESSOR FAULT         HS       FAULTY USCHARED PRETEWER AND ESENSOR         JS       FAULTY LOUG PRETEWER AND ESENSOR         HS       FAULTY LOUG PRETEWER AND ESENSOR         HS       FAULTY INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR         JS       FAULTY INVERTER CIRCUIT HEATS		E1	CIRCUIT BOARD FAULT	
E5       OL (COMPRESSOR OVERLOAD) STATED         E6       FAULTY COMPRESSOR STATU UP         F3       High TERMPERATURE DISCHARGE PIPE CONTROL         F6       HIGH TERMPERATURE DISCHARGE PIPE TEMPERATURE SENSOR         UNT       H6       OPERATION HIGH UDE TO AUXITY POSITION DETECTION SENSOR         H8       FAULTY SUCTION UDE TO FAULTY POSITION DETECTION SENSOR         J3       FAULTY SUCTION NUT TEMPERATURE SENSOR         J3       FAULTY HAT SCHARGE PIPE TEMPERATURE SENSOR         J3       FAULTY HAT SCHARGE TIME TERMPERATURE SENSOR         J3       FAULTY HAT SCHARGE TIME TERMPERATURE SENSOR         J3       FAULTY HAT SCHARGE TIME TERMPERATURE SENSOR         J4       HIGH TEMPERATURE AT INVERTER CIRCUIT HEATSINK         L4       HIGH TEMPERATURE AT INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR         J4       FAULTY INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR         L4       HIGH TEMPERATURE AT INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR         L4       HIGH TEMPERATURE AT INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR         L5       OUTPUT OVERCICUT HEATSINK TEMPERATURE SENSOR         L6       DE		E3	HIGH PRESSURE SWITCH (HPS) ACTIVATED	
E6       FAULTY COMPRESSION START UP         E8       OVERCURRENT INPUT         F8       HIGH TEMESSIONE CONTROL (IN COOLING)         F8       HIGH TEMESSION TOLET OX COMPRESSION INTERNAL TEMPERATURE         UNT       H6       DECAMINATION LAT TO UE TO COMPRESSION INTERNAL TEMPERATURE         H8       DC CURRENT SENSOR RAUT       DECAMINATION DETECTION SENSOR         H8       DC CURRENT SENSOR       DECAMINATION DETECTION SENSOR         H8       DC CURRENT SENSOR       DECAMINATION DETECTION SENSOR <t< td=""><td></td><td>E5</td><td>OL (COMPRESSOR OVERLOAD) STARTED</td><td></td></t<>		E5	OL (COMPRESSOR OVERLOAD) STARTED	
EF       DC FAM MOTOR FAULT         F3       HIGH TEMPERATURE DISCHARGE PIPE CONTROL.         F6       HIGH PRESSURE CONTROL IN COMPRESSOR INTERNAL TEMPERATURE         UNT       H6         H6       OPERATION HAIT DUE TO COMPRESSOR INTERNAL TEMPERATURE         H8       DCCUMBENT SEASOR FAULT         H8       DCCUMBENT SEASOR FAULT         H8       DCCUMBENT SEASOR FAULT         H3       FRAUTY LOUTD OFFE TEMPERATURE SENSOR         J3       FAULTY LOUTD OFFE TEMPERATURE SENSOR         J4       HGH TEMPERATURE AT INVERTER CIRCUIT HEATSINK         L4       HIGH TEMPERATURE SENSOR         L5       OUTDUT OVERCIMENT SENSOR         L4       HIGH TEMPERATURE AT INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR         L5       OUTDUT OVERCIMENT         P4       FAULTY INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR         L4       HIGH TEMPERATURE AT INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR         L5       OUTDUT OVERCIMENT         P4       FAULTY INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR         L6       HIGH TEMPERATURE SENSOR	-	 E6	FAULTY COMPRESSOR START UP	
Image: Series of the control of the		E0 E7		
UNITEDOR       F8       UNITABLE NUMERATIVE CONTROL         F8       OPERATION HAIT DUE TO COMPRESSOR INTERNAL TEMPERATURE         UNIT       F8       OPERATION HAIT DUE TO COMPRESSOR INTERNAL TEMPERATURE         H9       DESISOR FAULT       F8         H9       F8       OPERATION NAIT DUE TO FAULTY POSITION DETECTION SENSOR         H9       FAULTY SUCTION AIR TEMPERATURE SENSOR       F8         H9       FAULTY SUCTION AIR TEMPERATURE SENSOR       F8         H9       FAULTY VIEWERT FAULT       F8         H9       FAULTY INVERTER CIRCUIT HEATSINK       F8         H1       The OPERATION SING FAULT       F8         H1       The OPERATION SING FAULT       F8         H1       F8       OUTPOUR ORDER TEMPERATURE SENSOR         H1       The OPERATION NATIONE THE TO CONTROL THEATSINK       F8         H1       The OPERATION AND SING FAULT       F8         H1       The OPERATION NATIONE SENSOR       F8         H1       The OPERATION NATION SENSOR       F8         H1       The OPERATION NATION SENSOR       F8		E/		
Image: Provide the pression of		EO		
OUTDOOR       F6       HidH-PRESSURE CONTROL (IN COOLING)         UNIT       H6       SENSOR FAULT         H8       DC CUPRENT SENSOR FAULT         H8       PAULTY USCHARGE PIPE TEMEPRATURE SENSOR         J3       FAULTY USCHARGE PIPE TEMEPRATURE SENSOR         J3       FAULTY LOUID PIPE TEMEPRATURE SENSOR         J4       HIGH HEMEPRATURE SENSOR         J5       OUTPUT OVERCHAREM PIPE TEMEPRATURE SENSOR         H1       FAULTY INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR		F3	HIGH TEMPERATURE DISCHARGE PIPE CONTROL	
OUTDOOR       F8       OPERATION HAIT DUE TO COMPRESSOR INTERNAL TEMPERATURE         UNIT       H8       OPERATION HAIT DUE TO FAULTY POSITION DETECTION SENSOR         18       DC CURRENT SENSOR RAUT         19       FAULTY SUCTION AIR TEMPERATURE SENSOR         36       FAULTY HEAT EXCHANGER TEMPERATURE SENSOR         36       FAULTY HEAT EXCHANGER TEMPERATURE SENSOR         36       FAULTY HEAT EXCHANCER TEMPERATURE SENSOR         37       FAULTY HEAT EXCHANCER TEMPERATURE SENSOR         38       FAULTY HEAT EXCHANCER TEMPERATURE SENSOR         39       FAULTY HEAT EXCHANCER TEMPERATURE SENSOR         30       FAULTY INVERTER CIRCUT HEATSINK TEMPERATURE SENSOR         31       FAULTY INVERTER CIRCUT HEATSINK TEMPERATURE SENSOR         34       FAULTY INVERTER CIRCUT HEATSINK TEMPERATURE SENSOR         35       FAULTY INVERTER CIRCUT HEATSINK TEMPERATURE SENSOR         36       FAULTY INVERTER CIRCUT HEATSINK TEMPERATURE SENSOR         37       FAULTY INVERTER CIRCUT HEATSINK TEMPERATURE SENSOR         38       FAULTY INVERTER CIRCUT HEATSINK TEMPERATURE SENSOR         39       FAULTY INVERTER CIRCUT HEATSINK TEMPERATURE SENSOR         40       PHILTY INVERTER CIRCUT HEATSINK TEMPERATURE SENSOR         41       the OPERATION lamp does not blink after operating for a while, continue to operate with no		F6	HIGH PRESSURE CONTROL (IN COOLING)	
UNIT H6 OPERATION HALT DUE TO FAULTY POSITION DETECTION SENSOR H8 FAULTY SENSOR FAULT H8 DC CURRENT SENSOR FAULT H8 FAULTY DISCHARGE PIPE TEMPERATURE SENSOR J3 FAULTY DISCHARGE PIPE TEMPERATURE SENSOR J3 FAULTY LIQUID PIPE TEMPERATURE SENSOR J3 ELECTRICAL PARTS HEAT FAULT L4 HIGH TEMPERATURE AT INVERTER CIRCUIT HEATSINK L5 OUTPUT OVEROURRENT P4 FAULTY INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR	OUTDOOR	F8	OPERATION HALT DUE TO COMPRESSOR INTERNAL TEMPERATURE	
UNIT       H6       OPERATION HALT DUE TO FAULTY OSITION DETECTION SENSOR         H8       DC CURRENT SENSOR RAULT         H9       FAULTY SUCTION ARI TEMPERATURE SENSOR         36       FAULTY NEAT EXCHANGER TEMPERATURE SENSOR         37       ELECTRICAL PARTS HEAT FAULT         13       ELECTRICAL PARTS HEAT FAULT         14       H10H TEMPERATURE SENSOR         15       OUTPUT OVERCURRENT         16       FAULTY INVERTER CIRCUIT HEATSINK         15       OUTPUT OVERCURRENT         16       FAULTY INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR	COTDOON	H0	SENSOR FAULT	
HB       DC CURRENT SENSOR FAULT         HB       FAULTY DISCHARGE PIPE TEMPERATURE SENSOR         HB       FAULTY DISCHARGE PIPE TEMPERATURE SENSOR         HB       FAULTY UCUD PIPE TEMPERATURE SENSOR         HB       GUIPUT OVERUBRENT         HB       FAULTY INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR         HB       FAULTY INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR	UNIT	H6	OPERATION HALT DUE TO FAULTY POSITION DETECTION SENSOR	
Hig       FAULTY SUCTION AND TENDERATURE SENSOR         J3       FAULTY DISCHARGE FITE IMPERATURE SENSOR         J3       FAULTY LIQUID PIET TEMPERATURE SENSOR         J4       HIGH TEMPERATURE AT INVERTER CIRCUIT HEATSINK         L4       HIGH TEMPERATURE AT INVERTER CIRCUIT HEATSINK         L5       OUTPUT OVERCURRENT         P4       FAULTY INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR		H8		
Image: Product of Society and Texmentatione Sensors         33       FAULTY HEAT EXCHANGER TEXMEPRATURE SENSOR         34       FAULTY HEAT EXCHANGER TEXMEPRATURE SENSOR         123       ELECTRICAL PARTS HEAT FAULT         124       HIGH TEXMEPRATURE SENSOR         125       OUTPUT OVERCURRENT         P4       FAULTY INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR         125       OUTPUT OVERCURRENT         P4       FAULTY INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR		10		
33       FAULTY DISCHARGE PIPE TEMPERATURE SENSOR         38       FAULTY LIQUID PIPE TEMPERATURE SENSOR         13       ELECOTRICAL PARTS HEAT FAULT         14       HIGH TEMPERATURE SENSOR         15       OUTPUT OVERCURRENT         P4       FAULTY INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR         P4       FAULTY INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR		H9	FAULTY SUCTION AIR TEMPERATURE SENSOR	
Je       FAULTY HEAT EXCHANGER TEMPERATURE SENSOR         L3       ELECTRICAL PARTS HEAT FAULT         L4       HIGH TEMPERATURE ALT INVERTER CIRCUIT HEATSINK         L5       OUTPUT OVERCURRENT         P4       FAULTY INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR		J3	FAULTY DISCHARGE PIPE TEMPERATURE SENSOR	
30       FAULTY LIQUID PIPE TEMPERATURE SENSOR         13       ELECTRICAL PARTS HEAT FAULT         14       HIGH TEMPERATURE AT INVERTER CIRCUIT HEATSINK         15       OUTPUT VOERCURRENT         P4       FAULTY INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR    The OPERATION lamp is ON. If the OPERATION lamp does not blink after operating for a while, continue to operate with no change. If the OPERATION lamp blinks again     Turn off the circuit breaker and call your dealer.		J6	FAULTY HEAT EXCHANGER TEMPERATURE SENSOR	
L3       ELECTRICAL PARTS HEAT FAULT         L4       HIGH TEMPERATURE AT INVERTER CIRCUIT HEATSINK         L5       OUTPUT OVERCURRENT         P4       FAULTY INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR             The OPERATION lamp is ON.         If the OPERATION lamp does not blink after operating for a while, continue to operate with no change.         If the OPERATION lamp blinks again		J8	FAULTY LIQUID PIPE TEMPERATURE SENSOR	
14       High TEMPERATURE AT INVERTER CIRCUIT HEATSINK         15       OUTPUT OVERCURRENT         P4       FAULTY INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR             The OPERATION lamp is ON.         If the OPERATION lamp does not blink after operating for a while, continue to operate with no change.         If the OPERATION lamp blinks again             If the OPERATION lamp blinks again		L3	ELECTRICAL PARTS HEAT FAULT	
Image:	-	14	HIGH TEMPERATURE AT INVERTER CIRCUIT HEATSINK	
Doil of OUDINOUTLENT         P4         FAULTY INVERTER CIRCUIT HEATSINK TEMPERATURE SENSOR    The OPERATION lamp is ON. If the OPERATION lamp does not blink after operating for a while, continue to operate with no change. If the OPERATION lamp blinks again Turn off the circuit breaker and call your dealer.	-	15		
The OPERATION lamp is ON. If the OPERATION lamp does not blink after operating for a while, continue to operate with no change. If the OPERATION lamp blinks again Turn off the circuit breaker and call your dealer.		LJ D4		
The OPERATION lamp is ON. If the OPERATION lamp does not blink after operating for a while, continue to operate with no change. If the OPERATION lamp blinks again				
If the OPERATION lamp blinks again		-	The OPERATION lamp is ON. If the OPERATION lamp does not blink after operating for a while, continue to operate with no change.	
Turn off the circuit breaker and call your dealer.		-	If the OPERATION lamp blinks again	

When the Need Arises Troubleshooting Call your dealer immediately When an abnormality (such as a burning smell) occurs, stop operation and turn off the circuit breaker. · Continued operation in an abnormal condition may result in problems, electric shock or fire. · Consult the dealer where you bought the air conditioner. Do not attempt to repair or modify the air conditioner by yourself. Incorrect work may result in electric shock or fire. • Consult the dealer where you bought the air conditioner. If one of the following symptoms takes place, call your dealer immediately. · The power cord is abnormally hot or damaged. · An abnormal sound is heard during operation. • The circuit breaker cuts off the operation frequently. Turn off the circuit breaker and call your dealer. · A switch or a button often fails to work properly. • There is a burning smell. · Water leaks from the indoor unit. After a power failure • The air conditioner automatically resumes operation in about 3 minutes. Please wait for a while. Lightning • If there is a risk lightning could strike in the neighborhood, stop operation and turn off the circuit breaker to protect the system. Disposal requirements • Dismantling of the unit, handling of the refrigerant, oil and other parts, should be done in accordance with the relevant local and national regulations.



# 12.2 General Safety Considerations

Minimum required floor area for each refrigerant amount charged  $A_{min}$  (m<sup>2</sup>) 550 540 530 520 510 490 480 470 550  $\begin{array}{c} 470 \\ 480 \\ 450 \\ 440 \\ 440 \\ 420 \\ 440 \\ 400 \\ 390 \\ 380 \\ 330 \\ 330 \\ 330 \\ 320 \\ 330 \\ 320 \\ 300 \\ 290 \\ 200 \\ 200 \\ 200 \\ 200 \\ 200 \\ 200 \\ 200 \\ 200 \\ 200 \\ 200 \\ 200 \\ 100 \\ 100 \\ 100 \\ 100 \\ 100 \\ 90 \\ \end{array}$ 70 <del>80</del> Wall-mounted un 60 Ceiling-mounted unit al 20 10 74 78 7.6 8.0 m (kg) 1.843 Ceiling-mounted Wall-mounted Floor-standing unit<sup>(a)</sup> unit<sup>(b)</sup> unit<sup>(c)</sup> – A<sub>min</sub> (m<sup>2</sup>) — A<sub>min</sub> (m<sup>2</sup>) — A<sub>min</sub> (m<sup>2</sup>) m (kg) m (kg) m (kg) ≤1.842 ≤1.842 ≤1.842 1.843 - 3.64 1.843 — 4.45 1.843 — 28.9 2.0 - 3.95 2.0 — 4.83 2.0 - 34.0 2.2 - 4.34 2.2 - 5.31 2.2 - 41.2 2.4 — 4.74 2.6 — 5.13 2.8 — 5.53 2.4 — 49.0 2.6 — 57.5 2.8 — 66.7 2.4 - 5.79 2.4 — 5.79 2.6 — 6.39 2.8 — 7.41 2.8 - 5.923.0 - 5.923.2 - 6.483.0 — 8.51 3.2 — 9.68 2.8 — 66.7 3.0 — 76.6 3.2 — 87.2 3.4 - 7.32 3.4 - 10.9 3.4 - 98.4 3.6 — 8.20 3.6 — 12.3 3.6 — 110 3.8 — 9.14 4.0 — 10.1 3.8 - 13.7 3.8 --- 123 4.0 - 136 4.0 - 15.1 4.2 - 11.2 4.2 - 16.7 4.2 - 150 4.4 — 12.3 4.4 --- 18.3 4.4 --- 165 4.6 — 180 4.8 — 196 4.6 - 13.44.8 - 14.65.0 - 15.84.6 — 20.0 4.8 — 21.8 5.0 - 23.6 5.0 - 213 5.2 — 230 5.4 — 248 5.2 — 17.1 5.4 — 18.5 5.2 — 25.6 5.4 — 27.6 5.6 — 19.9 5.6 - 29.7 5.6 - 267 5.6 - 19.9 5.8 - 21.3 6.0 - 22.8 6.2 - 24.35.8 - 286 5.8 - 31.8 6.0 — 306 6.2 — 327 6.0 - 34.0 6.2 - 36.4 6.4 - 25.9 6.4 - 349 6.4 - 38.7 6.6 - 27.6 6.6 — 41.2 6.6 — 371 6.8 — 394 7.0 — 417 6.8 — 29.3 7.0 — 31.0 6.8 — 43.7 7.0 — 46.3 7.2 - 32.8 7.2 - 49.0 7.2 - 441 7.4 — 51.8 7.6 — 54.6 7.4 - 34.7 7.4 --- 466 7.6 — 36.6 7.6 — 492 7.8 - 57.5 7.8 - 518 7.8 - 38.5 lb = kg \* 2.2046 7.956 — 40.1 7.956 — 59.9 7.956 - 539 ft<sup>2</sup> = m<sup>2</sup> \* 10.764 1 120

## 1. General Safety Considerations 1-1 About the documentation • The original documentation is written in English. All other languages are translations. The precautions described in this document cover very important topics, follow them carefully. The installation of the system, and all activities described in the installation manual and in the installer reference guide MUST be performed by an authorized installer. 1-1-1 Meaning of warnings and symbols DANGER /Ì\ Indicates a situation that results in death or serious injury DANGER: RISK OF ELECTROCUTION Indicates a situation that could result in electrocution. DANGER: RISK OF BURNING Indicates a situation that could result in burning because of extreme hot or cold temperatures. DANGER: RISK OF EXPLOSION Indicates a situation that could result in explosion. WARNING /!\ Indicates a situation that could result in death or serious injury. WARNING: FLAMMABLE MATERIAL CAUTION Indicates a situation that could result in minor or moderate injury. NOTICE Indicates a situation that could result in equipment or property damage. INFORMATION Indicates useful tips or additional information. Symbols used on the unit: Symbol Explanation Before installation, read the installation and operation manual, and the wiring instruction sheet Before performing maintenance and service tasks, read the service manual. For more information, see the installer and user reference guide. The unit contains rotating parts. Be careful when servicing or inspecting the unit.

#### Symbols used in the documentation:

Symbol	Explanation			
<b>N</b>	Indicates a figure title or a reference to it.			
	<b>Example:</b> " <b>1</b> –3 Figure title" means "Figure 3 in chapter 1".			
===	Indicates a table title or a reference to it.			
	Example: "#1-3 Table title" means "Table 3 in chapter 1".			

## 1-2 For the user

## **♦ WARNING**

If you are NOT sure how to operate the unit, contact your installer.

#### 

This appliance is not intended for use by persons, including children, with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

Cleaning and user maintenance must not be carried out by children without supervision.

#### 

To prevent electrical shocks or fire:

- Do NOT rinse the unit.
- Do NOT operate the unit with wet hands.
- Do NOT place any objects containing water on the unit.

- Do NOT place any objects or equipment on top of the unit.
- Do NOT sit, climb or stand on the unit.

#### 1-3 For the installer

## 1-3-1 General

If you are NOT sure how to install or operate the unit, contact your dealer.

The manual contains specific information about the required qualification of the working personnel for maintenance, service and repair operations.

Every working procedure that affects safety should only be carried out by competent persons.

Examples for such working procedures are:

- Breaking into the refrigerating circuit
- Opening of sealed components
- Opening of ventilated enclosures

#### DANGER: RISK OF BURNING

- Do NOT touch the refrigerant piping, water piping or internal parts during and immediately after operation. It could be too hot or too cold. Give it time to return to normal temperature. If you must touch it, wear protective gloves.
- Do NOT touch any accidental leaking refrigerant.

## WARNING

Improper installation or attachment of equipment or accessories could result in electrical shock, shortcircuit, leaks, fire or other damage to the equipment. Only use accessories, optional equipment and spare parts made or approved by Daikin.

## WARNING

Make sure installation, testing and applied materials comply with applicable legislation (on top of the instructions described in the Daikin documentation).

#### CAUTION

Wear adequate personal protective equipment (protective gloves, safety glasses,...) when installing, maintaining or servicing the system.

## WARNING

Tear apart and throw away plastic packaging bags so that nobody, especially children, can play with them. Possible risk: suffocation.

## WARNING

Provide adequate measures to prevent that the unit can be used as a shelter by small animals. Small animals that make contact with electrical parts can cause malfunctions, smoke or fire.



Do NOT touch the air inlet or aluminum fins of the unit.

## 

- Do NOT place any objects or equipment on top of the unit.
- Do NOT sit, climb or stand on the unit.

## 

Works executed on the outdoor unit are best done under dry weather conditions to avoid water ingress.

In accordance with the applicable legislation, it might be necessary to provide a logbook with the product containing at least: information on maintenance, repair work, results of tests, stand-by periods,...

Also, at least, following information MUST be provided at an accessible place at the product:

- Instructions for shutting down the system in case of an emergency
- Name and address of fire department, police and hospital
- Name, address and day and night telephone numbers for obtaining service
- ISO 5149 provides the necessary guidance for this logbook.

That after completion of field piping for split systems, the field pipework should be pressure tested with an inert gas and then vacuum tested prior to refrigerant charging, according to the following requirements:

- The minimum test pressure for the low side of the system should be the low side maximum allowable pressure and the minimum test pressure for the high side of the system should be the high side maximum allowable pressure, unless the high side of the system cannot be isolated from the low side of the system, in which case the entire system should be pressure tested to the low side maximum allowable pressure.
- The test pressure after removal of the pressure source should be maintained for at least 1 hour with no decrease of pressure indicated by the test gauge, with test gauge resolution not exceeding 5% of the test pressure.
- During the evacuation test, after achieving a vacuum level equal to or less than the vacuum level specified in the manual, the refrigeration system should be isolated from the vacuum pump and the pressure should not rise above 1500 microns within 10 minutes. The vacuum pressure level is specified in the manual, and should be less than 500 microns, or the value required for compliance with national and local codes and standards, which may vary between residential, commercial, and industrial buildings.

#### 1-3-2 Installation site

- Provide sufficient space around the unit for servicing and air circulation as outlined in the unit installation manual.
- Make sure the installation site withstands the weight and vibration of the unit.
- Make sure the area is well ventilated. Do NOT block any ventilation openings.
- Make sure the unit is level.

Do NOT install the unit in the following places:

- · In potentially explosive atmospheres.
- In places where there is machinery that emits electromagnetic waves. Electromagnetic waves may disturb the control system, and cause malfunction of the equipment.
- In places where there is a risk of fire due to the leakage of flammable gases (example: thinner or gasoline), carbon fiber, or ignitable dust.
- In places where corrosive gas (example: sulfurous acid gas) is produced. Corrosion of copper pipes or soldered parts may cause the refrigerant to leak.

#### Instructions for equipment using R32 refrigerant

WARNING: FLAMMABLE MATERIAL The refrigerant inside this unit is mildly flammable.

## WARNING

- Do NOT pierce or burn.
  - Do NOT use means to accelerate the defrosting process or to clean the equipment, other than those recommended by the manufacturer.
  - Be aware that R32 refrigerant does NOT contain an odor.

## WARNING

The appliance should be stored so as to prevent mechanical damage and in a well-ventilated room without continuously operating ignition sources (example: open flames, an operating gas appliance or an operating electric heater), and the room size should be as specified.

(Refer to "Minimum required floor area for each refrigerant amount charged" on page 1.)

## 

## Ventilated area

Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation should continue during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.



## WARNING

Make sure installation, servicing, maintenance and repair comply with instructions from Daikin and with applicable legislation (for example national gas regulations) and are executed only by authorized persons.

#### 

If one or more rooms are connected to the unit using a duct system, make sure:

- there are no operating ignition sources (example: open flames, an operating gas appliance or an operating electric heater) in case the floor area is less than A<sub>min</sub> (ft<sup>2</sup>) defined in the table (Refer to "Minimum required floor area for each refrigerant amount charged" on page 1.)
- no auxiliary devices, which may be a potential ignition source, are installed in the duct work (example: hot surfaces with a temperature exceeding 158°F and electric switching devices)
- only auxiliary devices approved by the manufacturer are used in the duct work
- an air inlet or outlet is connected directly with a room by ducting. Do NOT use spaces such as a false ceiling as a duct for the air inlet or outlet.

#### CAUTION

Do NOT use potential sources of ignition in searching for or detection of refrigerant leaks.

## NOTICE

- · Do NOT re-use joints which have been used already.
- Joints made during installation between parts of the refrigerant system should be accessible for maintenance purposes.

## NOTICE

- Precautions should be taken to avoid excessive vibration or pulsation of refrigeration piping.
- Protection devices, piping and fittings should be protected as much as possible against adverse environmental effects.
- Provisions should be made for expansion and contraction of long sections of piping.
- Piping in refrigerating systems should be designed and installed so that the likelihood of hydraulic shock damaging the system is minimized.
- The indoor equipment and pipes should be securely mounted and guarded so that accidental rupture of equipment or pipes cannot occur from events such as moving furniture or reconstruction activities.

nstallation space requiremen	ts	$\mathbf{A}$	WARNING
MARNING If appliances contain R3 the room in which the ap	2 refrigerant, the floor area of pliances are installed, operated	<u> </u>	During tests, NEVER pressurize the product with a pressure higher than the maximum allowable pressure (as indicated on the nameplate of the unit).
and stored MUST be larged area A (ft²) defined in the required floor area for ea on page 1.) This applies	ger than the minimum floor • table. (Refer to "Minimum Ich refrigerant amount charged" to:		WARNING Take sufficient precautions in case of refrigerant leakage. If refrigerant gas leaks, ventilate the area
<ul> <li>Indoor units without a case of indoor units with consult the installation</li> </ul>	refrigerant leakage sensor; in th refrigerant leakage sensor, manual		Immediately. Possible risks:
Outdoor units installed	or stored indoors (e.g. yard,		• Excessive refrigerant concentrations in a closed room can lead to oxygen deficiency.
garage, machinery roo • Pipework in unventilate	m) ed spaces		In case of R410A or R32 refrigerant: Toxic gas might be produced if refrigerant gas comes into contact with fire
NOTICE     Pipework should be provided as a statement of the statemen	ptected from physical damage.		<ul> <li>In case of CO<sub>2</sub> refrigerant: Refrigerant gas is toxic in high concentrations.</li> </ul>
<ul> <li>Installation of pipework</li> </ul>	snould be kept to a minimum.		DANGER: RISK OF EXPLOSION
To determine the minimum flo . Determine the total refrigerant (= ● factory refrigerant char amount charged)	or area nt charge in the system ge + ❷ additional refrigerant		Pump down – Refrigerant leakage. If you want to pump down the system, and there is a leak in the refrigerant circuit: • Do NOT use the unit's automatic pump down function
$\mathbf{R32}  0 = \underline{\mathbf{kg}  \mathbf{b}} \\ 0 = \underline{\mathbf{kg}  \mathbf{b}} \\ 0 = \underline{\mathbf{kg}  \mathbf{b}} $			with which you can collect all refrigerant from the system into the outdoor unit. <b>Possible consequence:</b> Self-combustion and explosion of the compressor because of air going into the operating compressor.
			• Use a separate recovery system so that the unit's compressor does NOT have to operate.
<ul> <li>Determine which graph or ta</li> <li>For indoor units: Is the unit or floor-standing?</li> <li>For outdoor units installed piping in unventilated spac installation height:</li> </ul>	ble to use. ceiling-mounted, wall-mounted or stored indoors, and field es, this depends on the		WARNING ALWAYS recover the refrigerant. Do NOT release them directly into the environment. Use a vacuum pump to evacuate the installation. Ensure that the outlet for the vacuum pump is not close to any potential ignition sources and that ventilation is available.

<5.9ft	Floor-standing units
5.9≤×<7.2ft	Wall-mounted units
≥7.2ft	Ceiling-mounted units

- 3. Use the graph or table to determine the minimum floor area. See figure 1 on the inside of the front cover.
  - ft Total refrigerant charge in the system
  - A<sub>min</sub> Minimum floor area
  - (a) Ceiling-mounted unit
  - (b) Wall-mounted unit
  - (c) Floor-standing unit

#### 1-3-3 Refrigerant

If applicable. See the installation manual or installer reference guide of your application for more information.

## NOTICE

Make sure refrigerant piping installation complies with applicable legislation. ISO 5149 is the applicable standard.

## NOTICE

Make sure the field piping and connections are NOT subjected to stress.

- Flammable refrigerant used. To be repaired only by trained service personnel. Do NOT puncture refrigerant tubing.
- Dispose of properly in accordance with federal or local regulations. Flammable refrigerant used.
- Flammable refrigerant used. Consult repair manual/ owner's guide before attempting to service this product. All safety precautions must be followed.
- Risk of fire due to flammable refrigerant used. Follow handling instructions carefully in compliance with national regulations.

## NOTICE

 After all the piping has been connected, make sure there are no gas leaks. Use nitrogen to perform gas leak detection.

 Under no circumstances should potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) should not be used.

- If a leak is suspected, all naked flames should be removed/extinguished.
- The field-made refrigerant joints indoors should be tightness tested according to the following requirements: The test method should have a sensitivity of 5 grams per year of refrigerant or better under a pressure of at least 0.25 times the maximum allowable pressure. No leak should be detected.

## **NOTICE**

• To avoid compressor breakdown, do NOT charge more than the specified amount of refrigerant.

- Extreme care should be taken not to overfill the REFRIGERATING SYSTEM.
- Prior to recharging the system, it should be pressuretested with the appropriate purging gas.
- The system should be leak-tested on completion of charging but prior to commissioning.
- A follow-up leak test should be carried out prior to leaving the site.
- When the refrigerant system is to be opened, refrigerant MUST be treated according to the applicable legislation.

## WARNING

Make sure there is no oxygen in the system. Refrigerant may only be charged after performing a leak test and vacuum drying.

**Possible consequence:** Self-combustion and explosion of the compressor because of oxygen going into the operating compressor.

- In case recharge is required, see the nameplate of the unit. It states the type of refrigerant and necessary amount.
- The unit is factory charged with refrigerant, but depending on pipe sizes and pipe lengths some systems require additional charging of refrigerant.
- Only use tools exclusively for the refrigerant type used in the system. This to ensure pressure resistance and prevent foreign materials from entering into the system.
- Charge the liquid refrigerant as follows:

lf	Then
A siphon tube is present	Charge with the cylinder
(i.e., the cylinder is marked with "Liquid filling siphon attached")	upright.
A siphon tube is NOT present	Charge with the cylinder upside down.

- Open refrigerant cylinders slowly.
- Charge the refrigerant in liquid form. Adding it in gas form may prevent normal operation.



When the refrigerant charging procedure is done or when pausing, close the valve of the refrigerant tank immediately. If the valve is NOT closed immediately, remaining pressure might charge additional refrigerant. Possible consequence: Incorrect refrigerant amount.

## 1-3-4 Electrical

### DANGER: RISK OF ELECTROCUTION

- Turn OFF all power supplies before removing the switch box cover, connecting electrical wiring, or touching electrical parts.
- Disconnect the power supply for more than 1 minute, and measure the voltage at the terminals of main circuit capacitors or electrical components before servicing. The voltage MUST be less than 50V DC before you can touch electrical components. For the location of the terminals, see the wiring diagram.
- Do NOT touch electrical components with wet hands.
- Do NOT leave the unit unattended when the service cover is removed.

## WARNING

If NOT factory installed, a main switch or other means for disconnection, having a contact separation in all poles providing full disconnection under overvoltage category III conditions, MUST be installed in the fixed wiring.

## WARNING

- ONLY use copper wires.
- Make sure the field wiring complies with the applicable legislation.
- All field wiring MUST be performed in accordance with the wiring diagram supplied with the product.
- NEVER squeeze bundled cables and make sure they do NOT come in contact with the piping and sharp edges. Make sure no external pressure is applied to the terminal connections.
- Make sure to install ground wiring. Do NOT ground the unit to a utility pipe, surge absorber, or telephone ground. Incomplete grounding may cause electrical shock.
- Ensure that the REFRIGERATING SYSTEM is grounded prior to charging the system with refrigerant.
- Make sure to use a dedicated power circuit. NEVER use a power supply shared by another appliance.
- Make sure to install the required fuses or circuit breakers.
- Make sure to install a ground leakage protector where required by local codes. Failure to do so may cause electrical shock or fire.
- When installing the ground leakage protector, make sure it is compatible with the inverter (resistant to high frequency electric noise) to avoid unnecessary opening of the ground leakage protector.



# • When connecting the power supply: connect the ground cable first, before making the current-carrying connections.

- When disconnecting the power supply: disconnect the current-carrying cables first, before separating the ground connection.
- The length of the conductors between the power supply stress relief and the terminal block itself must be such that, in case the power supply is pulled loose from the stress relief, the current-carrying wires become taut before the ground wire becomes taut.

## 

Precautions when laying power wiring:



- Do NOT connect wiring of different thicknesses to the power terminal block (slack in the power wiring may cause abnormal heat).
- When connecting wiring which is the same thickness, do as shown in the figure above.
- For wiring, use the designated power wire and connect firmly, then secure to prevent outside pressure being exerted on the terminal board.
- Use an appropriate screwdriver for tightening the terminal screws. A screwdriver with a small head will damage the screw heads and make proper tightening impossible.
- Over-tightening the terminal screws may break them.

Install power cables at least 3.3ft away from televisions or radios to prevent interference. Depending on the radio waves, a distance of 3.3ft may not be sufficient.

## WARNING

- After finishing the electrical work, confirm that each electrical component and terminal inside the electrical components box is connected securely.
- Make sure all covers are closed before starting up the unit.

#### 1-3-5 Disposal

When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all refrigerant is removed safely.

- When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed.
- Ensure that the correct number of cylinders for holding the total system charge is available.
- Ensure that all cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i. e. special cylinders for the recovery of refrigerant).
- Cylinders should be complete with pressure-relief valve and associated shut-off valves in good working order.
- Empty recovery cylinders should be evacuated and, if possible, cooled before recovery occurs.
- The recovery equipment should be in good working order with a set of instructions concerning the equipment that is at hand and should be suitable for the recovery of all appropriate refrigerants including, when applicable, FLAMMABLE REFRIGERANT.
- In addition, a set of calibrated weighing scales should be available and in good working order.
- Hoses should be complete with leak-free disconnect couplings and in good condition.
- Before using the recovery machine, check that it is in satisfactory working order, has been properly maintained and that any associated electrical components are sealed to prevent ignition in the event of a refrigerant release.
- · Consult the manufacturer if in doubt.
- The recovered refrigerant should be returned to the refrigerant supplier in the correct recovery cylinder, and the relevant waste transfer note should be arranged.
- Do not mix refrigerants in recovery units and especially not in cylinders.
- If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that FLAMMABLE REFRIGERANT III does not remain within the lubricant.
- The evacuation process should be carried out prior to returning the compressor to the suppliers.
- Only electric heating of the compressor body should be employed to accelerate this process.
- When oil is drained from a system, oil drainage should be carried out safely.

#### 1-4 Glossary

#### Your dealer

Sales distributor for the product.

## Authorized installer

Technically skilled person who is qualified to install the product.

## User

Person who is owner of the product and/or operates the product.

#### Applicable legislation

All international, national and local directives, laws, regulations and/or codes that are relevant and applicable for a certain product or domain.

#### Service company

Qualified company which can perform or coordinate the required service on the product.

#### Installation manual

Instruction manual specified for a certain product or application, explaining how to install, configure and maintain it.

#### Operation manual

Instruction manual specified for a certain product or application, explaining how to operate it.

#### Maintenance instructions

Instruction manual specified for a certain product or application, which explains (if relevant) how to install, configure, operate and/or maintain the product or application.

#### Accessories

Labels, manuals, information sheets and pieces of equipment that are delivered with the product and that need to be installed according to the instructions in the accompanying documentation.

#### Equipment sold separately

Equipment made or approved by Daikin that can be combined with the product according to the instructions in the accompanying documentation.

#### Field supply

Equipment NOT made by Daikin that can be combined with the product according to the instructions in the accompanying documentation.

# 13. Options 13.1 Option List

## 13.1.1 Indoor Unit

	Option N	FTXM-V Series	
1	Wired remote controller $\star 1 \star 2 \star 3$		BRC944B2
2	Wired remote controller cord (shielded wire)	Length 9.8 ft (3 m)	BRCW901A03
		Length 26.3 ft (8 m)	BRCW901A08
3	Wiring adaptor for timer clock / remote controller ★3 ★4 ★5 (normal open pulse contact / normal open contact)		KRP413BB1S
4	Central remote controller ★6		DCS302C71
5	Unified ON/OFF controller ★6		DCS301C71
6	Schedule timer controller ★6		DST301BA61
7	Interface adaptor for DIII-NET (residential air conditioner) $\star 3 \star 4$		KRP928BB2S
8	Titanium apatite deodorizing filter (without frame) ★7		KAF970A46
9	Remote controller loss prevention with	KKF910A4	
10	S21 conversion connector		KER087A41

Notes: ★1 ★2 ★3

★4

A wired remote controller cord BRCW901A03 or BRCW901A08 is necessary. Wired remote controller can not be used together with Wireless LAN connection adopter (built in). S21 conversion connector is needed. Timer clock and other device ; obtained locally. Wireless LAN adopter (in the house) need to be set "OFF" when "Wiring adaptor for timer clock/remote controller" or "Interface adaptor for DIII-NET use" are connected. An interface adaptor (KRP928BB2S) is also required for each indoor unit. Standard accessory. ★5

★6

★7

# 13.1.2 Outdoor Unit

	Option Name	09/12 Class	18/24 Class
1	Air direction adjustment grille	KPW937F4E	KPW063B4
2	Drain plug ★1	KKP937A4	
3	Back protection wire net	KKG020A41	KKG063A42
4	Drain pan heater ★2	KEH094A41E	KEH063A4E(A)
5	Snow hood (intake side plate)	KPS034A41	KPS063A41
6	Snow hood (intake rear plate)	KPS034D42	KPS063A44
7	Snow hood (outlet)	KPS034A43	KPS063A47

Notes:

★1 ★2

Standard accessory. In high humidity areas or heavy snow areas, it is recommended to attach a drain pan heater to prevent ice build-up from the bottom frame.

# 13.2 <BRC944B2> Wired Remote Controller Installation Manual





# 13.3 <BRC944B2> Wired Remote Controller Operation Manual









## Automatic operation

 In Automatic, the temperature setting and operation mode (DRY, Cooling or Heating) are automatically selected according to the room temperature and outdoor temperature at the time of starting operation.

# **DRY** operation

- In this mode, humidity is removed from the air.
- While running in the DRY mode, you may feel cool or warm air from the air outlet. In this case, readjust the airflow direction with the vertical airflow direction louvers. (except Duct Connected type)

# ■ To adjust the temperature and airflow rate:

Operation Setting mode to be adjusted	Automatic	Cooling	Heating	DRY
(Temperature)	Temperat Reco Cooling Heating	ure is adjustable. ommended temperat g : 26°C-28°C (79°F g : 20°C-22°C (68°F	Temperature cannot be adjusted.	
<pre>PEAN    (Airflow rate)</pre>	Five level from " 🥫	Five levels of airflow rate setting from " = " to " = " plus " (A) " are available.		

• When the unit runs in the cooling or heating mode at a low airflow rate, the cooling or heating effect may be insufficient.

# To adjust the airflow direction:

( 🖙 page 9)

## Heating operation)

- Since the heating operation is performed by taking the heat from outdoor into the room, the heating capacity decreases as the outdoor temperature lowers. If the room is not heated sufficiently, it is recommended to use other heating appliance at the same time.
- Since the air conditioner heats the whole room by circulating hot air, it takes some time to heat the entire room completely.
- If the outdoor unit gets frosted during heating operation, the heating capacity is decreased. In this case, the unit starts defrosting operation.
- No hot air comes out of the indoor unit during defrosting operation.



 On the air conditioners with vertical and horizontal swing function, be sure to adjust the airflow directions using the remote controller. Do not forcibly adjust louvers by hand or a malfunction may occur.












## 13.4 <KRP413BB1S> Wiring Adaptor for Timer Clock / Remote Controller

-		-	
C C	ofoty Dr	ocautio	ne

- Read these safety precautions carefully before installing the unit, and be sure to install the unit properly.
- This manual classifies precautions to the user into the following two categories. These warnings and cautions are for your safety. Follow them.

Faulty installation can result in death or serious injury.
Faulty installation can result in serious injury, damage to property, or other serious consequences.

• After installation is complete, test the unit to confirm that it is working properly, and instruct the owner its proper use.

#### 🕂 WARNING

- Installation should be left to the dealer from whom you purchased the unit, or another qualified professionals.
- Install the unit securely according to the installation manual. Faulty installation may lead to electric shock or fire.
- Be sure to use the supplied or specified parts. Using other parts may lead to electric shock or fire.
- Install the unit securely in a location that will support its weight. If installed in a
  poor location or improperly installed, the unit may not work as intended.
- For electrical work, follow local electric standards and the installation manual.
   Faulty installation may lead to fire or electric shock.
- Do not bundle the power cord, or attempt to extend it by splicing it with another cord or by using an extension cord. Do not place any other load on the power circuit used for the unit. Improper wiring may lead to electric shock, heat generation or fire.
- Use dedicated wiring for all electrical connections, and be sure to arrange the wiring so that force applied to the wiring will not damage the terminals. Poor wiring or installation may cause electric shock, heat generation or fire.

#### 

- Before installation, unplug the air conditioner to ensure safety. Failure to do so may cause electric shock.
- Static electricity may damage electric components. Before connecting cables and communication lines, and operating the switches, be sure to discharge any electrical charge from your body (by, for example, touching the earth line)
- Do not install the unit in a location where it may be exposed to flammable gases. If gas leaks and build up around the unit, it may catch fire.
- Do not place the wiring close to the power cord, inter-unit cable, or pipes which generate noise. Treat the wiring with care.

#### 1. Functions and Features

- On/Off setting
- Switching between Instantaneous Contact/Normal Contact
  - Connection with fan coil remote controller
  - Automatic reset after power failure
     Output of normal operation signals/malfunction signals
  - Output of normal operation signals/manufaction signals



For interconnecting wiring, use Daikin KDC100A12 cable (not supplied) or other similar cable. Use a vinyl-covered wire or cable with four conductors each with a thickness of 0.2 to 1.25 mm<sup>2</sup>.

#### Optional cable KDC100A12 (without connectors)

Specifications:	$0.2 \text{ mm}^2 \times 4 \text{ core}$	(sheathed)
opecifications.	0.2 11111 ~ 4 0010 1	Sileatieu)

Outer diameter:	φ <b>5</b> .3
Length:	100 m
	-

- Colour: Grey
- Note : Keep any wiring for the control unit away from the power cord to prevent electrical noise.





2. Automatic Reset Af	ter Power Fai	lure	4. Connection with Rem	note Controller
<ul> <li>This PCB stores the following da storage period is limitless).</li> <li>①On/Off (see Note 1) ②Operation</li> <li>③Air flow rate ⑤On/Off status o</li> <li>○Note 1 Weap SWI 2 is in Off mode of the store of the store</li></ul>	ata in the event of a modes (see Note 2) f remote controller	a power failure (the ③Temperature setting	Example connections with three kinds Note: These connections cannot be <b>1</b> Remote control with sw	of remote controllers are shown bellow. used in combination. itch (field supply)
(Note 2 The following settings apply to	the models below.)		Set SW1-1 to Off and select Opera	ation Mode 1.
Mode before the power outage Room air conditioner	COOLING	HEATING	SW1 ON OFF	
Models with Humid heating and Reheating dehumidifying functions.	DRY COOLING	HUMID HEATING		
Models with Reheating dehumidifying function.		HEATING		The remote controller most
(Note 3 Not all settings will be saved (e.g. 3. Monitor Signal Output (not	n, humidity or swing se Imal operation an	ttings will not be saved)).		recently used (local or air conditioner) takes precedence. • Use a remote controller with a pulse width of 100 msec or more.
Maximum length of the wiring is 10     Monitor signal output	0 m. No external poor for LED Locally LED Re D Re R	wer supply is required.  procured parts facturer Type ohm SLR-342 ohm 1SS133 510 ohm 1/4W	<normal contact=""></normal>	<ul> <li>Power On/Off cannot be controlled from the unit's remote controller. (Three beeps for signal reception will be heard continuously when the wireless remote controller is operated.)</li> <li>When power is restored after a power failure in this mode, On or Off is determined according to the current settings of the remote controller.</li> </ul>
<ul> <li>malfunction)using ext</li> <li>s</li> <li>Power supp Recomment</li> <li>s</li> <li>s</li> <li>d</li> <li>f</li> <li< th=""><th>In the second se</th><th>tacts (1): Operation light (2): Malfunction light DC externally.) (S8,UX-N01512C current of 500 mA or over) External power supply for light elay contacts) Coil resistance 160 ohm ± 10%</th><th><ul> <li>Set SW1-1 to On and select Opera</li> <li>Most settings (power On/Off, air fit made using the air conditioner's re</li> <li>When power is restored after a podetermined according to the currer</li> <li>When the Cooling/Heating mode is remote controller to adjust the term</li> </ul></th><th>ation Mode 2. by rate, mode change) cannot be emote controller. wer failure in this mode, On or Off is nt settings of the remote controller. s changed, use the air conditioner's sperature. <math display="block">SW1 \\ OFF</math> <math display="block">1 \\ s</math> <math display="block">1 \\ s</math> <math display="block">1 \\ s</math> <math display="block">2 \\ 3</math> hen heading)</th></li<></ul>	In the second se	tacts (1): Operation light (2): Malfunction light DC externally.) (S8,UX-N01512C current of 500 mA or over) External power supply for light elay contacts) Coil resistance 160 ohm ± 10%	<ul> <li>Set SW1-1 to On and select Opera</li> <li>Most settings (power On/Off, air fit made using the air conditioner's re</li> <li>When power is restored after a podetermined according to the currer</li> <li>When the Cooling/Heating mode is remote controller to adjust the term</li> </ul>	ation Mode 2. by rate, mode change) cannot be emote controller. wer failure in this mode, On or Off is nt settings of the remote controller. s changed, use the air conditioner's sperature. $SW1 \\ OFF$ $1 \\ s$ $1 \\ s$ $1 \\ s$ $2 \\ 3$ hen heading)
			(When cooling)	Cooling/Heating switch



## 13.5 <KRP928BB2S> Interface Adaptor for DIII-NET

#### Safety Precautions 1. Overview, Features and Compatible Models This kit is the interface required when connecting the central controller · Read these Safety Precautions carefully to ensure correct installation. and a Room Air Conditioner. Use of the central controller makes it This manual classifies precautions into WARNING and CAUTION. possible to perform the following monitoring and operations. It is WARNING : Failure to follow WARNING is very likely to result in such compatible with room air conditioners which have an HA connector S21. grave consequences as death or serious injury. 1.Run / stop for the central controller and wired remote controller, operating mode selection, and temperature can be set. CAUTION : Failure to follow CAUTION may result in serious injury or The operating status, any errors, and the content of those errors can be monitored from the central controller and wired remote controller. property damage, and in certain circumstances, may result in a grave consequence. 3.Run / stop for the central controller and wireless remote controller, operating mod Be sure to follow all the precautions below ; they are all important for selection, and the temperature setting can be limited by the central controller. 4.Zone control can be performed from the central controller. ensuring safety. 5. The unit can remember the operating status of the air conditioner before a power outage and then start operating in the same status when the power comes back on. 6.Card keys, operating control panels, and other constant / instantaneous connection-compatible equipment can be connected. Installation should be left to the dealer or another qualified professional. The Operating / error signals can be read. Improper installation by yourself may cause malfunction, electrical shock, or 8. The indoor temperature can be monitored from the iTM / iTC. Install the set according to the instructions given in this manual. Precaution Incomplete or improper installation may cause malfunction, electrical shock, or fire. When reading the Operating / error signals, a separate external power source Be sure to use the standard attachments or the genuine parts. (12 V DC) is needed. A separate timer power source (16 V DC) is needed when using the schedule 2. Use of other parts may cause malfunction, electrical shock, or fire A separate timer power source (16 V DC) is needed when using the schedule timer independently, and not in conjunction with other central controllers. The range of temperatures that can be set from the central controller is 18°C to 32°C in cooling and 14°C to 28°C in heating. Fan operation cannot be selected from the central controller or wired remote controller. Group control (i.e., control of multiple indoor units with a single remote controller) is Disconnect power to the connected equipment before starting installation. З. Failure to do so may cause malfunction, electrical shock, or fire A ground fault circuit interrupter / an earth leakage circuit breaker should 5. be installed. If the breaker is not installed, electrical shock may occur not available. Monitoring is not available of the thermo status, compressor operating status, indoor fan operating status, electric heater, or humidifier operating status. Forced thermo off, filter sign display and reset, fan direction and speed settings, air conditioning fee management, energy savings instructions, low-noise instructions, and demand instructions cannot be made. Do not install the set in a location where there is danger of exposure to inflammable gas. 2.Component Parts Gas accumulated around the unit at the worst may cause fire To prevent damage due to electrostatic discharge, touch your hand to a This kit includes the following components. Check to ensure that none of nearby metal object (doorknob, aluminum sash, etc.) to discharge static these are missing. electricity from your body before touching this kit. Parts Q'ty Parts Q'ty Static electricity can damage this kit. Kit assy Connection harness (about 1.6m Lay this cable separately from other power cables to avoid external electrical noises. 1 PCB is in the housing. Mounting screws 3 Binding band 6 · After installation is complete, test the operation of the PCB set to check Installation manual 2 for problems, and explain how to use the set to the end-user 3.Names of Parts and Electric Wiring <Wiring procedure> Connecting a Wired Remote Controller\* Reading the Operating / error Display Connecting a Momentary / constar Contact Input Equipment In case that a central controller is connected Operating monitoring Central controller DCS302 Series (field supply) BRC944 Series equipment (field supply) Operating control panel BRC073 Series DCS301 Series (field supply) DCS401 Series DST301 Series DCM601 Series The adapter included with the DCL401 Series KDC100A10, and KDC101B Series cannot be connected A cable field supply Separately sold remote control code (quadplex) KRCW101A Series Cable available field supply (See the installation manual of the central controller) ſ Non polarity Ţ Ŷ Supplied connection harness (Cannot be made longer.) $\otimes \otimes \otimes \otimes \otimes \otimes \otimes$ 615 XX Remote control all prohibition/permission setting switch (SW3-1) Room air conditioner indoor unit Momentary contact ews constant contact Selection switch (SW3-2) Power supply terminal (S8) Connect an external 12 V 1234 To HA connector (S21) (A sold separately remote control PC-board set with an S21 terminal DC power supply only when reading the Operating / error display. Japanese unit / Overseas unit Setting switch (SW3-3) 140 0000 0000 0LMS ZMS A sold separately connector adapter is required for some NO R765 4321 required for some models.) models. Operation when recovering from a power outage mode switch (SW2-R) Upper group number switch (SW2-5 to 7) Service monitor (LED1: green) Lower group number switch (SW1) \*For wired remote controller compatible models When the CPU is working properly, the LED flashes. see the list of products which are sold separately

NOTE       Turn the power on after all the switches have been set. Settings made while the power is on are invalid.       When using comparison of the circuit board.         Ipen the KI's case and set the switches on the circuit board.       1) For Overseas (Japanese unit setting (SW3) nationalit conditioners, different methods are used for setting the temperature is automatic mode, so this switch needs to be set.       2) pentioners, different methods are used for setting the temperature is changed, it will current as a switch switch set on the circuit board.       3) setting (Facility and SW2-5 to SW2-71) Set freese when using the central controller, foe train and the central controller, the settings are needed when used in conjunction with another DCS Series entral controller.)       Instantation (Controller)         2) Group number settings (SW1 and SW2-5 to SW2-71) Set freese when using the central controller, (Set to the Bide.) Do not set more the settings are needed when used in conjunction with another DCS Series entral controller.)       Controller (Controller)         2) Group NU-bree settings SW2       Group NO. Lower settings SW1       Group NO. Lower settings SW1       Controller (Controller)         1 = 0 = 0 = 0 = 0 = 0 = 0 = 0 = 0 = 0 =			4.	Sw	itch Settings			
open the Kit's case and set the switches on the circuit board.       O : perf mode are conditioners, different methods are used for setting the temperature in automatic mode, so this switch needs to be set.       S : open methods in the switch needs to be set.         Japan       OFF (Factory setting)       ''Automatic' operation is available from the central controller. Including the writes renormed to optimatic operation is available from the central controller.       Instantic         Japan       OFF (Factory setting)       ''Automatic' operation is available from the central controller.       Instantic         Jorcup number settings (SW1 and SW2-5 to SW2-7) Set these when using the central controller. (Set to the liside.) Do not set more than one unit to the same number.       Doer settings on on need to be made when using the schedule timer redependently.       Const Co	NOTE	Turn the Settings	power o made v	on af vhile	ter all the switches ha the power is on are ir	ive been se ivalid.	ət.	When u operati continu
1/10/04/1948/25/30       Construction is switch needs to be set.       Soperation is conditioners, different methods are used for setting the temperature in automatic mode, so this switch needs to be set.       Soperation is conditioners, different methods are used for setting the temperature in automatic mode, so this switch needs to be set.         Japan       OFF       'Automatic' operation is available from the central controller.       Instantic mode, so this switch needs to be set.         Japan       OFF       'Automatic' operation is available from the central controller.       Instantic mode, so this switch needs to be set.         Orreseas       ON       'Automatic' operation is available from the central controller.       Instantic mode, so the mode, so the mode of the match of the set of the mode of the match of the set of the mode of the match of the set of the mode of the match of the set of the mode of the match of the set of the mode of the match of the set of the mode of the match of the set of the mode of the match of the set of the mode of the match of the set of the set of the mode of the set of the set of the mode of the set of the set of the set of the set of the mode of the set of the set of the mode of the set of the set of the set of the mode of the set o	Open the Kit's	case and	set the	swite	ches on the circuit bo	ard.		0 : per
automatic model, so this switch needs to be set.       Sperimate in the set of th	Room air co	onditioner	s, differ	ent n	nethods are used for	setting the	temperature in	
Contracting       OFF <ul> <li>Automatic operation is not available from the central controller. When using "automatic operation using the wireless remote When using "automatic operation is available from the central controller. When using 2 automatic operation is available from the central controller.</li> <li>Correat central controller is available from the central controller.</li> <li>Correates N</li> <li>- "Automatic" operation is available from the central controller.</li> <li>Correates Stating StVM1 and SW2-2 to SW2-71</li> <li>Set these when using the central controller. (Set to the set indices are needed when used in conjunction with another DCS Series entral controller.)</li> <li>Set the set things are needed when used in conjunction with another DCS Series entral controller.)</li> <li>Set this case, the schedule timer performs an auto address after the power is turned on, so new roup numbers are automatically set. Settings made using the switches will be overwritten.</li> <li>Set this case, the schedule timer performs an auto address after the power is turned on, so new roup numbers are automatically set. Settings made using the switches will be overwritten.</li> <li>Set the settings of the charged settings will and SW2 in 3. Names of Parts and Electrical Wiring?)</li> <li>Set the settings of the charged settings of the s</li></ul>	Destination S	W3-3 sett	ing Ing	cn n	What H	annens		] ope
Derivation       return b2 S° cafter a while.         Decreseas       ON       * "Automatic" operation is available from the central controller.         2) Group number settings (SW1 and SW2-5 to SW2-7) Set these when using the central controller. (Set to the side.) Do not set more than one unit to the same number.       Do not set more settings are needed when used in conjunction with another DCS Series entral controller.)         1 this case, the schedule timer ontop numbers are automatically set. Settings made using the switches will be overwritten.       All references contact schedule timer performs an auto address after the power is turned on, so new roup numbers are automatically set. Settings made using the switches will be overwritten.         3 roup NO. Upper settings SW2       Group NO. Lower settings SW1 1       Image: Settin	Japan (Fa	OFF actory set	ting)	"Auto Whe conti (hea	omatic" operation is not ava n using "automatic" operati roller, the central controller ting) and 25°C. Even if the	ilable from th on using the displays auto temperature i	e central controller. wireless remote matic cooling s changed, it will	m
2) Group number settings (SW1 and SW2-5 to SW2-7) Set these when using the central controller. (Set to the side.) Do not set more than one unit to the same number.       Instanta contact         Use SW2-R for (3) Settings when recovering from a power outage.       Sowers, these settings do not need to be made when using the schedule timer rule controller.)       Contact         The settings are needed when used in conjunction with another DCS Series entral controller.)       The settings settings made using the switches will be overwritten.         The settings are needed when used in conjunction with another DCS Series entral controller.)       The settings SW1       The ref         This case, the schedule timer performs an auto address after the power is turned on, so new roup numbers are automatically set. Settings made using the switches will be overwritten.       The ref         The settings SW2       Group NO. Lower settings SW1       Group NO. Lower settings SW1       The ref         The operation of the spearate timer power source is needed when using the schedule timer independently.       The ref       The ref         Swer source specs: 16 V DC, +10%, -15%, 200mA.       Stops after recovering from a power outage       The operation priority in cases where the independently.       The operation priority in cases         Swer source specs: 16 V DC, +10%, -15%, 200mA.       Stops after recovering from a power outage       The Operation of the operating mode (NOTE), set temperature, and drection and speed settings and remote before the power outage       The Operating onde (NOTE), set temperature, and rection s	Overseas	ON		retur "Aut	n to 25°C after a while. omatic" operation is availa	able from the	central controller.	$\left\{ \right\}$
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Aroup NO. Settings table (Enlarged section SW1 and SW2 in *3. Names of Parts and Electrical Wiring))       All response of Parts and Electrical Wiring)         Group NO. Upper settings SW2       Group NO. Lower settings SW1       The region of the region	central controll In this case, the group numbers a	er.) schedule tir ire automat	ner perf ically se	orms t. Set	an auto address after th tings made using the sw	e power is ti itches will b	urned on, so new e overwritten.	Con contac
ardup NO. Opper settings SW2       CHOUP NO. Lower settings SW1       are prime         1	Group NO. Setting	s table (Enla	arged se	ction S	SW1 and SW2 in "3. Name	s of Parts and	Electrical Wiring")	All re controlle
3-       0.2       0.2       0.5       0.1       0.0       0	$1 - \begin{bmatrix} 1 \\ R \\$		00 01	4 3	$\begin{bmatrix} \text{Group NO. Lower} \\ 04 \\ 4 \\ 3 \\ 2 \\ 1 \\ 05 \\ 4 \\ 3 \\ 2 \\ 1 \\ 0 \\ 0 \\ 1 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0$	8 4 3 2 1 9 4 3 2 1		The rer
Image:	3- 7 5 7 4- 8 4 8		02					S1 operatir
NOTE also that a separate timer power source is needed when using the schedule timer independently.       Instanta separate timer power source specs: 16 V DC, +10%, -15%, 200mA.         3) Settings when recovering from a power outage (SW2-R)       This selects whether to restart operation. This setting is given priority in cases where the indoor unit has an auto start ON / OFF jumper. Note also that regardless of whether switch SW2-R is on or off, the operating mode (NOTE), set temperature, fan direction and speed settings, and remote control prohibition status are stored.       Constant contact ingut Stops after recovering from a power outage         SW2-R setting       What Happens       Constant conditioner         OFF (Factory setting)       Stops after recovering from a power outage and runs if it was running.       The Option Stops if the unit was stoped before the power outage and runs if it was running.         NOTE)       Models before the power outage       COOLING       HEATING         Models with humid heating and dehumidifying functions.       DRY COOLING       HEATING         Models with numid function.       DRY COOLING       HEATING         A) Contact input function settings (SW3-1 to SW3-2)       What Happens       Control mode         Stap after recovering status of the air conditioner is repeated (parenter) (stoper to mode ar model.       Stap and the air conditioner is stoped (NOTE 2).         A) Contact input function.       OFF       OFF (For Control is rejected (parenter) (stoper on toolse: air condition rus conditoner is stoped (NOTE 2). <tr< td=""><td>Use with pow</td><td>ver failure rec</td><td>covery se</td><td>ttings</td><td>2 1 4 3 2 1 Set to the ■ side ↓</td><td>4 3 2 1 :ON ∱</td><td>4 3 2 1 :OFF</td><td>Instanta contac Cons contac</td></tr<>	Use with pow	ver failure rec	covery se	ttings	2 1 4 3 2 1 Set to the ■ side ↓	4 3 2 1 :ON ∱	4 3 2 1 :OFF	Instanta contac Cons contac
Contract units, units, specific V DC, +10%, -15%, 200mA.         3) Settings when recovering from a power outage (SW2-R)         This selects whether to restart operation, this setting is given priority in cases where the indoor unit has an auto start ON / OFF jumper. Note also that regardless of whether switch SW2-R is on or off, the operating mode (NOTE), set temperature, fan direction and speed settings, and remote control prohibition is status are stored.         SW2-R setting       What Happens         OFF (Factory setting)       Stops after recovering from a power outage ON       Stops after recovering from a power outage ON         VOTE) The following settings apply to the models below.       Models before the power outage       HEATING         NOTE) The following settings (SW3-1 to SW3-2)       HEATING         Models with dehumidifying function.       DRY COOLING       HEATING         4) Contact input function settings (SW3-1 to SW3-2)       What Happens       Control mode         Stantaneous contact input (Story setting)       Setting setting wan is the air condition (NOTE 2).       Control mode         Stantaneous contact input (Story setting)       OFF       OFF       Frequent was stopped below the air condition power outage       Control mode         Stantantaneous contact input (Story setting)       OFF       Drever outage       Control mode       Status         Stantaneous contact input (Story setting)       OFF       Freopenalig status of the air condition (NOTE 2).	NOTE also the	at a separ	ate tim	er po	wer source is needed	d when usi	ng the	Instanta
Inis selects whether to restart operation when the power comes back on after a power outage occurred during operation. This setting is given priority in cases where the indoor unit has an auto start ON / OFF jumper. Note also that regardless of whether switch SW2-R is on or off, the operating mode (NOTE), set temperature, fan direction and speed settings, and remote control prohibition is status are stored.       Instanta control and speed settings.         OFF (Factory setting)       Stops after recovering from a power outage       Cons         OFF (Factory setting)       Stops after recovering from a power outage       ON         NOTE)       The following settings apply to the models below.       The Option of the operating form a power outage       The Option of the operating form a power outage         NOTE)       Mode before the power outage       COOLING       HEATING         Models with humid heating and dehumidifying functions.       DRY COOLING       HEATING         Models with numid neating and dehumidifying functions.       DRY COOLING       HEATING         A) Contact input function settings (SW3-1 to SW3-2)       What Happens       Control mode         Stant contact input (1), choose or nore of the following functions.       State control is rejected (operate/ stop / time prohibition) (NOTE 2).       State control is rejected (operate/ stop / time prohibition) (NOTE 2).         Contact control all mode is enting mode model mene stopped on the stand control is colosed. (NOTE 2).       Contact - Open to cose: aromation ara prohibited when the point is colosed. (NOT	Dowor oouroo	macpen	donity.					l contac
SW2-R setting         What Happens           OFF (Factory setting)         Stops after recovering from a power outage           ON         Stops if the unit was stopped before the power outage and runs if it was running.           NOTE) The following settings apply to the models below.         Mode before the power outage           Obde before the power outage         COOLING         HEATING           Models with humid heating and dehumidifying functions.         DRY COOLING         HEATING           Models with humid heating and dehumidifying functions.         DRY COOLING         HEATING           Models with dehumidifying function.         DRY COOLING         HEATING           4) Contact input function settings (SW3-1 to SW3-2)         What Happens         Control mode           S1         SW3-1         SW3-2         What Happens         Control mode           S1         SW3-2         What Happens         Control mode         Ss           S0         Free opening status of the air conditioner is repected (pareate/ stop / timer prohibition) (NOTE 1).         Contact - Open to dose: air conditioner is colosed. (NOTE 2).         Ss           S1         ON         Invalid         Contact - Open to close: to copen: air conditioner is colosed. (NOTE 2).         The open to control are prohibited when the prohibition (NOTE 1).	(3) Settings wh	specs:16 en recove	V DC,	+10%	%, -15%, 200mA. power outage (SW2-I	R)	ack on after a	Contac Cons contac
ON     Stops if the unit was stopped before the power outage and runs if it was running.       NOTE) The following settings apply to the models below.       MOTE) The following settings apply to the models below.       Mode before the power outage       Room air conditioner       Models with humid heating and dehumidifying functions.       Models with humid heating study.       Models with humid heating study.       Models with humid heating study.       Models with humid heating and dehumidifying functions.       Models with numid heating and dehumidifying functions.       Models with a settings (SW3-1 to SW3-2)       When using contact input (S1), choose one of the following functions.       S1     SW3-1 [SW3-2]       What Happens     Control mode       S1     Setting       OFF     OFF       OFF     OFF       ON     Contact - Open to dose: a roomtion runs (open af condition runs control is rejected (operate/ stop / timer prohibition) (NOTE 2).       Nonation control all control     ON       Notat control all control on the open open air condition runs control is cloced. (NOTE 2).	(3) Settings wh This selects power outag where the ir of whether s fan direction	specs:16 en recove whether to ge occurre door unit switch SW2 and spee	V DC, oring fro o restar d during has an 2-R is o d settin	+109 om a rt ope g ope auto on or igs, a	%, -15%, 200mA. power outage (SW2-I pration when the powe pration. This setting is start ON / OFF jumpe off, the operating mod ind remote control pro	R) r comes ba given priori r. Note also e (NOTE), hibitio n sta	ack on after a ty in cases ) that regardless set temperature atus are stored.	Contac Contac Instanta Contac Contac Contac Contac
NOTE) The following settings apply to the models below.       The OpOutput         Mode before the power outage       COOLING       HEATING         Room air conditioner       COOLING       HEATING         Models with humid heating and dehumidifying functions.       DRY COOLING       HUMID HEATING         Models with humid heating and dehumidifying functions.       DRY COOLING       HEATING         Models with humid heating and dehumidifying functions.       DRY COOLING       HEATING         4) Contact input function settings (SW3-1 to SW3-2)       When using contact input (S1), choose one of the following functions.       S8         Stantaneous contact input (S1), choose one of the air conditioner fus reversed by an isstantaneous input of the air conditioner ins stopped (operating fastas of the air conditioner ins stopped (operating fastas of the air conditioner ins the second the following functions.       S5         Stant contact input (CON cores or once. in condition runs. on Control is rejected (operate/stop / timer prohibition) (NOTE 2).       ON Or Contact - Open to dose: air condition runs. (NOTE 2).         Areade control all monthlorer mission on the air condition stops. Close to open: air condition is closed. (NOTE 3) <td>(3) Settings wh This selects power outac where the in of whether s fan direction SW2-R se OFF (Factory</td> <td>specs:16 en recove whether th ge occurre door unit switch SW2 and spee etting (setting)</td> <td>V DC, rring fro o restar d during has an 2-R is c ed settin Ston</td> <td>+10% om a rt ope auto on or igs, a</td> <td>%, -15%, 200mA. power outage (SW2-i pration when the power ration. This setting is: start ON / OFF jumpe off, the operating mod ind remote control pro- What Hap per recovering from a t</td> <td>R) r comes ba given priori r. Note also e (NOTE), hibitio n sta pens</td> <td>ack on after a ty in cases that regardless set temperature atus are stored.</td> <td>Contac Cons contac Instanta contac Cons contac All re controlle are pre</td>	(3) Settings wh This selects power outac where the in of whether s fan direction SW2-R se OFF (Factory	specs:16 en recove whether th ge occurre door unit switch SW2 and spee etting (setting)	V DC, rring fro o restar d during has an 2-R is c ed settin Ston	+10% om a rt ope auto on or igs, a	%, -15%, 200mA. power outage (SW2-i pration when the power ration. This setting is: start ON / OFF jumpe off, the operating mod ind remote control pro- What Hap per recovering from a t	R) r comes ba given priori r. Note also e (NOTE), hibitio n sta pens	ack on after a ty in cases that regardless set temperature atus are stored.	Contac Cons contac Instanta contac Cons contac All re controlle are pre
Mode before the power outage         COOLING         HEATING         Output           Room air conditioner         Models with humid heating and dehumidifying functions.         HUMID HEATING         M2: T           Models with humid heating and dehumidifying functions.         DRY COOLING         HUMID HEATING         M2: T           Models with dehumidifying function.         DRY COOLING         HEATING         KRP92           When using contact input function settings (SW3-1 to SW3-2)         What Happens         Control mode         S8           Sperating mode         setting         What Happens         Control mode         S5         S6           Orstant contact input (S1), choose one of the following functions.         OFF         Contact one to dea: a conditioner is evered by an isstantaneous input of 100 msec or more.         Contact - Goen to dea: a conditioner is stopped (NOFE 20).         S5           Contact control all rohibition/permission put         ON         Invalid         Contact - Copen to dea: a conditioner is alonged to when the are prohibited when the put         All remote controller actions are prohibited when the contact is closed. (NOTE 3)	(3) Settings wh This selects power outag where the ir of whether s fan direction SW2-R se OFF (Factory ON	specs:16 en recove whether to ge occurre- door unit l switch SW2 and spee etting / setting)	V DC, rring fro o restar d during has an 2-R is o d settin Stop Stops	+10% om a rt ope g ope auto on or igs, a os afte if the u	%, -15%, 200mA. power outage (SW2- pration when the power ration. This setting is: start ON / OFF jumpe off, the operating mod ind remote control pro What Hap er recovering from a p nit was stopped before the pow	R) r comes ba given priori r. Note also e (NOTE), hibitio n sta pens power outa ver outage and	ack on after a ty in cases that regardless set temperature atus are stored. ge	Contac Cons contac Instanta contac Contac All re controlle are pro
Models with dehumidifying functions.     DRY COOLING     HUMID HEATING       Models with dehumidifying function.     DRY COOLING     HEATING       4) Contact input function settings (SW3-1 to SW3-2)     HEATING       When using contact input (S1), choose one of the following functions.     S8       stating mode setting     SW3-1 setting     SW3-2 setting     What Happens     Control mode       operating mode (actory setting)     OFF     The operating state of the ai conditioner is reversel by an isstantaneous input of 100 mec or more.     Contact - Open to dose: air condition runs. (NOTE 2).     ON / OFF control is rejected (operate/stop / timer prohibition) (NOTE 2).       Contact - Open to dose: air condition stops. Close to open: put     ON     Invalid contact - Open to close: control contact is closed. (NOTE 3)	(3) Settings wh This selects power outag where the ir of whethers is fan direction SW2-R se OFF (Factory ON (NOTE) The fo	specs:16 en recove whether tr ge occurre- door unit l switch SW2 a and spee etting / setting)	V DC, rring fro o restar d during has an 2-R is o od settin Stop Stops ttings a	+10% om a rt ope auto on or ogs, a os afte if the u	%, -15%, 200mA. power outage (SW2- ration when the power ration. This setting is. start ON / OFF jumpe off, the operating mod md remote control pro What Hap er recovering from a p nit was stopped before the pow to the models below.	R) r comes ba given priori r. Note alsc e (NOTE), hibitio n sta pens power outa ver outage and	ack on after a ty in cases that regardless set temperature tus are stored. ge ge	Constant Contac Instanta Contac Cons contac All re controlle are pro
Models with dehumidifying function.     HEATING       4) Contact input function settings (SW3-1 to SW3-2) When using contact input (S1), choose one of the following functions.     S8       5) S1 operating mode     SW3-1 SW3-1 SW3-1 put factory setting     SW3-2 What Happens     Control mode       0FF     The operating status of the ar conditioner is reversed by an instantaneous input of 100 msec more.     Control mode       0N     Cortact - Open to dose: air conditioner is stopped (NOTE 2).     ON / Cortact - Open to dose: air conditioner is stopped (NOTE 2).       4     Contact - Open to dose: air conditioner is stopped (NOTE 2).     All remote control is rejected (operate/ stop / timer prohibition) (NOTE 2).	(3) Settings wh This selects power outag where the in of whether's fan direction SW2-R se OFF (Factory) ON (NOTE) The fo Room air cond Models with	specs:16 en recove whether ti ge occurred door unit li witch SWW and spee etting r setting) llowing se Modu ditioner	V DC, rring fro o restar d during has an 2-R is o d settin Stops ttings a e before ower out ating a	+10% om a ct opeg g opeg auto on or ngs, a os afte if the u apply e the utage	%, -15%, 200mA. power outage (SW2-2- iration when the powe ration. This setting is start ON / OFF jumpe start ON / OFF jumpe off, the operating mod (the control pro- What Hap er recovering from a 1 nit was stopped before the pow to the models below.	R) r comes ba given priori r. Note also e (NOTE), hibitio n sta pens power outa pens power outage and	ack on after a ty in cases that regardless set temperatures set temperatures utus are stored. ge uns if it was running.	Contac Cons contac instant contac Cons contac dire controlle are pro United The Of Output M1: 1 M2: 1
4) Contact input function settings (SW3-1 to SW3-2) When using contact input (S1), choose one of the following functions.       S8         5) S1       SW3-1 Setting       SW3-2 What Happens       Control mode         instantaneous contact put flactory setting)       OFF       The operating status of the air conditioner is reversed by an instantaneous input of 100 msec or met.       Last command priority         Constant contract input       OFF       Contact - Open to dose: air conditioner is stopped (operate / stop / timer prohibition) (NOTE 2).       S5         Remote control all robibition/permission       ON       Invalid air contage in operating status.       ON close to open: in contange in operating status.       All remote controller actions contact is closed. (NOTE 3)	(3) Settings wh This selects power outage where the ir of whether s fan direction SW2-R st OFF (Factory) ON (NOTE) The fo ON Room air cond Models with dehumic	specs:16 en recove whether t e occurre door unit l witch SW2 a and spee etting $\gamma$ setting) llowing se Mod 	V DC, rring fro o restar d during has an 2-R is c d settin Stops ttings a e before ower out ating a ctions.	+10% om a g ope auto on or ogs, a gs, a apply e the utage	%, -15%, 200mA. power outage (SW2-1 ration when the powe ration. This setting is start ON / OFF jumpe start ON / OFF jumpe er recovering from a j mit was stopped before the pow to the models below. COOLING DRY COOLING	R) r comes be r comes be r, Note also r, Note als r, Note also r, Note also r, Note also r, Note	ack on after a ty in cases that regardless est temperature atus are stored. ge muns if it was running. HEATING MID HEATING	contac Conso Conso Conso Conso Conso Contac Contac Conta
When using contact input (51), choose one of the following functions.         S1       SW3-1       SW3-2       What Happens       Control mode         Instantaneous contact input (below in stantaneous input (below in stantaneous contact input (below in stantaneous input (below in the open information i	(3) Settings wh This selects power outage where the ir of whether's fan direction SW2-R se OFF (Factor) ON (NOTE) The fo Models with dehumic dehumic	specs:16 en recove whether t ge occurred door unit i witch SWW and spece etting y setting) Illowing se Mod 	V DC, ring fro o restard d during has an 2-R is co d settin Stops ttings a e before ower ou ating a ctions.	+109 m a et ope g ope auto nn or s aft if the u apply e the utage nd	<ul> <li>,-15%, 200mA.</li> <li>power outage (SW2-1 ration when the power ration. This setting is start ON / OFF jumpe start ON / OFF jumpe off, the operating mod nd remote control pro What Hap er recovering from a ; nit was stopped before the pow to the models below.</li> <li>COOLING</li> <li>DRY COOLING</li> </ul>	R) r comes be given priori. r. Note also e (NOTE), hibition sta pens power outage and l HUN l HUN	Ack on after a ty in cases that regardless est temperature atus are stored. ge ge HEATING HEATING HEATING	Contac Conso Contac Conso Contac Conso Contac All re controlle are pro Output M1: 1 M2: 1 KRP99
Opperating mode         setting         setting         What Happens         Control mode           nstantaneous contact nput (factory setting)         PFF         Preoperating status of the air conditioner Is reversed by an instanteneous input of 100 msec or more.         Last command priority         S5           Constant contact input         ON         Contact - Open to dose air condition runs (NOTE 2).         ON / OFF control is rejected (operate/stop / timer prohibition) (NOTE 2).         S5           Network control all robiblion/premission put         ON         Invalid         Contact - Open to close: air condition stops. Close to open: no change in operating status.         All remote controller actions are prohibited when the contact is closed. (NOTE 2).	(3) Settings white (3) Settings white power outage where the ir of whethers is fan direction SW2-R sc OFF (Factory ON (NOTE) The for Models with dehumic (4) Contact inp When with	specs:16 en recove whether t ge occurred door unit i witch SW2 and spece atting / setting) Illowing se Mode D D D D D D D D D D D D D D D D D D D	V DC, ring froo o restand d during has an 2-R is o d settin 2-R is o d settin Stops ttings a e before ower out ating a ctions.	+109 m a ct opeg g opeg auto on or or ss aftur if the u apply e the utage md gs (S 1) of	<ul> <li>,-15%, 200mA.</li> <li>power outage (SW2-)- tration when the power ration. This setting is.</li> <li>start ON / OFF jumpe off, the operating mod nd remote control pro</li> <li>What Hap er recovering from a µ nt was stopped before the pow- to the models below.</li> <li>COOLING</li> <li>DRY COOLING</li> <li>W3-1 to SW3-2)</li> </ul>	R) r comes be given priori r, Note also e (NOTE), hibition ste pens power outa re outage and hum	Ack on after a ty in cases that regardless est temperature atus are stored. ge HEATING HEATING HEATING	Contac Conscience Conscience Contac Contac Controlle are pro- Controlle are pro- Controlle are pro- Marce Marce Marce Marce Marce Salar Sa
Instantaneous contact nput (factory setting)         OFF              - In the questing status to the all unitative 100 meet or mole.          Last command priority         S5           Constant contact input         ON              Contact - Open to dose: air condition runs. (NOTE 2).               ON - OPEn to dose: air condition runs. (NOTE 2).               ON - OPEn to dose: air conditioner is stopped (NOTE 2).               S5            Permote control all mohibition/permission put         ON              Invalid in contange in operating status.               Contact - Open to dose: no change in operating status.               All remote controller actions no change in operating status.	(3) Settings white (3) Settings white power outage where the ir of whethers is fan direction SW2-R sc OFF (Factory ON (NOTE) The fo Models with dehumic dehumic (4) Contact inpg When using S1	specs:16 en recove whether t ge occurre- door unit i whether t and spee atting v setting) Illowing se Modd ditioner humid he lifying fun ut functior geontact in [SW3-1]	V DC, pring fro o restar d during 2-R is or d setting Stops ttings a e before ower ou ating a ction. n setting nput (S SW3-2	+109 om a gope auto on or ngs, a apply e the the the gs (S 1), cl	<ul> <li>,-15%, 200mA.</li> <li>power outage (SW2 ration when the power ration. This setting is: start ON / OFF jumpe off, the operating mod ind remote control pro What Hap er recovering from a p nit was stopped before the pow- to the models below.</li> <li>COOLING</li> <li>DRY COOLING</li> <li>W3-1 to SW3-2) hoose one of the follo DWS-1412</li> </ul>	R) r comes basission of the second secon	Ack on after a ty in cases that regardless set temperature ge HEATING HEATING HEATING HEATING	Contac Cons contac Contac
Constant contact input         ON         Close to open air conditioner is stopped (NOTE 1).         (poperate/stop / timer prohibition) (NOTE 2).           Nemote control all rohbibion/premission         ON         Invalid air condition stops. Close to open: no change in operating status.         All remote controller actions are prohibited when the contact is closed. (NOTE 3).	(3) Settings wh This selects power outage where the ir of whethers is GFF (Factory ON (NOTE) The fo Models with dehumic dehumic (4) Contact inp When using S1 operating mod	specs:16 en recove whether t ge occurre- door unit it witch SWW and spee atting r setting) llowing se Mod pditioner humid he lifying funu df dels with difying fun ut functior contact in sw3-1 fe	V DC, ring froo o restar d during has an o d during has an o Stops Stops Stops stuttings a e befor ower ou ating a e tofors. ction. n setting setting SW3-2 setting	+10% om a tropeg ope auto on or r ogs, a saft if the u apply e the trage gs (S 1), cl	%, -15%, 200mA. power outage (SW2- ration when the power ration. This setting is. start ON / OFF jumpe off, the operating mod ind remote control pro What Hap er recovering from a p nit was stopped before the power to the models below. COOLING DRY COOLING W3-1 to SW3-2) noose one of the follo What Happens	R) r comes be given priori r. Note also: e (NOTE), hibitio n sta pens power outa er outage and HUN I wing functi Cont	Ack on after a ty in cases that regardless set temperature ge HEATING HEATING HEATING HEATING ID HEATING	Contac Cons Cons Cons Cons Cons Cons Cons Contac Cons Controlle are pro Controlle are pro Mutput M1: 1 M2: 1 KRP9 S8
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timer. To prevent operation of the power ON timer, use of the (KRP413BBIS) remote control PC-board set is recommended. However, note that it cannot be used in tandem with the central controller. If this product is connected to an air conditioner manufactured in or after	(3) Settings wh This selects power outage where the ir of whethers is GFF (Factory ON (NOTE) The fo Models with dehumic Models with dehumic Models with dehumic Models with dehumic Models with dehumic Constant control all poperating moo Instantaneous conta input (factory setting Constant control all porbiblion/permissi input NOTE1: Since operat Example NOTE2: Operat Example NOTE2: Operat	specs:16 en recove whether t ge occurre- door unit if which SWW and spee stiting r setting) llowing se Mod 	V DC, ring frc o restand d during has an 2-R is c o restand stops Stops Stops Stops Stops titlings a e beform ating a e beform ating a e beform setting or SW3-2 setting OFF ON Invalid Invalid Invalid nt roperatin t operatin t operatin	+109 ma a trope on or ago	<ul> <li>*6, -15%, 200mA.</li> <li>power outage (SW2-1 prover outage (SW2-1 ration when the power ration. This setting is: start ON / OFF jumpe off, the operating mod ind remote control pro- What Hap er recovering from a p nit was stopped before the power to the models below.</li> <li>COOLING</li> <li>DRY COOLING</li> <li>DRY COOLING</li> <li>W3-1 to SW3-2) noose on eof the follo</li> <li>What Happens</li> <li>extend status of the air conditioner set by an isstatraeous input of ecor more.</li> <li>I open to dose: air condition russ, open air condition is stopped 1.0 pen to dose: air condition russ, open air condition is stopped 1.0 pen to dose: air condition russ, open air condition status at 1.0 pen to dose: air condition russ, open air conditions is stopped the cont colse:</li> <li>I act command priori ondition starts at it of the power ON timer is set, e operation starts at it of the power ON timer is set, in tandem with the ce an an air conditioner</li> </ul>	R) r comes basister of the second	Ack on after a ty in cases that regardless set temperature atus are stored. HEATING HEATING HEATING HEATING HEATING ALEATI	Contac Conso Conso Conso Conso Conso Conso Conso Contolie are pro MU M1: 1 M2: 7 8 N KRP9 S8 S5 The Ce
timer. To prevent operation of the power ON timer, use of the (KRP413BB1S) remote control PC-board set is recommended. However, note that it cannot be used in tandem with the central controller. If this product is connected to an air conditioner manufactured in or after 2011, when the contact is closed, the power ON timer may be cancelled depending on the combination with the model. Central ON / C Sched	(3) Settings wh (3) Settings wh This selects power outage where the ir of whethers is OFF (Factory ON (NOTE) The fo SW2-R sc OFF (Factory ON (NOTE) The fo Models with dehumic dehumic dehumic (4) Contact inp When using S1 operating moo Instantaneous contal input (factory setting Constant control all Remote control all Remote control all Remote control all NOTE1: Since operar Examp NOTE2: Opera NOTE2: Opera S1 01 01 01 01 01 01 01 01 01 0	specs:16 en recove whether t ge occurre- door unit if your the whether t secting) llowing se thing functioner humid he lifying function contact is on ON ccentral co ting status ple: If the u with any secting t contact is on is still on is still on to reven 13BB15) hat it cann product is when the dding on th	V DC, ring frc o restand d during has an 2-R is c o restand Stops Stops Stops Stops stitings a e beform ating a e beform ating a e beform tons. Ction. setting OFF ON Invalid Invalid Invalid closed operatin t opera e contac co	+10% orm a contact operation of the second generation of the second operation of the second generation of the second operation ope	<ul> <li>*6, -15%, 200mA.</li> <li>power outage (SW2-)</li> <li>prover outage (SW2-)</li> <li>prover outage (SW2-)</li> <li>prover outage (SW2-)</li> <li>prover outage (SW2-)</li> <li>when the power ration. This setting is start ON / OFF jumpe off, the operating mod and remote control provide the power of the models below.</li> <li>COOLING</li> <li>DRY COOLING</li> <li>DRY COOLING</li> <li>Wa3-1 to SW3-2)</li> <li>procese one of the follo</li> <li>What Happens</li> <li>entight status of the air conditioner start off of the air conditioner is steped of the air conditioner is steped of the air conditioner start of the power ON time is set, and controller off the ONT the CONTRAL set of the ONT officiant set is set, the contax will be open ection and speed set is the ON timer is set, and officiant set is a first officiant set is a set officiant set is a first officiant set is a set of the power ON time is set, and the power O</li></ul>	A) r comes bagiven priori r. Note also e (NOTE), hibition nstapens power outa er outage and HUN HUN wing functi Control of the comment of the comment of the comment of the comment on the time specific on the time sp	Ack on after a ty in cases that regardless est temperature atus are stored. HEATING HEATING HEATING HEATING ONS. trol mode and priority Itrol is rejected op / timer prohibition) trol is rejected op / timer prohibition and priority Itrol is rejected when the blosed. (NOTE 3) tact status and times. Controller actions dillo her also active of the status and priority Itact status and times. Active of the status and priority Itact status and times. Active of the status and priority Itact status and times. Active of the status and priority and priority Itact status and times. Active of the status and priority the e changed. Active of the status and active of the status and priority the status and priority the status and active of the status active of the status acti	Contac Conso Conso Conso Conso Conso Conso Conso Contolie are pro MU M1: 1 M2: 7 % KRP9 S8 S5 The Ce
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#### 5.Control Codes

When using a central remote controller, the operating codes can be used to limit operation from wireless remote controllers. Three beeps for signal reception will be heard continuously when the wireless remote controller is operated while in central control. <u>o</u> : permitted; × : prohibited

			C	perat	ions fr	om th	e rem	ote co	ontrolle	er	j t
			"Run	' contr	ol from	the	"Stop	" contr	ol fron	n the	Ti B
S1			centr	al cont	troller		centra	al cont	roller		ntac
operating mode	Control mode	Control code	Run / timer	Stop	perating mode mperature	an direction nd fan speed	Run / timer	Stop	perating mode mperaturet	an direction nd fan speed	perations from on
	ON / OFF control	013	×	×	0 10	LL rd	×	×	0 20	LL rd	0 5
	is rejected	10,11	X	X	×		X	X	×		
	Only OFF control is accepted	2 12–19	×	0	×	1	×	0	×	1	
Instantaneous	Control priority	4	0	0	0	1	×	0	×	1	
contact mode	Central phonity	5	0	0	0		×	×	0		
	Last command priority	6,7	0	0	0		0	0	0		
	Timer operation	8	O*	O*	O*	0	×	0	×	0	
	remote controller	9	O*	0*	O*		×	×	0		0
		2,10-19			×				×		
Constant		0,1,3,5-7			0				0		
contact mode		4	×	×	0		×	×	×		
Contact mode		8			O*				×		
		9			O*				0		
All remote controller actions are prohibited		$\square$	×	×	×	×	×	×	×	×	
*	Only during timer one	ration									

The remote controller permission / prohibition settings using the iTM / iTC are as follows. o : permitted; × : prohibited

S1 pin		iTM / iTC se	ttings		Oper ren	ations from	the er	s from central and contact input
oporating mode	Start / stop	Change operating mode	Change set temperature	Run / timer	Stop	Operating mode temperature	Fan direction and fan speed	Operation controller
Instantaneous contact mode	ON / OFF	permitted	permitted/prohibited	×	×	0		
Constant contact mode	rejected	prohibited	permitted/prohibited	×	×	×		
Instantoneous		normittod	permitted	X	Х	0		
Instantaneous	0 1 055	permitteu	prohibited		~			
contact mode	Only OFF	prohibited	permitted/prohibited	×	0	×	~	
Constant	accented	normittad	permitted	X	Х	0	0	
Constant	accopica	permitteu	prohibited					0
contact mode		prohibited	permitted/prohibited	^	×	×		
Instantaneous		permitted	permitted/prohibited	0	0	0		
contact mode	Last command	prohibited	permitted/prohibited	X	0	×		
Constant	priority	permitted	permitted/prohibited	X	Х	0		
contact mode		prohibited	permitted/prohibited	X	Х	×		
All remote controller actions are prohibited	Do	oes not affect	settings	×	×	×	×	

#### 6.Read Operating / Error Display Signal

Operating / error signals can be read from the contact output (S5).

Dutput specs

M1: Turn MR 1 ON when the air conditioner is running. M2: Turn MR 2 when a communication error has occurred between the KRP928BB2S and the air conditioner, or MR 1 is ON and the unit has stopped after an error. MR 2 is not turned ON during a warning.

S8     Power supply for relay (Supply 12 V DC externally.)       Operating control panel (Field supply)	KRP928BB2S	8BB2S	
Operating control panel (Field supply)	S8 ⊕ ⊖	O     Power supply for relay (Supply 12 V DC externally.)	
		Operating control panel (Field supply)	
S5 M1 (-) (MR) (-) (-) (-) (-) (-) (-) (-) (-) (-) (-	MC (+) S5 M1 (-) M2 (-)	MC (+) MI (-) (MR) (-) (MR2) (-) (-) (-) (-) (-) (-) (-) (-) (-) (-	MR2) 10%

#### 7.Combining Equipment

ntroller can be combined with the following devices D-BIPS Contact input Wired Remote Controller Remote Controller OFF controlle time Schedule Central Remote Cor No Wireless e Controller 0 0 0 0 0 0 0 0 0 0 roller 0 0 0 0 0 0 0 0 0 х х 0 0 × × 0 0 0 0 0 0 0 × 0 0 0 0 × × Controller 0 0 0 ote Controller 0 0 0 0 0 × 0



# 13.6 <DCS302C71> Central Remote Controller Installation Manual

This air condition	ner comes under the term "appliances not accessible to the general public".
Meaning of warnin	ng, caution and note symbols,
	Indication a potentially hazardous situation which, if not avoided, could result in death or serious injury Indication a potentially hazardous situation which, if not avoided, may result in minor or moderate injur It may also be sued to alert against unsafe practices.
	Indication situation that may result in equipment or property-damage-only accidents.
	WARNING
Ask your deale	or or qualified personnel to carry out installation work. Do not try to install the machine by yours
Perform installa	ation work in accordance with this installation manual. tion may result in water leakage, electric shocks or fire.
Be sure to use Failure to use th	only the specified accessories and parts for installation work, re specified parts may result in water leakage, electric shocks, fire or the unit falling,
Carry out the s Improper installa	pecified installation work after taking into account strong winds, typhoons or earthquakes. ation work may result in the equipment falling and causing accidents.
Make sure that by qualified per An insufficient p	: a separate power supply circuit is provided for this unit and that all electrical work is carried o reonnel according to local laws and regulations and this installation manual.
Make sure that al	I wiring is secured, the specified wires and used, and no external forces act on the terminal connections or wires ctions or installation may result in fire.
When wiring th wires so that the Improper position	e power supply and connecting the remote controller wiring and transmission wiring, position the electric parts box lid can be securely fastened. ning of the electric parts box lid may result in electric shocks, fire or the terminals overheating.
Before touchin Ground the air o	g electrical parts, turn off the unit. xonditioner. Do not connect the ground wire to gas or water pipes, lightning rod or a telephone ground wir
When installing	nding may result in electric shocks. s or relocating the system, be sure to keep the refrigerant circuit free from substances other the
Do not reconst If the pressure s	truct or change the settings of the protection devices. witch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than the
specified by Dail	in are used, fire or explosion may result. the switch with wet fingers.
Install an leak	ch with wet tingers can cause electric shock. circuit breaker, as required.
Do not install t	the air conditioner or the remote controller in the following locations:
(a) where a m Plastic par (b) where cor	ineral oil mist or an oil spray or vapor is produced, for example in a kitchen ts may deteriorate and fall off or result in water leakage. rosive gas, such as sulfurous acid gas, is produced
(c) near mach	inery emitting electromagnetic waves gratic waves may disturb the operation of the control system and result in a malfunction of the equinme
(d) where flar volatile fla Operatin	mable gases may leak, where there are carbon fiber or ignitable dust suspensions in the air, or where mmables such as thinner or gasoline are handled. g the unit in such conditions may result in fire.
	A CAUTION
Safely dispose	of the packing materials.
Packing materia Tear apart and bag which was	Is, such as nails and other metal or wooden parts, may cause stabs or other injuries. throw away plastic packaging bags so that children will not play with them. If children play with a plastic not torn apart, they face the risk of suffocation.
Do not turn of Always wait at I	f the power immediately after stopping operation. east five minutes before turning off the power. Otherwise, water leakage and trouble may occur.
Install the indo televisions or r (Depending on	or and outdoor units, power supply wiring and connecting wires at least 3,5ft, away from adios in order to prevent image interference or noise. the radio waves, a distance of 3,5ft, may not be sufficient enough to eliminate the noise.)
Remote contro fluorescent lan Install the indoor	ller (wireless kit) transmitting distance can result shorter than expected in rooms with electronic nps.(inverter or rapid start types) r unit as far away from fluorescent lamps as possible.
This unit is a c	lass A product. ironment this product may cause radio interference in which case the user may be required to take adequate measu



<ul> <li>(1) Connector for</li> <li>When using the unit with</li> <li>When using r optional cont</li> </ul>	r setting master controller (X1A) (Provided with connector at factory set) only 1 central remote controller, do not disconnect the connector for setting master controller. (Use the connector in the state in which it was delivered.) multiple central remote controllers, or using the central remote controller in conjunction with the trollers for centralized control, makes settings as indicated in the below table.
Pattern of connection Central remote controller	of optional controllers for centralized control Connector for setting master controller (X1A) Setting, Removed r Unified ON/OFF controller Schedule timer Central remote controller Unified ON/OFF controller Schedule timer
1 to 4	1 to 16     Set one to "Used" and all the rest to "Not used"     Set all to "Not used"       1     1     "Not used"
<ul> <li>(Remove all the cousing the unit toguing the unit toguinit, or the paralle</li> <li>(2) Address settir Two central rem 128 groups of ir</li> </ul>	onnectors for the central remote controller, the on/off controller, and the schedule timer when ether with the Ve-UP controller, the master station II, the DMS interface, the payment management al interface station.) Ing note controllers can be used as shown in <b>O SYSTEM CONFIGURATION</b> , to control anywhere up to a max. Indoor units. In this case, group address must be set. This is done with the switch for setting each address (SS3).
SS3 setting SETTING EACH ADDR 5-00 1900 ~ 8-15	gIndoor unit addressSS3 settingIndoor unit addressESSTo control indoor units from group Nos. 1-00 through 4-15SETTING EACH ADDRESS 5-00To control indoor units from group Nos. 5-00 through 8-15
Central remote controller (1) One of the two (4) Setting of the	, it is necessary to set the MAIN/SUB changeover switch. Group No.1-00 · · · Group No.1-15 Group No.2-00 · · · Group No.4-15 Central remote Max. 64 groups Central remote controller (2) central remote controllers (1) . (2) is set to "MAIN" while the other is set to "SUB".
units on in 2-s sequential ope	While holding down the unified stop button, perform forced reset.
Sequ	"ON" Sequential operation "ON" "OFF" (Factory cost) While holding down the unified operation
NOTE: The seque not guara capacity n	ential operation function is designed to reduce the load on the power supply equipment, but does netee that compressors will not be started simultaneously. You cannot therefore count on a eduction effect by power supply equipment breaker selection.
(5) Forced reset s When changing for setting ma reset simply by once and retur without turning (For normal op	witch g the setting of the connector ister controller, etc., you can setting it to the reset side ning to the normal side, g the power OFF. peration, set the switch to le.) Normal side (Factory set) Reset side <u>Forced reset switch</u> <b>Fig. 1</b>
the normal sid	

WIRING OUTLINE	Central remote
Power supply AC100V-240V (50/60Hz)	$\begin{array}{c} \text{controller}_{F1, F2} & \text{outdoor}_{I} \\ \text{Manual} & \text{F1, F2} & \text{F1, F2} & \text{F1, F2} & \text{F1, F2} \\ \text{switch} & \text{F1, F2} & \text{F1, F2} & \text{F1, F2} & \text{F1, F2} \\ \end{array}$
WIRING TO THE INDOOF	R UNIT AND OUTDOOR UNIT
	Outdoor unit In-Out Dur-Out F1.F2 F1.F2       Outdoor unit In-Out Dur-Out F1.F2 F1.F2       See the installation manual which came with the air conditioner for details on its transmission wiring specifications.         ************************************
	Central remote controller
Batch remote control adapte Separately sold batch remote Used for DCS302A72 conn See the instruction manual ir control adapter for details,	er Connector (X2A) e control adapter. ections, ncluded with the batch remote
Wiring specifications	
Power supply wiring	2mm <sup>2</sup>
for control	1000 m (total overall wiring length 2000 m)
Manual switch	10A or 15A
instruction manual inclu	ded with the indoor and outdoor units for details.
CONTROL TERMINAL S *1 For connecting Indo *2 Forced OFF input (1 None of the indoor contact with minima Use only contactors	STRP for unit (F1, F2) F1, T2) units connected to the forced OFF input contact (non-voltage current) willoperate when it is shut off. which guarantee the minimum applicable load DC 16V, 10mA. $H = \frac{1}{1}$
T1-] DC16V	NOTE) Use instantanecous contactor of over 200m sec, energizing time, when necessary
*3 For schedule timer ( Power can be suppl details, refer to the i Wire *2 and *3 only wh	D1, D2) lied to the schedule timer (DST301B61) separately sold. For nstallationmanual of the schedule timer. hen necessary.
(NOTE) Do not connect the power damage or burn electrical p danger. Be sure to check w	supply wiring (100 to 240V) to the control terminal strip. If connected by mistake, it may parts of optional controllers for centralized control and indoor unit. It may result in serious virings before turning the power ON.



## 13.7 <DCS302C71> Central Remote Controller Operation Manual

## **BEFORE USE**

#### ■ GENERAL DESCRIPTION OF SYSTEM

This central remote controller can monitor and control up to 64 indoor unit groups. Using two central remote controllers allows monitoring and controlling of up to 128 indoor unit groups.

#### Main Functions

- 1. Batch starting and stopping of indoor units connected to the central remote controller.
- 2. Handling of operation settings such as start/stop, timer operation, remote controller prohibition/permission, etc., and operation status settings such as temperature.
- 3. Operation status monitoring of operation mode, set temperature, etc.
- **4.** Can be connected to an external central monitor panel and key system using the forced stop input (non-voltage a connector).
- · When using 1 central remote controller



(The central remote controller and the separately sold remote control adapter circuit board or group remote control adapter cannot be used together.)

#### \* GROUP OF INDOOR UNIT refers to the below.

**1.** A single indoor unit without remote controller

**1.** A single indoor unit without remote controller

1



2. A single indoor unit controlled by one or two remote controllers





3. Maximum of 16 indoor units, group-controlled by one or two remote controllers



\* Zone control from the central remote controller Zone control is available from the central remote controller. With it, it is possible to make unified settings for multiple groups, so setting operations are greatly simplified.



- Any setting you make within a given zone will apply to all groups in the said zone.
- A maximum of 64 zones can be set from a single central remote controller.
- (Each zone contains a maximum of 64 groups.)
- Zones can be set randomly from the central remote controller.

# SAFETY CONSIDERATIONS

Please read these "SAFETY CONSIDERATIONS" carefully before installing air conditioning equipment and be sure to install it correctly.

After completing the installation, make sure that the unit operates properly during the start-up operation. Please instruct the customer on how to operate the unit and keep it maintained.

Also, inform customers that they should store this installation manual along with the operation manual for future reference. This air conditioner comes under the term "appliances not accessible to the general public".

Meaning of danger, warning, caution and note symbols.

- **DANGER** ..... Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
- WARNING ....Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
- CAUTION .... Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
- NOTE...... Indicates situation that may result in equipment or property-damageonly accidents.

# Keep these warning sheets handy so that you can refer to them if needed.

Also, if this equipment is transferred to a new user, make sure to hand over this operation manual to the new user.

- Any abnormalities in the operation of the air conditioner such as smoke or fire could result in severe injury or death. Turn off the power and contact your dealer immediately for instructions.
- Do not install the unit in an area where flammable materials are present due to risk of explosion resulting in serious injury or death.
- Safely dispose of the packing materials. Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries. Tear apart and throw away plastic packaging bags so that children will not play with them. Children playing with plastic bags face the danger of death due to suffocation.

- Ask your dealer for installation of the air conditioner. Incomplete installation performed by yourself may result in a water leakage, electric shock, and fire.
- Ask your dealer for improvement, repair, and maintenance. Incomplete improvement, repair, and maintenance may result in a water leakage, electric shock, and fire.
- Improper installation or attachment of equipment or accessories could result in electric shock, short-circuit, leaks, fire or other damage to the equipment. Be sure only to use accessories made by Daikin which are specifically designed for use with the equipment and have them installed by a professional.
- Ask your dealer to move and reinstall the air conditioner or the remote controller.
   Incomplete installation may result in a water leakage, electric shock, and fire.
- Never let the indoor unit or the remote controller get wet. It may cause an electric shock or a fire.





- Never use flammable spray such as hair spray, lacquer or paint near the unit. It may cause a fire.
- Do not allow children to play on or around the unit as they could be injured.
- Never replace a fuse with that of wrong ampere ratings or other wires when a fuse blows out. Use of wire or copper wire may cause the unit to break down or cause a fire.
- Never inspect or service the unit by yourself. Ask a qualified service person to perform this work.
   Cut off all electric waves before maintenance.
- Out off all electric waves before maintenance.
   Do not wash the air conditioner or the remote controller with excessive water.
- Electric shock or fire may result. • Do not touch the switch with wet fingers.
- Touching a switch with wet fingers can cause electric shock.
   Never touch the internal parts of the controller. Do not remove the front panel because some parts inside are dangerous to touch. In addition, some parts may be damaged by touching. For checking and adjusting internal parts, contact your dealer.
- Check the unit stand for damage on a continuous basis, especially if it had been in use for a long time. If left in a damaged condition the unit may fall and cause injury.
- Placing a flower vase or other containers with water or other liquids on the unit could result in a shock hazard or fire if a spill occurs.

## - CAUTION -

 Avoid placing the controller in a spot splashed with water.

Water coming inside the machine may cause an electric leak or may damage the internal electronic parts.

- Do not operate the air conditioner when using a room fumigation - type insecticide.
   Failure to observe could cause the chemicals to become deposited in the unit, which could endanger the health of those who are hypersensitive to chemicals.
- Do not turn off the power immediately after stopping operation.
- Always wait at least five minutes before turning off the power. Otherwise, water leakage and trouble may occur.
- The appliance is not intended for use by young children or infirm persons without supervision.
- The remote controller should be installed in such a way that children cannot play with it.

## 

- Never press the button of the remote controller with a hard, pointed object.
  - The remote controller may be damaged.
- Never pull or twist the electric wire of the remote controller.
- It may cause the unit to malfunction.
- Do not place the controller exposed to direct sunlight. The LCD display may get discolored, failing to display the data.
- Do not wipe the controller operation panel with benzine, thinner, chemical dustcloth, etc.
   The panel may get discolored or the coating peeled off. If it is heavily dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the panel clean. And wipe it with another dry cloth.
- Dismantling of the unit, treatment of the refrigerant, oil and eventual other parts, should be done in accordance with the relevant local and national regulations.

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1	UNIFIED OPERATION BUTTON		" 『上 " DISPLAY (COOLING/HEATING			
•	Press to operate all indoor units.	10	SELECTION PRIVILÈGE NOT SHOWN)			
2	UNIFIED STOP BUTTON	13	For zones or individual units (groups) for which			
2	Press to stop all indoor units.		this is displayed, cooling and heating cannot be			
	OPERATION LAMP (RED)					
3	Lit white any of the indoor units under control is in operation.		" HOST ? " DISPLAY (UNDER HOST COMPUTER INTEGRATED CON-			
4	" CIRCUIT " DISPLAY (REFRIGERANT SYSTEM DISPLAY)	14	While this display is lit up, no settings can be made. It lights up when the upper central			
	This indication in the square is lit while the refrigerant system is being displayed.		conditioning network.			
5	" ZONE " DISPLAY (ZONE SETTING)	15	" క్రార్ రో " DISPLAY (PRESET TEMPERATURE)			
	The lamp is lit while setting zones.		Displays the preset temperature.			
6	" MONITOR " DISPLAY (OPERATION MONITOR)	16	" 🖉			
	The lamp is lit while operation is being monitored.		This diaplays (flashes) the content of errors			
	" ALL " " ZONE " " INDIVIDUALLY " DISPLAY		when an error failure has occurred.			
7	The status displays indicates either batch functions or which zone or individual unit		content.			
	(or group) are being used.		(NO FUNCTION DISPLAY)			
0	OPERATION MONITOR	17				
)	Each square displays the state corresponding to each group.		even if the button is pressed, "NOT AVAILABLE" is may be displayed for a few seconds.			
9	" (∄" "ۥ≹" "∢" "∢" " ⊛" " " DISPLAY (OPERATION MODE)		"🐝 <sup>"</sup> " DISPLAY			
	Displays operating state.	18	(FAN DIRECTION SWING DISPLAY)			
			This displays whether the fan direction is fixed or set to swing.			
10	This is displayed when a Ventiair total enthalpy heat exchanger unit or other such unit is connected.	19	" €``, " <sup>2</sup> ", " FRESH UP " DISPLAY (VENTILATION STRENGTH/SET FAN STRENGTH			
	" 💩 TEST " DISPLAY (INSPECTION/TEST)		DISPLAY)			
11	Pressing the maintenance/test run button		This displays the set fan strength.			
	(for service) displays this. This button should not normally be used.	20	" <sup>⊕</sup> <sub>No.</sub> " DISPLAY (TIME NO.)			
	" 🛩 ∕ 👘 " DISPLAY (TIME TO CLEAN)		Displays the operation timer No. when used in conjunction with the schedule timer.			
12	It lights up when any individual unit (group) has reached the time for the filter or element to be cleaned					

		22	SET BUTTON				
		55	Sets control mode and time No.				
	PLAY)	24	FAN STRENGTH ADJUSTMENT BUTTON				
21	I he method of operation (remote controller prohibited, central operation priority after-press operation priority, etc.) is displayed by the	34	Pressing this button scrolls through "weak", "strong", and "fast".				
	corresponding code. This displays the numbers of any indoor units		ZONE SETTING BUTTON				
	which have stopped due to an error.	35	Zone registration mode can be turned on and of by pressing the start and stop buttons simulta- neously for at least four seconds.				
22	CLEAN AIR CLEANER ELEMENT/ TIME TO CLEAN AIR FILTER)		INSPECTION/TEST RUN BUTTON (FOR SERVICE)				
	Displayed to notify the user it is time to clean the air filter or air cleaner element of the group displayed.	36	Pressing this button scrolls through "inspection" "test run", and "system display". This button is not normally used.				
	VENTILATION MODE BUTTON		VENTILATION STRENGTH				
23	This is pressed to switch the ventilation mode of the total enthalpy heat exchanger.	37	ADJUSTMENT BUTTON				
	ALL/INDIVIDUAL BUTTON		strength ("fresh up") of the total enthalpy heat				
24	Pressing this button scrolls through the "all screen", "zone screen", and "individual screen".	(Notes)					
	ARROW KEY BUTTON	1.	Please note that all the displays in the figure				
25	This button is pressed when calling an individual indoor unit or a zone.	cover is open. 2. If the unit is used in conjunction with other optional					
	ON/OFF BUTTON	central controllers, the OPERATION LAMP of the					
26	Starts and stops ALL, ZONE, and INDIVIDUAL units.		up and go out a few minutes behind schedule. This shows that the signal is being exchanged.				
	TEMPERATURE ADJUSTMENT BUTTON (ZONE NUMBER BUTTON)		and does not indicate any failure.				
27	This button is pressed when setting the temperature. Select the zone number if any zones have been registered.	OP					
	FAN DIRECTION ADJUSTMENT	= 1 Z	zone screen (Fig. 3)				
28	BUTTON	This controller can perform operations in the individual					
	This button is pressed when setting the fan direction to "fixed" or "swing".	scre • In	en, all screen, or zone screen. ndividual screen The individual screen is used when performing group opera-				
29	OPERATION MODE SELECTOR BUTTON	• A	tions. Il screen The all screen is used when pe				
	This sets the operation mode. The dry setting cannot be done.	• Z	forming operations for all units a once. One screen The zone screen is used when				
	TIME NO. BUTTON		performing zone operations.				
30	Selects time No. (Use in conjunction with the schedule timer only).	1.	ি Select the screen by pressing the "ALL/INDIVIDUAL" button.				
31	CONTROL MODE BUTTON		$\widehat{\mbox{(2)}}$ Every time the "ALL/INDIVIDUAL" button is				
-	Selects control mode.		pressed, the selection scrolls through INDIVIDUAL $\rightarrow$ ALL $\rightarrow$ ZONE				
	FILTER SIGN RESET BUTTON	$\rightarrow$ ALL $\rightarrow$ ZONE. If nothing is done in the all or zone screens for o minute, it automatically goes to the individual					

If the zone number in the zone screen is displayed as "---," this indicates that no units are registered in a zone.
 Please perform zone registration before proceeding in the zone screen. (See page 9)

#### Batch operation and stop method (Fig. 4)

This is for operating or stopping all connected units at once.

# A. What to do when operating or stopping all connected units at once.

#### 1. Press either () " ALL |" or

- 27 "ALL O".
  - Operation can be performed from the individual screen, the all screen, or the zone screen.
  - The "TEMPERATURE ADJUSTMENT" and "OPERATION MODE SELECTOR" buttons cannot be used.

To set the temperature and operation mode, use B. batch operation.

#### **B. Batch Operation**

# 1. <sup>(3)</sup> Press the "ALL/INDIVIDUAL button" to enter the all screen.

The " 📃 " display lights up on all registered units.

#### **2.** <sup>(4)</sup> Press the "SELECT" button.

The " I display lights up on all connected units.

#### <sup>(5)</sup> Press the "RESET" button.

The " **I** " display goes off on all connected units. Operation and stop in the batch screen are done the same as with the batch operation and batch stop buttons.

3. <sup>(C)</sup> Press the "TEMPERATURE ADJUST-MENT" button.

The temperature rises  $1^\circ\mbox{ every time}$ 

the (  $\blacktriangle$  ) button is pressed.

The temperature drops 1° every time

the ( $\mathbf{\nabla}$ ) button is pressed.

Set to "--" when you do not wish to use batch setting for the temperature setting. Setting to 1° above or below the temperature setting range displays "--".

#### 4. <sup>(C)</sup> Call up the desired mode by pressing the "OPERATION MODE SELECTOR" button.

Set to "--" when you do not wish to use batch setting for the operation setting.

# Group operation and stop method (Fig. 5)

This is for operating or stopping connected units in groups.

#### [Group operation]

1. Press the Transformation "ALL/INDIVIDUAL button"

to enter the 2 individual screen. The unit will enter the individual screen automatically if nothing is done for one minute.

2. I Using the arrow keys, I move the

" To select the units to operate or stop. Keeping the button pressed down will move it rapidly.

The " The " The " in this screen has selected unit 1-04.

3. <sup>(5)</sup> Press the "SELECT" button.

The " **I** " display lights up in the group.

<sup>(6)</sup> Press the "RESET" button.

The " I display goes off in the group.

 In the "TEMPERATURE ADJUST-MENT" button.

The temperature rises 1° every time the

( ) button is pressed.

The temperature drops 1° every time the

(▼) button is pressed.

Temperature adjustment cannot be done if the selected group's air conditioners are in fan mode.

5. <sup>(a)</sup> Call up the desired mode by pressing the "OPERATION MODE SELECTOR" button.

#### Registering zones (Fig. 6)

It is possible to set multiple groups as one zone and control each zone separately.

No zones are registered when the unit is shipped from the factory.

Zone registration can be done in the individual screen, all screen, or zone screen.

#### [Registration]

#### 1. TPressing the "ALL/INDIVIDUAL" button for four seconds. Displays ZONE SET.

Zone Number 1 will be displayed, and if there are any groups already registered in the displayed

zone, a " 🔳 " will light up on the operation monitor.

- 2. <sup>(3)</sup> Select the Zone Number to be registered using the "ZONE NUMBER" button. Keeping the button pressed down will move it rapidly.

Keeping the button pressed down will move it rapidly.

4. <sup>(C)</sup> Press the "SELECT" button to register that group to the zone.

The " **I** " display lights up on all the selected units.

#### " 🔳 " goes off.

Repeat steps 3 and 4 until all the units you wish to register to the zone have been added.

<b>[</b> 2	ZONE								Z	201	١E				1	
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
1-																
2-																
3-																
4-																

In this example, a screen is shown with units 1-00, 1-02, 1-03, and 2-00 registered to Zone Number 1.

- 5. Repeat steps 2 to 4 to register to the next zone.

The display returns to the normal screen if nothing is done for one minute when in zone registration mode.

(NOTE)

• It is impossible to register one group to several different zones.

If this is done, the last zone registered to will be valid.

#### [Batch deletion of zone registration]

1. <sup>⊕</sup>Pressing the "ALL ○" for at least four seconds while <sup>⊕</sup> pressing the "FIL-TER SIGN RESET" button when

(2) "ZONE SET" is displayed will delete all zone registrations.

The zone registrations for all units will be lost.

# Zone operation and stop method (Fig. 7)

This is for operating or stopping connected units in zones.

#### [Zone operation]

- 1. IP Press the "ALL/INDIVIDUAL button" to enter the zone screen.
- 2. In Using the arrow keys, select the zone number to operate or stop.

Pressing - and + reduces the zone number

while  $\rightarrow$  and  $\uparrow$  raise the number.

Keeping the button pressed down will move it rapidly.

 If the zone number is displayed as "---," this indicates that no units are registered in a zone. Please perform zone registration before using a zone. (See page 9)

**3.** <sup>(J)</sup> Press the "SELECT" button.

The " I display lights up in the group.

<sup>(5)</sup> Press the "RESET" button.

The " I display goes off in the group.

4. IP Press the "TEMPERATURE ADJUST-MENT" button.

The temperature rises 1° every time the ( $\blacktriangle$ ) button is pressed.

The temperature drops 1° every time the ( $\mathbf{\nabla}$ ) button is pressed.

Set to " -- " when you do not wish to use zone setting for the temperature setting.

Setting to 1° above or below the temperature setting range displays " -- ".

#### 5. CP Call up the desired mode by pressing the "OPERATION MODE SELECTOR" button.

Set to " -- " when you do not wish to use zone setting for the operation mode.

#### Changing the fan direction and fan strength (Fig. 8)

This changes the fan direction and strength settings in the air conditioner.

Changing the fan direction and strength is done in the individual screen.

#### [Registration]

1. (IP Press the "ALL/INDIVIDUAL button"

to enter the IP individual screen. The unit will enter the individual screen automatically if nothing is done for one minute.

- 2. In Using the arrow keys, I move the
  - " " to select the units to fan direction adjustment or fan strength adjustment. Keeping the button pressed down will move it rapidly.
- GPPress the "FAN DIRECTION ADJUST-MENT" button.

This sets "fixed" or "swing" for the fan direction.

#### <sup>(C)</sup> Press the "FAN STRENGTH ADJUST-MENT" button.

Pressing this button scrolls through " $\overset{\circ}{L}$ ", " $\overset{\circ}{H}$ ", and " $\overset{\circ}{L}$ ".

Depending on the indoor unit, only " ${}^{*}_{L}$ " and " ${}^{*}_{H}$ "

may be available.

The functions included in the indoor units may vary. Pressing a button for a function which is not available will cause "NOT AVAILABLE" to be displayed.

#### Changing the ventilation mode and ventilation strength (Fig. 9)

This changes the ventilation mode and strength settings in the total enthalpy heat exchanger. Changing the ventilation mode and strength is done in the individual screen.

#### [Registration]

1. IP Press the "ALL/INDIVIDUAL button" to

enter the (i) individual screen. The unit will enter the individual screen automatically if nothing is done for one minute.

2. In Using the arrow keys, I move the

# 3. (FPress the "VENTILATION MODE" button.

It will scroll through " $(\underline{A} \boxtimes )$ "  $\rightarrow$  " $\mathbb{K}$ "  $\rightarrow$  "  $\mathbb{K}$ "  $\rightarrow$  "

**CP** Press the "VENTILATION STRENGTH ADJUSTMENT" button.

It will scroll through " $\stackrel{\bullet}{L}$ "  $\rightarrow$  " $\stackrel{\bullet}{H}$ "  $\rightarrow$  " $\stackrel{\bullet}{L}$   $\stackrel{\bullet}{L}$   $\stackrel{\bullet}{}$   $\stackrel{\bullet}{}$ 

 $\begin{array}{c} \overset{\bullet}{\mathsf{H}} & \overset{\bullet}{\mathsf{H}} & \overset{\bullet}{\mathsf{H}} & \overset{\bullet}{\mathsf{H}} & \overset{\bullet}{\mathsf{L}} & \overset{\bullet}{\mathsf{L}} \\ \text{FRESH UP} \\ \end{array}$ 

The fresh up function may not be available depending on the connected unit model. The functions included in the indoor units may vary. Pressing a button for a function which is not available will cause "NOT AVAILABLE" to be displayed.

#### Ventilation Mode and Amount

If these are changed using the remote controller depending on the unit model, they cannot be displayed on the central remote controller. To monitor the ventilation mode and amount, check the values on the remote controller.

#### ■ Timer Number Setting (Fig. 10)

(Only when used with the schedule timer) Using this together with the schedule timer makes it possible to set on and off times four times a day.

#### [Registration]

1. IP Pressing the "TIMER NO." button causes the number set for timer number 1 to blink.

If no timer setting has been made "-" will be displayed. Select the desired timer number by pressing the TIMER NO." button.



2. <sup>(2)</sup> Once the desired timer number is displayed, press the "SET" button.

Press the  $(27)^{-1}$  "SET" button within 10 seconds after the timer number is displayed. The display will return to how it was after 10 seconds.



The display for timer number 1

will stop blinking and then timer number 2 will start blinking.

<sup>&</sup>quot; " to select the units to ventilation mode or ventilation strength adjustment. Keeping the button pressed down will move it rapidly.

# 3. The Select the desired timer number by pressing the "TIMER NO." button. Once the desired timer number is \_\_\_\_\_

displayed, (2) press the "SET" button. The display for timer number 2 will stop blinking.



The " $\stackrel{\bigcirc}{No.}$ " display will disappear after 3 seconds.

Select " – " in the timer number when you do not wish to set a timer number.

It is possible to set only one timer number. (The times for turning the unit(s) on and off twice a day can be set with a single timer number.)

#### Timer Number Setting

Group control: select the unit in the individual screen and set the timer number.

- Batch control: set the timer numbers for all connected units.
- Zone control: set the timer numbers for all zone-registered units. Call up the zones which you wish to set in the zone screen and set the timer numbers.
- Since the timer number will be set to afterpress priority, the timer number in the last screen set will be valid for the connected units.

#### Example 1

Setting timer number 1 for unit 1-00 to "1" and timer number 2 to "2" in the individual screen and then setting timer number 1 to "3" and timer number 2 to "4" in the batch screen causes the timer numbers for all units to be set, so timer number 1 for unit 1-00 will be "3" and timer number 2 will be "4".

#### Example 2

To prevent leaving units on, timer number 1 is set to "5" in the batch screen.

Setting timer number 1 in zone number 1 to " – " in the zone screen after that will change the timer number for zone number 1, so the setting to prevent leaving the units on will be lost for zone number 1 only.

If a timer number is set incorrectly by accident, redo the setting in the desired screen.

# • What happens when the timer number on time and off time are set to the same time

When the on time and off time are set to the same time for the same timer number, operation does not change.

When the on time and off time are set to the same time for different timer numbers, the off time is given priority.

When using timer operation, make sure the times do not overlap when setting the program of the schedule timer.

#### ■ Setting the Operation Code (Fig. 11)

#### [Registration]

1. The Pressing the "CONTROL MODE" button causes the currently set operation code to blink. Call up the desired code number by pressing the

 I Donce the code number is displayed, press the "SET" button.
 The display will stop blinking.
 The operation code display will disappear after 3 seconds.

#### [The Operation Code Setting]

- Group control: select the unit in the individual screen and set the operation code.
- Batch control: set the operation code for all connected units.
- Zone control: set the operation code for all zone-registered units. Call up the zones which you wish to set in the zone screen and set the operation code.

Since the operation code will be set for after-press priority, setting the operation code in the zone and individual screens after setting the operation code in the batch screen, will cause the operation codes set afterwards to be valid.

## **OPERATION MODE**

The following five operation control modes can be selected along with the temperature setting and operation mode by remote controller, for a total of twenty different modes. These twenty modes are set and displayed with control modes of 0 to 19. (For further details, see **EXAMPLE OF OPERATION SCHEDULE** on the next page.)

ON/OFF control impossible by remote controller	Use this mode when operating and stopping from the central remote controller only. (ON/OFF control by the remote controller is disabled.)
Only OFF control possible by remote controller	Use this mode when executing the operation only by the central remote controller, and executing only the stop by remote controller.
Centralized	Use this mode when executing the operation only by the central remote controller, and executing start/stop freely by remote controller during the preset hours.
Individual	Use this mode when executing start/stop both by central remote controller and remote controller.
Timer operation possible by remote controller	Use this mode when executing start/stop by remote con- troller during the preset hours, and not starting operation by the central remote controller at the programmed time of system start.

#### [HOW TO SELECT THE CONTROL MODE]

• Select whether to accept or to reject the operation from the remote controller regarding the operation, stop, temperature setting and operation mode setting, respectively, and determine the particular control mode from the rightmost column of the table below.

Example



		Control by remote controller							
	Operat	ion							
Operation mode	Unified operation, individ- ual operation by central remote controller, or opera- tion controlled by timer	Unified stop, individual stop by central remote controller, or timer stop	Stop	Tempera- ture control	Operation mode setting	Control mode			
				Dejection	Acceptance	0			
ON/OFF control			Pejection	Rejection	Rejection	10			
impossible by remote controller			(Example)	Acceptance	Acceptance (Example)	1 (Example			
	Rejection			(Example)	Rejection	11			
	(Example)			Dejection	Acceptance	2			
Only OFF control		Rejection		Rejection	Rejection	12			
remote controller		(Example)		Accontance	Acceptance	3			
				Acceptance	Rejection	13			
				Rejection	Acceptance	4			
Controlizod					Rejection	14			
Centralized				Accentance	Acceptance	5			
	Assentance		Assantance	Acceptance	Rejection	15			
	Acceptance		Acceptance	Dejection	Acceptance	6			
المطنع بتطريبها		Assesses		Rejection	Rejection	16			
Individual		Acceptance		Accentorios	Acceptance	7			
				Acceptance	Rejection	17			
				Dejection	Acceptance	8			
Timer operation	Acceptance	Rejection		Rejection	Rejection	18			
remote controller	OV position only)	(During timer at OFF position)		Accentorio	Acceptance	9			
	,,,,,			Acceptance	Rejection	19			

Note) Do not select the timer operation possible without the remote controller. In this case, timer operation is disabled.



When the operation, stop, temperature setting and operation mode setting by remote controller are rejected, "HOST A," is displayed on the remote controller.

#### **EXAMPLE OF OPERATION SCHEDULE**

Operation schedule is possible only in conjunction with the schedule timer (optional accessory). Liquid crystal display of schedule timer

ON/OFF control impossible by remote controller





#### ■ Setting operation mode (Fig. 12)

#### [Registration]

- 1. TPress the OPERATION MODE SELEC-TOR BUTTON. Each time you press this button, the display rotates as shown on the below list.

	A: Zones and groups with no "[玉去]" display.				
Display	Setting	Contents of setting			
	×				
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	0	Can be set in individual zones or groups			
	0 * 1	Can be set in individual zones or groups			
*	0	Can be set in individual zones or groups			
	0	Can be set in individual zones or groups			
r∰≣or≫2001 ⊈≣≣or≫22	0 * 1	Can be set in individual zones or groups * 3			
	0 * 1	Can be set in individual zones or groups			
	0	Select this display if you don't wish to set by zone.			

	B: Zones and groups with a "" display.				
Display	Setting	Contents of setting			
	0	To be set by zone * 2			
	0	Can be set in individual zones or groups			
	×				
*	×	The displays are shown by group * 4			
*	×	The displays are shown by group * 4			
entan ar ≫ Cor≫ C	0 * 1	Can be set in individual zones or groups * 3			
	0 * 1	Can be set in individual zones or groups			
	0	Select this display if you don't wish to set by zone.			

- \*1: Setting may not be acceptable depending on the type of indoor unit with which this unit is connected.
- \*2: In zone control, the units run in temperature adjustment mode (heating or cooling) for the outdoor system for the groups registered to those zones. Heating or cooling selection is not available.
- \*3: 📇 or 💥 or 🔪 or 🔪 Changing the ventilation mode cannot be done in the zone screen. Changing the ventilation mode should be done in the individual screen.
- \*4: In group control, the units run in temperature adjustment mode (heating or cooling) for the group outdoor system. Heating or cooling selection is not available.
- The Zone consists of the following two cases.

#### A. Zone without display"

The group with master remote controller setting exists in this zone.

Setting the master remote controller enables cool/ heat selection.

Operations other than cool/heat operations can also be set for some operations. For further details, see the list on the left.

#### B. Zone with display"

No group with master remote controller setting exists in this zone.

The cool/heat selection is not available because the master remote controller has not been set. Some operations other than cool/heat operations can be set. For further details, see the list in the left.

See page 20 if the display" [] X is flashing.

- Fan operation can be performed for each zone using the central remote controller even if there is no cooling/heating selection right during cooling or heating. Also, if a Ventiair is connected in the zone, ventilation and ventilation cleaning operation is possible. See the included operating manuals for details.
- When the indoor unit is in heat operation, change the setting to FAN operation through the central remote controller; then, you can switch the fan speed to the extremely low fan speed. Warm air may blow if any other indoor unit belonging to the same system is in heat operation.
- The indoor fan stops during defrost/hot start.
- DRY cannot be set from the central remote controller.

#### Group monitoring (Fig. 13)

Utilize the group monitor function in each of the following cases:

- 1. Check the malfunction code.
- (See the next page.)
- 2. Check the group that requires cleaning of the air filter and air cleaner element. (See page 21.)
- 3. Change the setting of the master remote controller. (See page 20.)
- Check the group(s) sharing the same outdoor unit. Or, check the particular group(s) with the master remote controller setting. (See page 20.)
- 5. Check the conditions of other individual groups.

#### When in zone screen

The zone screen will revert to the individual screen automatically if nothing is done in it for one minute.

#### [Registration]

- 1. TPress the "ALL/INDIVIDUAL" button to switch to the T "INDIVIDUAL" screen.
- 2. In Using the arrow key, I move the

" " to select the unit to be monitored. Keeping the button pressed down will move it rapidly.

The " $\square$ " lights up and the status of that unit is displayed in the LCD. The cursor in the screen Fig. 13 has selected unit 2-06.

#### Error diagnosing function (Fig. 14)

This central remote controller is provided with a diagnosing function, for when an indoor unit stops due to malfunction. In case of actuation of a safety device, disconnection in transmission wiring for control or failure of some parts, the operation lamp, inspection display and unit No. start to flash; then, the malfunction code is displayed. Check the contents of the display, and contact your DAIKIN dealer because the above signs can give you the idea on the trouble area.



The display " — " flashes under the group No. where the indoor unit that has stopped due to malfunction.

#### [Registration]

1. IP Press the ARROW KEY BUTTON to call up the group that has stopped due to malfunction.

(2) The unit No. (3) the malfunction code is flashing because of an error failure.



Operation lamp	Maintenance display	Unit No.	Malfunction code	Error content
¢	•	⋪	64	Indoor air thermistor error
¢	•	⋪	65	Outdoor air thermistor error
¢	•	¢	68	HVU error (Ventiair dust-collecting unit)
¢	•	¢	6A	Dumper system error
÷Þ	÷\$	\$	6A	Dumper system error + Thermistor error
¢	•	\$	6F	Simple remote controller error
¢.	•	\$	6H	Door switch (Ventiair dust-collecting unit), relay harness fault (Ventiair dust-collecting/humidifier unit)
÷ <b>þ</b>	-\$	\$	94	Ventiair internal transmission error (between total enthalpy – fan unit)
⇒	¢	\$	A0	Indoor unit · external safety device error
÷Þ	\$	⇒	A1	Indoor unit · BEV unit (Sky-Air connection unit) PC board assembly fault
\. ↓ ↓	•	⇒	A1	Indoor unit · PC board assembly fault
÷	\$	⋪	A3	Indoor unit · Drain level error (33H)
÷	÷\$	¢	A6	Indoor unit · Fan motor (51F) lock, overload
¢	•	¢	A7	Indoor unit · Fan direction adjustment motor (MA) error
÷Þ	÷\$	¢	A9	Indoor unit · BEV unit, electric expansion valve motor (20E) error
¢	•	\$	AF	Indoor unit · Malfunctioning drain
¢	•	⇒	АН	Indoor unit · Dust-collector error
⇒	⇒	⇒	AJ	Indoor unit · Insufficient capacity setting, address setting fault

<b>.</b>	¢-	-Þ	C4	Indoor unit · Liquid piping thermistor (Th2) Error (faulty connec- tion, cut wire, short circuit, fault)
⇒	\$	\$	C5	Indoor unit · BEV unit, gas piping thermistor (Th3) Error (faulty connection, cut wire, short circuit, fault)
	\$	- <b>Þ</b>	C9	Indoor unit · Intake air thermistor (Th1) Error (faulty connection, cut wire, short circuit, fault)
⇒	÷>	->	CA	Indoor unit · Outlet air thermistor (Th4) Error (faulty connection, cut wire, short circuit, fault)
¢	•	¢	CJ	Indoor unit · remote controller sensor error
⇒	- <b>&gt;</b>	\$	E0	Outdoor unit · Safety device operation
⇒	⇒	\$	E1	Outdoor unit · PC board assembly fault
<b>‡</b>	•	÷\$	E1	Outdoor unit · PC board assembly fault
÷ <b>þ</b>	- <b>&gt;</b>	÷\$	E3	Outdoor unit · High-pressure switch fault
.⇔	÷Þ	4	E4	Outdoor unit · Low-pressure switch fault
÷Þ	÷Þ	4	E9	Outdoor unit · Electric expansion valve motor (20E) error
¢-	•	-Þ	EC	Heat source unit $\cdot$ Intake water temperature inter-lock operation (fan operation)
⇒	⇒	\$	EF	Outdoor unit · Ice thermal storage unit error
÷\$	⇒	\$	F3	Outdoor unit · Discharge piping temperature error
¢.	•	\$	H3	Outdoor unit $\cdot$ High-pressure switch operation
-⊅	÷Þ	4	H4	Outdoor unit · Low-pressure switch operation
⇒	¢-	- <b>Þ</b>	H9	Outdoor unit · Outdoor air thermistor (Th1) Error (faulty connection, cut wire, short circuit, fault)
<b>\</b>	•	-Þ	H9	Outdoor unit $\cdot$ Outdoor air thermistor (Th1) Error (faulty connection, cut wire, short circuit, fault)
☆	•	\$	НС	Outdoor unit · Water temperature sensor system error
\$	•	-\$	HF	Ice thermal storage unit error, ice thermal storage controller error error in outdoor unit during ice thermal storage operation
÷Þ	-> <b>þ</b>	÷\$	HJ	Outdoor unit · water system fault
.⊅	-> <b>þ</b>	÷\$	J1	Outdoor unit · pressure sensor error
<del>.</del>	¢-	-Þ	J3	Outdoor unit · Discharge piping thermistor (Th3) Error (faulty connection, cut wire, short circuit, fault)
<b>\</b>	•	-Þ	J3	Outdoor unit · Discharge piping thermistor (Th3) Error (faulty connection, cut wire, short circuit, fault)
⇒	<b>\$</b>	\$	J5	Outdoor unit · Intake piping thermistor (Th4) Error (faulty connection, cut wire, short circuit, fault)
-≯	-¢-	<b>.</b>	J6	Outdoor unit · Heat exchange thermistor (Th2) error
¢	•	\$	J6	Outdoor unit $\cdot$ Heat exchange thermistor (Th2) error Error (faulty connection, cut wire, short circuit, fault)
÷	\$	⇒	J7	Outdoor unit · Header thermistor (Th6) error
÷\$	⇒	\$	JA	Outdoor unit · Discharge piping pressure sensor error
- <b>Þ</b>	-\$ <b>•</b>	¢-	JC	Outdoor unit · Intake piping pressure sensor error
- <b>Þ</b>	-¢-	÷\$	JF	Outdoor unit · Oil temperature sensor (Th5) system error
÷¢-	•	÷\$	JH	Outdoor unit · Oil temperature sensor (Th5) system error
-≯	⇒	4	LO	Outdoor unit · Inverter system fault
÷\$	⇒	4	L4	Outdoor unit · Inverter cooler fault
- <b>Þ</b>	*	÷\$	L5	Outdoor unit · Ground circuit for compressor motor, short circuit, or power unit short circuit
		•		-

⇒	⇒	-≯	L6	Outdoor unit $\cdot$ Ground circuit for compressor motor, short circuit
\$	÷Þ	¢-	L8	Outdoor unit · Compressor overload, compressor motor wire disconnection
÷\$	⇒	⇒	L9	Outdoor unit · Compressor lock
⇒	÷\$	¢-	LA	Outdoor unit · Power unit error
÷ <b>þ</b>	¢-	¢-	LC	Outdoor unit · Transmission error between inverter and outdoor control unit
⇔ or ♦	⇒	-≯	M1	Central controller: PC board fault
⇔ or ●	⇒	\$	M8	Transmission error between central controllers
⇔ or ♦	⇒	⇒	MA	Central controller: Incorrect combination
⇔ or ♦	. <b>Þ</b>	⇒	MC	Central controller: Address setting fault
÷Þ	•	⇒	P0	Insufficient gas (thermal storage)
÷ <b>þ</b>	. <b>Þ</b>	⇒	P1	Outdoor unit · Power voltage imbalance, phase loss
÷ <b>þ</b>	⇒	⇒	P4	Outdoor unit · Power unit temperature sensor error
\$	•	¢-	UO	Pressure drop due to insufficient refrigerant, electric expansion valve fault, etc.
⇒	⇒	⇒	U1	Reversed or lost phase
÷ <b>þ</b>	⇒	⇒	U2	Power voltage error, momentary electrical stoppage
-⊅	¢-	4:	U4	Transmission error between indoor unit/BEV unit and outdoor/BS unit, Transmission error between outdoor unit and BS unit
-≯	*	*	U5	Transmission error between remote controller and indoor control unit
٠	☆	•	U5	Remote controller board fault or remote controller setting fault
- <b>Þ</b>	÷\$	÷\$	U6	Transmission error between indoor units
⇒	.⇔	4	U7	Transmission error between outdoor units Transmission error between outdoor unit and ice thermal storage unit
☆	•	⇒	U7	Transmission error between outdoor units (cooling/beating batch, low-noise operation)
Þ		•	U8	Transmission error between master remote controller and slave remote controller (slave remote controller error) Incorrect combination of indoor unit and remote controller within a single system (model)
Þ	->	-\$	U9	Transmission error between indoor unit/BEV unit and outdoor unit within a single system Transmission error between BS unit and indoor unit/BEV unit and outdoor unit within a single system
⇒	->Þ	-> <b>•</b>	UA	Incorrect combination of indoor, BS, and outdoor units within a single system (model, number of units, etc.) Incorrect combination of indoor unit and remote controller (remote controller in question) BS unit connection position fault
÷.	•	÷.	UC	Central control group numbers overlap
÷Þ	× <b>þ</b>	- <b>&gt;</b>	UE	Transmission error between indoor unit and central controller
৵	->	-\$	UF	Unset system, incorrect settings between BEV unit and indoor unit
- <b>'</b> Þ	*)		UH	System fault

- error codes (in outline font) do not display "maintenance" and the system will run, but please check the content of the display and contact your dealer.

#### Setting master remote controller (Fig. 15)

You must set the master remote controller of the operation mode for one of the indoor units, if two or more such indoor units with the remote controller are connected with the outdoor unit where the operation modes such as cool/heat operation and FAN operation can be set by remote controller and central remote controller.

#### 1. Preparations

When you want to fix settings

- Check the particular group with the master remote controller setting for the refrigerant system you wish to reset. (See the below.)
- Call up the group without the display
  - " **下** ," (See page 16.)

CT Hold the OPERATION MODE SELECTOR BUTTON down for about four seconds while the above group is being called up.

The display " [ ] , " flashes on the liquid crystal display of the remote controller for all the groups sharing the same outdoor unit or BS unit.

When you turn on the power switch for the first

time, the display" [], " flashes.



#### 2. Setting selection right

Pall up the desired group to set the master remote controller, and repress the OPERA-TION MODE SELECTOR BUTTON. The master remote controller is set for this group, and the

display " [ ] 났 " goes out. The display

" The second sec

#### When switching operation

In case of operation switch
 Call up the zone including the group with the setting of master remote controller.

(Zone without the display " [] ; ")

 $\bigcirc$  Press the OPERATION MODE SELECTOR BUTTON several times, and switch to the desired operation mode.

#### Each time you press it, the display is switched

## to " 🗞 " " 🗰 " " 🥘 " and " 💶 " in sequence.

#### NOTE

 However, the displays " (A) " " (B) " and "VENTI-LATION MODE" may apper in some zones, depending on the type on indoor unit with which they are connected. (VENTILATION MODE)

📇 or 💥 or 😼

#### [System Display]

- 1. Test run mode is necessary to display the system display.
- 2. In order to turn on test run mode, select the appropriate air conditioner on the individual screen with the cursor and then set its operation mode to either cooling or heating. (It makes no difference if the air conditioner is running or not running while this operator is being performed.)
- 3. Press the "inspection/test run" button twice to put it into test run mode.
- 4. Pressing the "inspection/test run" button for four or more seconds in test run mode will display IP the "REF CIRCUIT."

REF CIRCU	C IT	٦ را	ጋ										-	0	3
00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
1-					Ĭ										
2-															
3-															
4-															

Call the unit whose system you wish to look up using the arrow keys.

The " **m**" on all groups in the same system as the displayed group will light up.

Of those, the " I display in all groups which have cooling/heating selection privilege will blink.



In this example, individual units 1-00, 1-03, 1-05, 1-06, 1-07, 2-02, and 2-03 are in the same system, and 1-05 has the cooling/heating selection privilege.

To look up other systems, call up all the units you wish to look up using the arrow keys.

Pressing the inspection/test run button one more time gets rid of the system display and ends it.

The unit will enter the individual screen automatically if nothing is done for one minute in the system display screen.

This function may not be available for all connected outdoor units, in which case "REF CIRCUIT" will blink. It will also not be correctly displayed if DIII-NET extension ADP is used.

#### ■ Display of time to clean (Fig. 16)

cleaner element of some group.

#### If a cleaning sign is displayed

A filter or element in some group is ready to be cleaned.

1. ⊕ Press the ARROW KEY BUTTON, and search the groups displaying " → " or

" \_\_\_\_ " (The group may be plural.)

# Clean or change the air filter or air cleaner element.

For further details, see the operation manual attached to each indoor unit. (Clean or change the air filter or air cleaner element of all the groups dis-

playing " 🖓 " or " 🖉 ".)

#### 2. ② Press the FILTER SIGN RESET BUT-TON, and the display " → " disappears. (Including all the groups where the air filter has been cleaned.)

#### NOTE

Be sure to check the display I " " has disappeared at this point. The appearance of the above display is a sign that the air filter or air cleaner element of some group still needs cleaning.

# INSTALLATION TABLE

When installing the equipment, mark the zone No. of each group and installation location in the below table.

#### Setting group No.

(Setting is not possible unless power is activated to both the central remote controller and indoor unit.)

#### Operated by remote controller

- 1. Activate power to both the central remote controller and indoor unit.
- While in the normal mode, hold down the "
   ">">"
   ">"
   ">"
   ton for a minimum of 4 seconds. The unified ON/ OFF controller will enter the FIELD SET MODE.
- 3. Select the MODE No. " [] " with the " ] " button.
- Use the " button to select the group No. for each group. (Group No. increases in the order of 1-00, 1-01 ... 1-15, 2-00, ... 8-15.)
- 5. Press " $\overset{\frown}{\frown}$ " to set the selected group No.
- 6. Press "" to return to the NORMAL MODE.

# GROUP NO.

#### Operated by simplified remote controller

- 1. Activate power to both the central remote controller and indoor unit.
- 2. Remove the upper part of the remote controller.
- 3. Press the BS6 BUTTON (field set) on the PC board. The controller will enter the FIELD SET MODE.
- 4. Select the MODE No. " 🖧 " with the BS2 BUT-TON and BS3 BUTTON (temperature setting).
- 5. Use the BS9 BUTTON (set A) and BS10 BUTTON (set B) to select the group No. for each group. (Group No. increases in the order of 1-00, 1-01 ... 1-15, 2-00, ... 8-15.)
- 6. Press BS7 BUTTON (set/cancel) to set the selected group No.
- 7. Press BS6 BUTTON (field set) to return to the NORMAL MODE.



Zone No.																
Group No.	-00	-01	-02	-03	-04	-05	-06	-07	-08	-09	-10	-11	-12	-13	-14	-15
Indoor unit Quantity of units Controlled by																
Location																
Zone No.																
Group No.	-00	-01	-02	-03	-04	-05	-06	-07	-08	-09	-10	-11	-12	-13	-14	-15
Indoor unit Quantity of units Controlled by																
Location																

Zone No.																
Group No.	-00	-01	-02	-03	-04	-05	-06	-07	-08	-09	-10	-11	-12	-13	-14	-15
Indoor unit Quantity of units Controlled by																
Location																
Zone No.																
Group No.	-00	-01	-02	-03	-04	-05	-06	-07	-08	-09	-10	-11	-12	-13	-14	-15
Indoor unit Quantity of units Controlled by																
Location																

## **OPTIONAL ACCESSORIES**



You can perform the normal operation, take off the malfunction contact point and unified start/stop by contact point, all by connecting this unit with the unification adaptor for computerized control. For further details, ask your DAIKIN dealer.

(a) Unification adaptor for computerized control (b) Central remote controller

# DOUBLE CENTRAL REMOTE CONTROLLERS



With two central remote controllers, centralized control (indoor units) is possible from different locations.

(a) Central remote controller (b) Group No. 1 – 00 (c) Group No. 1 – 15 (d) Group No. 2 – 00 (e) Group No. 4 – 15 (f) A maximum of 64 groups

Note)

• For control alignment and settings for double central remote controllers, contact your dealer.

# **SPECIFICATIONS**

## Specifications

Power supply	1 ~ 50/60Hz, 100V – 240V						
Power consumption	Max. 8W						
Forced ON/OFF input	Continuous "a" contact Contact current: approximately 10mA						
Size	180 (W) × 120 (H) × 64.5 (D)						
Weight	420g						

#### ■ Outline drawings



When using this unit an electric parts box of KJB311A is required. For installation, a steel electric parts box to be embedded is mandatory.




# 13.8 <DCS301C71> Unified ON/OFF Controller Installation Manual

lease read these "S stallation, make sur	AFETY CONSIDERATIONS" carefully before installing air conditioning equipment and be sure to install it correctly. After completing the e that the unit operates properly during the start-up operation.
lease instruct the cu	istomer on how to operate the unit and keep it maintained.
his air conditioner c	omes under the term "appliances not accessible to the general public".
leaning of warning,	caution and note symbols.
	Indication a potentially hazardous situation which, if not avoided, could result in death or senous injury. Indication a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be sued to alert against unsafe practices.
<u>∧</u> NOTE	Indication situation that may result in equipment or property-damage-only accidents.
sk your dealer or o	ualified personnel to carry out installation work. Do not try to install the machine by yourself.
erform installation	work in accordance with this installation manual.
e sure to use only	the specified accessories and parts for installation work.
allure to use the spe	cutied parts may result in water leakage, electric shocks, tire or the unit failing.
nproper installation	work may result in the equipment falling and causing accidents.
cake sure that a se scal laws and regul	parate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to ations and this installation manual.
lake sure that all w	iring is secured, the specified wires and used, and no external forces act on the terminal connections or wires.
nproper connections	s or installation may result in fire.
an be securely fast	tened. of the electric parts box lid may result in electric shocks, fire or the terminals overheating.
Before touching ele	ctrical parts, turn off the unit.
round the air cond	litioner. Do not connect the ground wire to gas or water pipes, lightning rod or a telephone ground wire. may result in electric shocks.
Vhen installing or r	elocating the system, be sure to keep the refrigerant circuit free from substances other than the specified refrigerant (R410A),
Do not reconstruct	or change the settings of the protection devices. , thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or
Do not touch the sw	ritch with wet fingers.
Touching a switch wit	h wet fingers can cause electric shock.
If an leak circuit brea	ker is not installed, electric shock may result.
Do not install the ai (a) where a miner Plastic parts m (b) where corrosiv Corroding cop (c) near machiner Electromagnet (d) where flammal gasoline are h Operating the	r conditioner or the remote controller in the following locations: al oil mist or an oil spray or vapor is produced, for example in a kitchen ay deteriorate and fall off or result in water leakage. e gas, such as sulfurous acid gas, is produced per pipes or soldered parts may result in refrigerant leakage. y emitting electromagnetic waves ic waves may disturb the operation of the control system and result in a malfunction of the equipment. Je gases may leak, where there are carbon fiber or ignitable dust suspensions in the air, or where volatile flammables such as thinner or andled. unit in such conditions may result in fire.
Be very careful abo	ut product transportation.
Sately dispose of th Packing materials, su Tear apart and throw the risk of suffocation	e packing materials. ch as nails and other metal or wooden parts, may cause stabs or other injuries. away plastic packaging bags so that children will not play with them. If children play with a plastic bag which was not torn apart, they face
Do not turn off the p Always wait at least fi	wower immediately after stopping operation. ve minutes before turning off the power. Otherwise, water leakage and trouble may occur.
Install the indoor an interference or nois (Depending on the ra	d outdoor units, power supply wiring and connecting wires at least 3.5ft. away from televisions or radios in order to prevent image e. adio waves, a distance of 3.5ft. may not be sufficient enough to eliminate the noise.)
Remote controller ( (inverter or rapid st Install the indoor unit	wireless kit) transmitting distance can result shorter than expected in rooms with electronic fluorescent lamps. art types) as far away from fluorescent lamps as possible.
This unit is a class In a domestic environ	A product. ment this product may cause radio interference in which case the user may be required to take adequate measures.
Dismantling of the u	init, treatment of the refrigerant, oil and eventual other parts, should be done in accordance with the relevant local and national



	controller	Central remote control	ler Schedule timer	Unified O	Connector for setting m	Central rem	ote controller	Schedule timer
		1 to 4		Set one to "Used" a Set all	nd all the rest to "Not used" to "Not used".	·(N	lote)	
1 to 16	· -	1 to 4	1	Set one to "Used" a Set all	nd all the rest to "Not used" to "Not used".	(N	lote)	"Not used" "Not used"
DS1 setting (Factory Aft att MAIN/SUB With two unif locations. In 1 Ocations. In 1 Ocations unified sequential c indoor units operation. (: To switch se IOTE: The sec	changeover s ied ON/OFF cont wo unified ON/OFF cont this kind of set- wo unified ON/OFF cont poperation funct on in 2-secon sequential opera quential opera	ach the number seal display sticker, as sh Example) n the case of 1-00 to switch setting ntrollers, centralized cont p, it is necessary to set t DFF controllers (1)-(2) is operation function oller is equipped with ion that sequentially tu d intervals during unifi ration is factory set to ation ON or OFF, set at tion function is design	applicable to respective own in the diagram below 1-15, attach 1. rol (indoor units) is possible f he MAIN/SUB changeover sv s set to "MAIN" while the ott a "ON" s follows. (Factory set) ned to reduce the load of	control range of th w. rom different witch. her is set to "SUB". While held n the power supply	Connector re Sw Connector Sw Cutdoof Unified ON/OFF Controller (1) solding down the unified stop b ing down the unified operation y equipment, but does	for setting ma Force itch for setting Control MAIN Group No. 1-00 Max. of 16 utton, perform force i button, perform force	(To hold reset) aster controller ad reset switch g each address mode selector /SUB changeo 	Ver switch Unified ON/Of controller (2)
Control mo The followin	de selector (E ng four patteri	DS2) ns of control mode ca	In be set.		Timer operation possibl	e by	ON/OFF contr	ol impossible
Content	Operation/stop unified ON/OFI remote controll	is controlled by both controller and er.	After operated by unified Ot controller, operation/stop is controlled by remote control stopped by unified ON/OFF	N/OFF When freely oper- ller until contr controller. not a	remote controller n used in conjunction with sche ation/stop is controlled freely by oller during the set time but op vailable when schedule timer is	dule timer, Oper remote ON eration is (Th s ON. rem	by remote eration/stop is con /OFF controller on is unit can not be note controller.)	controller trolled by unified ly. operated/stopped b
DS2 setting	(Factory set)			CONIHOL				





Before starting test operation, supply power to the indoor units, outdoor units, and unified ON/OFF controller and press the ON/OFF BUTTON. If the operation lamp flashes, it indicates a malfunction in the indoor unit of the applicable group.

- If the display of "\_\_\_\_\_" flashes, it indicates a malfunction in the optional controllers for centralized control. Check for such malfunctions.
  - After turning the power supply ON, if the unit does not accept operation for two minutes or more with the display of "\_\_\_\_\_\_" flashing, check the following points.
     Check that setting of the connector for setting master controller is correct.
    - Check that the group No. for centralized control has been set.

## 13.9 <DCS301C71> Unified ON/OFF Controller Operation Manual





## 13.10 <DST301BA61> Schedule Timer Controller Specifications / Dimensions

Enables you to connect and control weekly schedule for up to 128 indoor units all together.



- Simultaneous control of up to 128 indoor units is managed by a week schedule.
- The start and stop time for twice a day can be set for the week in increments of 1 minute.
- By combining with a central remote controller and schedule timer, you can construct a system that matches the size and use of the building.
- If used together with a central remote controller, you can set up to 8 schedule patterns which can be distributed among zones as desired using the central remote controller.
- Is equipped with a compensation function for power failure up to 48 hours.
- Features thin design of a mere 16 mm in thickness. (Uses JIS recessed box for 2.)
- Wiring can be up to 1 km in length. Applicable wiring methods include bus and star in addition to crossover type.
- Can be used in combination with other D-BACS equipment.

#### Specifications / Dimensions

## SPECIFICATIONS

#### Specifications

Display of time	12-hour digital display
Clock cycle type	Quartz clock type
Clock accuracy	Within ±30 sec./month (environmental temperature from 15°C to 35°C)
Timer programming	Two pairs of programmed time for both system start and system off can be set in units of minute for each day of the week
Power failure compensation time	Approximately 48 hours for a single occurrence of power failure (clock with No. of programmed time)
Size	120 (W) $\times$ 120 (H) $\times$ 53 (D) mm (Width/Height/Depth)
Weight	Approximately 210g

#### Outline drawings



Specifications and appearance subject to change without notice.

## 13.11 <DST301BA61> Schedule Timer Controller Installation Manual

nstall it corre	ctly. After completing the installation, make sure that the unit operates properly during the start-up operation.
Please instruc	ct the customer on how to operate the unit and keep it maintained.
Also, inform c	sustomers that they should store this installation manual along with the operation manual for future reference.
This air condi	tioner comes under the term "appliances not accessible to the general public".
leaning of wa	rning, caution and note symbols.
	<ul> <li>Indication a potentially hazardous situation which, if not avoided, could result in death or serious injury.</li> <li>Indication a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.</li> <li>Indication situation that may result in equipment or property-damage-only accidents.</li> </ul>
Ask your dea	ler or qualified personnel to carry out installation work. Do not try to install the machine by yourself.
mproper insta	Illation may result in water leakage, electric shocks or fire.
Perform insta	Ilation work in accordance with this installation manual.
mproper insta	Ilation may result in water leakage, electric shocks or fire.
Be sure to us	e only the specified accessories and parts for installation work.
Failure to use	the specified parts may result in water leakage, electric shocks, fire or the unit falling.
Carry out the	specified installation work after taking into account strong winds, typhoons or earthquakes.
mproper insta	Ilation work may result in the equipment falling and causing accidents.
Make sure the	at a separate power supply circuit is provided for this unit and that all electrical work is carried out by
qualified pers	connel according to local laws and regulations and this installation manual.
An insufficient	power supply capacity or improper electrical construction may lead to electric shocks or fire.
Make sure that	all wiring is secured, the specified wires and used, and no external forces act on the terminal connections or wires.
mproper conn	ections or installation may result in fire.
When wiring t	the power supply and connecting the remote controller wiring and transmission wiring, position the wires
so that the ele	ectric parts box lid can be securely fastened.
Improper posit	ioning of the electric parts box lid may result in electric shocks, fire or the terminals overheating.
Before touch	ng electrical parts, turn off the unit.
Ground the ai	r conditioner. Do not connect the ground wire to gas or water pipes, lightning rod or a telephone ground wire.
Incomplete gro	Dounding may result in electric shocks.
When installi	ng or relocating the system, be sure to keep the refrigerant circuit free from substances other than the
specified refr	igerant (R410A), such as air.
Do not recon If the pressure specified by D	struct or change the settings of the protection devices. switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those aikin are used, fire or explosion may result.
Do not touch	the switch with wet fingers.
Touching a sw	itch with wet fingers can cause electric shock.
Install an ear	th leak circuit breaker, as required.
If an earth lea	k circuit breaker is not installed, electric shock may result.
Do not install (a) where a Plastic p (b) where c Corrodir (c) near ma Electron (d) where fl flammal Operatir	the air conditioner or the remote controller in the following locations: mineral oil mist or an oil spray or vapor is produced, for example in a kitchen parts may deteriorate and fall off or result in water leakage. orrosive gas, such as sulfurous acid gas, is produced ng copper pipes or soldered parts may result in refrigerant leakage. cchinery emitting electromagnetic waves magnetic waves may leak, where there are carbon fiber or ignitable dust suspensions in the air, or where volatile oles such as thinner or gasoline are handled. ng the unit in such conditions may result in fire.
CISPR 22 Cla	ss A Warning.
This is a class	A product. In a domestic environment this product may cause radio interference in which case the user may be
required to tak	are adequate measures.







#### FTXM-W Series



Refer to the installation manual attached to the outdoor unit.

In case the schedule timer is used individually and the wiring is changed after the system has been operated, reset the power after energizing for more than five minutes. It may not be possible to control the unit from the schedule timer.



## 13.12 <DST301BA61> Schedule Timer Controller Operation Manual





4

6





5

3



7

[2]

3P124623-5C

# SAFETY CONSIDER-ATIONS

Please read these "SAFETY CONSIDER-ATIONS " carefully before installing air conditioning equipment and be sure to install it correctly. After completing the installation, make sure that the unit operates properly during the start-up operation.

Please instruct the customer on how to operate the unit and keep it maintained.

Also, inform customers that they should store this installation manual along with the operation manual for future reference.

This air conditioner comes under the term " appliances not accessible to the general public ".

Meaning of warning, caution and note symbols.

\Lambda WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
	Indicates situation

that may result in equipment or property-damage-only accidents.

# Keep these warning sheets handy so that you can refer to them if needed.

Also, if this equipment is transferred to a new user, make sure to hand over this operation manual to the new user.

# – 🥂 WARNING ·

In order to avoid electric shock, fire or injury, or if you detect any abnormality such as smell of fire, turn off power and call your dealer for instructions.

# Ask your dealer for installation of the air conditioner.

Incomplete installation performed by yourself may result in a water leakage, electric shock, and fire. Ask your dealer for improvement, repair, and maintenance.

Incomplete improvement, repair, and maintenance may result in a water leakage, electric shock, and fire.

Improper installation or attachment of equipment or accessories could result in electric shock, short-circuit, leaks, fire or other damage to the equipment. Be sure only to use accessories made by Daikin which are specifically designed for use with the equipment and have them installed by a professional.

Ask your dealer to move and reinstall the air conditioner or the remote controller. Incomplete installation may result in a water leakage, electric shock, and fire.

Never let the indoor unit or the remote controller get wet.

It may cause an electric shock or a fire.

Never use flammable spray such as hair spray, lacquer or paint near the unit. It may cause a fire.

#### Never replace a fuse with that of wrong ampere ratings or other wires when a fuse blows out.

Use of wire or copper wire may cause the unit to break down or cause a fire.

Never inspect or service the unit by your-self.

Ask a qualified service person to perform this work.

Cut off all electric waves before maintenance.

**Do not wash the air conditioner or the remote controller with excessive water.** Electric shock or fire may result.

Do not install the air conditioner or the remote controller at any place where flammable gas may leak out.

If the gas leaks out and stays around the air conditioner, a fire may break out.

**Do not touch the switch with wet fingers.** Touching a switch with wet fingers can cause electric shock.

#### **CISPR 22 Class A Warning:**

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

## 

# After a long use, check the unit stand and fitting for damage.

If they are left in a damaged condition, the unit may fall and result in injury.

#### Do not allow a child to mount on the unit or avoid placing any object on it.

Falling or tumbling may result in injury.

# Do not let children play on and around the unit.

If they touch the unit carelessly, it may result in injury.

# Do not place a flower vase and anything containing water.

Water may enter the unit, causing an electric shock or fire.

#### Never touch the internal parts of the controller.

Do not remove the front panel. Some parts inside are dangerous to touch, and a machine trouble may happen. For checking and adjusting the internal

parts, contact your dealer.

# Avoid placing the controller in a spot splashed with water.

Water coming inside the machine may cause an electric leak or may damage the internal electronic parts.

#### **Do not operate the air conditioner when using a room fumigation - type insecticide.** Failure to observe could cause the chemicals to become deposited in the unit, which could endanger the health of those who are hypersensitive to chemicals.

#### Safely dispose of the packing materials.

Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.

Tear apart and throw away plastic packaging bags so that children will not play with them. If children play with a plastic bag which was not torn apart, they face the risk of suffocation.

# Do not turn off the power immediately after stopping operation.

Always wait at least five minutes before turning off the power. Otherwise, water leakage and trouble may occur.

The appliance is not intended for use by young children or infirm persons without supervision.

The remote controller should be installed in such away that children cannot play with it.

## 

#### Never press the button of the remote controller with a hard, pointed object. The remote controller may be damaged.

# Never pull or twist the electric wire of the remote controller.

It may cause the unit to malfunction.

# Do not place the controller exposed to direct sunlight.

The LCD display may get discolored, failing to display the data.

#### Do not wipe the controller operation panel with benzine, thinner, chemical dustcloth, etc.

The panel may get discolored or the coating peeled off. If it is heavily dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the panel clean. And wipe it with another dry cloth.

Dismantling of the unit, treatment of the refrigerant, oil and eventual other parts, should be done in accordance with the relevant local and national regulations.

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# FEATURES AND FUNCTIONS



 When used in conjunction with central remote controller (Optional Accessory) The operation controlled by programmed time can be set for up to eight different patterns (timer No. 1 – 8). Each schedule pattern can be also selected.

#### NAMES AND FUNCTIONS OF OPERATING SECTION (Fig. 1, 2)DISPLAY " Mon TUE WED THU FRI SAT SUN " **UNIFIED OPERATION BUT-**TON " \_\_\_\_\_" (PRESENT TIME) 9 1 Displays the present day of the week Press this button to perform the unified and time. operation regardless of the No. of programmed time. DISPLAY " [2:2] " (PRO-UNIFIED STOP BUTTON **GRAMMED TIME OF SYSTEM** 10 " ALL () " START) 2 Press this button to perform the unified Displays the time programmed to start. stop regardless of the No. of pro-DISPLAY " O AMPM " (PROarammed time. **GRAMMED TIME OF SYSTEM OPERATION LAMP (RED)** 11 3 OFF) The light turns on during the operation of the indoor unit. Displays the time programmed to stop. $\oplus$ TIME NO. BUTTON " ,, 12 4 Displays the time No. only when used in conjunction with the central remote See page 5-9. controller. **CLOCK ADJUSTING** DISPLAY BUTTON " CLOCK " "PROGRAM JSTART." 13 5 (PROGRAMMING START) Press this button to set the present The light turns on when the timer is time programmed. **PROGRAMMING START DISPLAY " OFF " (HOLIDAY** BUTTON " SETTING) 14 6 Press this button to set or check the Lights above the day of the week set No. of programmed time. Press it as holiday. The operation controlled by again after you are through with the timer is not available on that day. program. DISPLAY "-" (SETTING **BUTTON FOR SELECTING** OF DAYS OF A WEEK) 7 DAY (1~7) DAYS OF A WEEK " 15 Flashes below the day of the week programmed. Press this button to select the day of the week. DISPLAY " HOUR/MINUTE BUTTON TION CODE) 8 HR MIN. Displays the contents of malfunction ,, " 16 (1~12) (1~60) during the stop due to malfunction. Press this button to adjust the present time and the programmed time.

17					
17	Press this button to set the present time and the programmed time.				
	HOLIDAY SETTING				
18	BUTTON "				
	Press this button to set holidays.				
	BUTTON FOR COPYING PROGRAM OF PREVIOUS				
19	DAY " DAY COPY "				
	Use this button to set the No. of pro- grammed time same as that of the pre- vious day.				
	PROGRAM CANCELING				
20	BUTTON "				
_0	Use this button to set the programmed time to cancel. The display shows " $-;$ ".				
<ul> <li>(Note)</li> <li>1. Please note that all the displays in the figure appear for explanation purpose or when the cover is open</li> </ul>					

# OPERATION

## ■ Setting present time (Fig. 3)

(Example) In case of setting Friday, 5:30 p.m.

1. The press the CLOCK ADJUSTING BUTTON. The present time display flashes.

(NOTE)

• The present time needs adjusting in case of turning power supply on for the first time or the occurrence of power failure over the period of 48 hours or more.



- 2. Press the BUTTON FOR SELECTING DAYS OF A WEEK. Each time the button is pressed, the day display shifts to the right. (NOTE)
  - The display " MON " follows the display " SUN. "



Set the day to Friday.

3. <sup>(3)</sup> Set the time with the HOUR/ MINUTE BUTTON. Each time the HOUR/MINUTE BUTTON is pressed, the display is put forward minute by minute and hour by hour. When the button is kept pressed, the display is put forward continuously.

(NOTES)

- After becoming " AM 11:00 ", when the button is pressed, the display becomes " PM 0:00 ".
- After becoming "59" (minute), when the button is pressed, the display becomes "00" (minute).



Set the time to 5:30 p.m.

4. <sup>(4)</sup> Press the TIMER ON BUTTON the moment the time signal of TV, radio, telephone, etc. is heard. The mark ": " flashes, and the clock starts.

	FRI
CLOCK	рм 530

Press the TIMER ON BUTTON in tune with the time signal at 5:30 p.m.

#### (NOTES)

- The clock used is of 12-hour type.
- When you turn power supply on, the system may display " 🖓 " for about one minute and not start to operate after all the liquid crystal displays appear at a time.
- If the CLOCK ADJUSTING BUTTON is pressed by mistake, press it again to return to the original state. As the clock does not stop, the time indicated by the clock is kept correct. In case of power failure within 48 hours, the clock keeps operating by utilizing the built-in battery.

## Setting no. of programmed time (Fig. 4)

(Example) Time No. 5 (to be programmed only when used in conjunction with the central remote controller)

#### Monday to Friday:

Operating from 8:45 a.m. till 5:00 p.m. Operating from 5:15 p.m. till

11:00 p.m.

Saturday and Sunday: Setting the whole day stop operation (application for holidays) controlled by programmed time.

1. UP Press the PROGRAMMING **START BUTTON.** Programming is available. The display "PROGRAM → START " appears, and the display of days of a week flashes.

PROGRAM L START MON TUE WED THU FRI SAT SUN

2. <sup>(2)<sup>-</sup></sup> Press the TIME No. BUTTON, and select the desired number. (NOTE)

• Unless used in conjunction with the central remote controller. The TIME No. is not displayed and can not be selected.

Select the TIME No. 5.



3. <sup>(3)</sup> Press the BUTTON FOR SELECTING DAYS OF A WEEK. and set the proper day of the week. Each time you press it, the flashing display of days of a week shifts to the right.



Set to Monday.

- (1) Setting programmed time
- 4. 4 Set the programmed time of system start 1 by using the HOUR/ MINUTE BUTTON. Each time the **HOUR/MINUTE BUTTON is** pressed, the display is put forward minute by minute and hour by hour. When the button is kept pressed, the display is put forward continuously.



Set the "PROGRAMMED TIME OF SYSTEM START 1" at 8:45 a.m.

5. <sup>(5)</sup> Press the TIMER ON BUTTON, and set the programmed time of system start 1. Each time you press it, the next area to be set flashes.

(NOTE)

 Set the other programmed time in the same procedure.



- (2) Set the next day of the week. Set the day of the week to Tuesday, and copy the program of the previous day (Monday). In the same procedure, set the day of the week to Wednesday through Friday in sequence.
- 6. <sup>(E)</sup> Press the BUTTON FOR SELECTING DAYS OF A WEEK and set the following day. Press the BUTTON FOR COPYING PRO-GRAM OF PREVIOUS DAY. The same program as that of the immediately preceding day of the week is set.

(NOTE)

 Repeat each procedure 3 – 5 in the above when not copying the contents of the previous day.

- (3) Holiday setting
- 7. TPress the BUTTON FOR SELECTING DAYS OF A WEEK and set one or more days of the week as holiday. Press the HOLI-DAY SETTING BUTTON, and the display "OFF " is displayed at the top of the day of the week. If you press it again, the display returns to the original state.



Set Saturday and Sunday as holidays.

# 8. <sup>(\*)</sup> Press the PROGRAMMING START BUTTON, and finish the program setting.

(NOTES)

- Unless the button is pressed within 20 minutes, the display will automatically revert back to the original state. In this case, setting contents up to the point where the TIMER ON BUTTON (or HOL-IDAY SETTING BUTTON or BUTTON FOR COPYING PROGRAM OF PREVI-OUS DAY) is pressed will only take effect.
- The display " PROGRAM , START " and the display of days of a week " — " disappears.

- The flashing display goes off, and the No. of programmed time of the present day is displayed. Then the operation controlled by timer starts.
- The operation controlled by timer is executed even while the program is being set.



This is the end of the setting example.

## Change and cancellation of no. of programmed time (Fig. 5)

(Example) Time No. 3 (to be set only when used in conjunction with the central remote controller)



- Image: Press the PROGRAMMING START BUTTON. The program setting is ready. The display "PROGRAM JSTART " appears, and the display of days of a week flashes.
- 2. <sup>(2)</sup> Press the TIME No. BUTTON, and select the desired No.

() NO,		OFF OFF THU FRI SAT SUN	SET1   <sup>on</sup> # :::-::::::::::::::::::::::::::::::::	O OFF S:[][]
	CLOCK		SET2   <sup>on</sup> 5: 15: ►	O OFF / /:[/[]

Select the time No. 3.

3. <sup>(3)</sup> Press the BUTTON FOR SELECTING DAYS OF A WEEK, and set the day of the week to be changed. The set No. of programmed time of the day of the week is displayed.



Set the day to Wednesday.

- A. Change/cancel partially
- 4. <sup>(4)</sup> Press the TIMER ON BUTTON and change, and the display of programmed time flashes. Each time you press it, the next area to be set flashes.

(-)	OFF OFF	9 9FF
NO.	Mon TÜE <u>WÊD</u> THU FŘI SÁT SUN	5:00

Shift to the display "PROGRAMMED TIME OF SYSTEM OFF 1".

5. <sup>(5)</sup> Press the HOUR/MINUTE BUTTON and change the programmed time. Press the TIMER ON BUTTON, and finalize the setting of change.



Change the "PROGRAMMED TIME OF SYSTEM OFF 1" to 7:00 p.m.

6. <sup>(6)</sup> Press the PROGRAM CAN-CELING BUTTON, and cancel the programmed time. If you press it again, display returns to the original state. Press the TIMER ON BUTTON to finalize the cancellation.



Shift to the "PROGRAMMED TIME OF SYSTEM START 2".



Set the "PROGRAMMED TIME OF SYSTEM START 2" to program cancellation.

In the same procedure, cancel the programmed time of system off 2.

- B. Cancel the whole
- 7. TPress the BUTTON FOR SELECTING DAYS OF A WEEK, and shift to the day of the week to be canceled. Then, press the HOL-IDAY SETTING BUTTON, the display " OFF " appears at the top of the particular day of the week. The programmed time is canceled. If you press the button again, the display returns to the original state.

()	OFF OFF SET ON	O <sup>off</sup>
NO.	Mon Tuế wếd thụ Fhi sắt sun	-:
		O OFF -:

Shift the day of the week to Thursday to set as a holiday.

## 8. <sup>(®)</sup> Press the PROGRAMMING START BUTTON. The program setting is now finished.

- (NOTES)
- Unless the button is pressed within 20 minutes, the display will automatically revert back to the original state. In this case, setting contents to the point where the TIMER ON BUTTON (or HOLIDAY SETTING BUTTON or BUTTON FOR COPYING PROGRAM OF PREVIOUS DAY) is pressed will only take effect.
- To continue the change/cancellation, do not press the PROGRAMMING START BUTTON until all change/cancellation are completed.
- The operation controlled by timer is executed even while the program is being set.

## Manual operation (Fig. 6)

This schedule timer enables the operation/stop by pressing the UNIFIED OPERATION/STOP BUTTON in addition to the operation controlled by timer (operation/stop according to the programmed time) at any time.

- 1. UP Press the UNIFIED OPERA-TION BUTTON, and the OPERA-TION LAMP turns on.
- 2. OPress the UNIFIED STOP BUT-TON, and the OPERATION LAMP is turned off.

#### (NOTES)

- The operation automatically stops according to the programmed time of system off even during the manual operation. In the meantime, the operation starts automatically according to the programmed time of system start even during the stop of operation.
- If the unit is used in conjunction with other optional controllers for centralized control, the OPERATION LAMP of the unit that is not under operation control may be turned on or off a few minutes behind schedule. This shows that the signal is being exchanged, and does not indicate any failure.



## Operation control code

Two different types of operation control codes can be selected when this kit is used independently (when not used in conjunction with the central remote controller, unified ON/OFF controller, etc.).

#### Individual

In case where the operation/stop is controlled by both schedule timer and remote controller.

#### Centralized

The operation is controlled by the schedule timer alone, and the operation/stop is controlled freely with the remote controller during the programmed time.

#### (NOTES)

- For current settings, contact your DAIKIN dealer.
- To change settings, contact your DAIKIN dealer.

Do not change settings yourself.

## Error diagnosing function (Fig. 7)

This schedule timer is provided with the malfunction diagnosing function. The malfunction code flashes if there occurs any malfunction in communication, etc. between and among the optional controllers for centralized control. In addition, the operation lamp also flashes if there occurs any malfunction in communication with the indoor unit. Check the contents of the display and contact your DAIKIN dealer because the signals give you the idea of the trouble area.

Opera- tion lamp	Malfunc- tion code	Contents of mal- function	- Turn on or off Flash		Address failure of schedule timer.
Turn off	M1	Failure of PC board of schedule timer. Fixes The following causes are possi- ble. Check each one. 1. PC board prob- lems	Turn on or off Flash	МС	<ul> <li>Fixes The following causes are possible. Check each one. 1. Do the control range addresses in the central remote control- ler overlap? </li> <li>2. Do the control</li> </ul>
Turn on		Malfunction of transmission between each optional controllers for centralized con- trol.		Turn on or offMCThe following causes are post Check each on 1. Do the contr range addres in the centra remote comi ler overlap?Turn on or offMC1. Do the contr range addres in the centra remote comi ler overlap?2. Do the contr range addres in the on/off troller overlap?2. Do the contr range addres in the on/off troller overlap?3. Are there 2 more sched timers con- nected?Malfunction of transmission between indoor unit and optior controllers for tralized controFlashUEFixes Inspect all indo units which are playing an error (e.g., power su transmission wiring, etc.).Malfunction in indoor unit (Re to the malfunc codes of the in romete extended	<ul> <li>ange addresses in the on/off con- troller overlap?</li> <li>3. Are there 2 or more schedule timers con- nected?</li> </ul>
Turn on or off	M8	Fixes Check all central devices which are connected (e.g., power supply, transmission	Flack		Malfunction of transmission between indoor unit and optional controllers for cen- tralized control.
		wiring, etc.). Improper combina- tion of optional controllers for cen- tralized control. <b>Fixes</b>	Flash	UE	Fixes Inspect all indoor units which are dis- playing an error (e.g., power supply, transmission wiring, etc.).
Turn on or off	MA	<ul> <li>The following causes are possible. Check each one.</li> <li>1. Are all central devices combined correctly?</li> <li>2. Is the master central connector attached to</li> </ul>	Flash	_	Malfunction in indoor unit (Refer to the malfunction codes of the indoor remote controller, while also read the " CAUTION FOR SERVICING " attached to the indoor unit.)
		two or more cen- tral devices? 3. Are there 128 or	QUEST		AND ANSWER
		units con-	Questi	on	Answer

Question	Answer
It is possible to make settings twice a day, but is it possible to make only the " off " setting? (To avoid forget- ting to turn the unit off.)	Yes. Press the PRO- GRAM CANCELING BUTTON in the "Marchine"" section in order to set it to " OFF ".

nected?

Is it possible to set times which straddle days?	Yes, it is possible. Example: Start operation at 5:00 a.m. on Sunday Stop operation at 6:00 p.m. on Monday	The TIME NO. is not displayed.	<ul> <li>The following causes are possible.</li> <li>1. The TIME NO. is not displayed when using the schedule timer alone. (It can be set if using the central remote controller at the same time.)</li> </ul>
The unit does not turn on even though the set " on " time has come. (When using the schedule timer alone)	The following causes are possible. 1. Are the " on " time and the " off" time set to the same time?	The display remains " () () () () () () () () () () () () () (	The following causes are possible. <b>1.</b> Is the day set to a holiday?
The unit does not turn on even though the set " on " time has come. (When using the unit with a central remote controller)	<ul> <li>Ine following causes are possible. Check each one.</li> <li>1. Was the timer number set with the central remote controller? Was an incorrect timer number set?</li> <li>2. Is another timer no. set with the central remote controller set for " off " at the same time?</li> <li>3. Is the operation code set to " remote control permission timer " using the central remote controller or the on/off controller?</li> </ul>	I cannot set " central manage- ment priority " or " after-push prior- ity " with the schedule timer.	<ul> <li>The following causes are possible.</li> <li>1. Is a central remote controller or on/off controller also installed?</li> <li>* The priority order of the operation codes depends on the central devices which are installed. The below operation codes are set.</li> <li>Schedule timer Central remote controller is used as well Operation code of the central remote controller</li> <li>Schedule timer</li> </ul>
The unit oper- ates even though that day is set as a holiday. (When using the unit with a central remote controller)	The following causes are possible. <b>1.</b> Is another timer num- ber set with the cen- tral remote controller set for " on " at the same time? (If two timer numbers are set, make sure that the settings for holidays and working days do not overlap between the different		<ul> <li>On/off controller is used as well</li> <li>Operation code of the on/off controller</li> <li>Schedule timer</li> <li>Central remote controller</li> <li>On/off controller is used as well</li> <li>Operation code of the central remote controller</li> </ul>

## 13.13 <KPW937F4E> Air Direction Adjustment Grille

	(1) Air direction adjustment grill	② Spacer	③ Screw	④ Installation manual
Shape			€ <u>M4 × 50</u>	
Juantity	1 pc.	4 pcs.	4 pcs.	1 sheet
Choosing Use wh follow If the If cha direct Cautions In ord at the Be sur Instal If usi grill Do not as sno up, be fallon	g an installation si en the outdoor unit ing conditions. a outdoor unit is ins inging the fan direct ly on passers-by, sh s for use er to use correctly time of installation e to stop operation l in a manner that w ng in an area where so that the air out attach the air direct w may clog the air of a cautious as the air backgroup	te) is installed in stalled near the ion of the outo nubbery, etc. and safely, be on. before performing ill not cause a snow accumulate ets point to the stion adjustmer putlet of the out the outlets can ea	a location white border to a net door unit to pre- sure to follow ing installation a short circuit. es, attach the a ne left or right at grill with th utdoor unit and attached with t	ch meets any of the sighbor's house. event it blowing the precautions below work. hir direction adjustment c, or down. he air outlets pointing up result in malfunction. the air outlets pointing
Do not Tighte	use screws other then the screws secure	an the accessor y so that they	ry screws. are not loose.	gged with debris such as



## 13.14 <KPW063B4> Air Direction Adjustment Grille

Component p	<u>arts</u>			
Name	①Air direction adjustment grille	e 🛛 Screw	③ Spacer	④Installation Manual
Illustration		Omenan		
Quantity	1 pcs.	4 pcs.	4 pcs.	1 sheet(this sheet)
Selection	of installation site			
its exhaust a ●When changing Cautions f	ir g the airflow direction to prevent exh or usage	aust blowing d	irectly onto	passersby or garden plants.
safe use of 1. Install for main 2. When ins install 3. Tighten	the air direction adjustment grille. the product so that it is situated hig tenance purposes. talling the product in a location in w a rollover prevention bracket (sold se screws securely. Failure to do so may	th enough to al which it may be aparately) at t result in vibr	low access to e exposed to s the same time. ation.	o the outdoor unit strong winds,
Verifying th	e amount of space required for in	istallation)		
		Caution Leave at leas the outdoor u	<b>)</b> nit and any c	h between the rear of bstructions(walls, etc.).



## 13.15 <KKG063A42> Back Protection Wire Net



## 13.16 <KEH094A41E> Drain Pan Heater

# **Safety Considerations**

# Give this installation manual to the user when installation is completed.

- Read these **Safety Considerations** carefully to ensure correct installation.
- After completing the installation, make sure that the unit operates properly during the startup operation.
- All phases of the field-installation, including, but not limited to, electrical, piping, and safety, must be done in accordance with manufacturer's instructions and must comply with national, state, provincial, and local codes.
- This product is a heater designed to melt snow that is blown into the product from the outside to prevent the drain pan of the outdoor unit from freezing.
- Install the product with a snow-break hood on a high stand if this product is used in heavy snow areas.
- Meaning of DANGER, WARNING and CAUTION symbols:

**DANGER** : Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING : Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION : Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

## 🕂 DANGER -

• Do not touch the heater unit without wearing gloves. The temperature of the heater unit will become high when the heater is turned on.

Touching the heater unit with bare hands will result in burns or injury.

## 🕂 WARNING <sup>.</sup>

• Only qualified personnel must carry out the installation work. Installation must be done in accordance with this installation manual.

Improper installation may result in electric shock, fire, or equipment damage.

- Use only specified accessories and parts for installation work. Failure to use specified parts may result in electric shock, fire, the product falling, or equipment damage.
- · Before touching electrical parts, turn off the unit.
- Use specified wires. Connect and fix the wires so that the wires will not put improper force on the terminal junctions. Wires connected or fixed improperly could result in terminal overheating, an electric shock, or fire.
- When wiring and connecting the indoor and outdoor units, carefully arrange the wiring so that they will not put improper force on the structures.
   Install covers over the wires. Incomplete cover installation could result in terminal overheating, an electric shock, or fire.

# 

- Wear protective gloves at the time of installation. Touching the suction mouth or aluminum fin of the outdoor unit may result in injury.
- Do not install the product in places where there is danger of exposure to inflammable gas leakage.
- If the gas leaks and builds up around the unit, it may catch fire. • Do not grab the top plate of the outdoor unit carelessly

when removing the top plate. The sharp edge of the top plate may cause injury.

 Do not install the outdoor unit in places where small animals may nest in the outdoor unit.
 If small animals intrude and touch the internal parts of the outdoor unit, the outdoor unit may malfunction, generate smoke, or ignite.

Advise the user to keep the place clean.

• Do not touch the heater unit with bare hands. The temperature of the heater unit will become high when the heater is turned on.

Touching the heater unit with bare hands may result in burns or injury.

# Accessories

A Drain pan heater	1	B Screw M4 × 1/2" (M4 × 12mm)	×	3
C Cable tie	1	D Installation Manual		1



#### 2. Remove the fan motor base.

- 1) Remove the fixing screws at the lower section of the fan motor base. (2 screws)
- 2) Remove the fan motor base together with the propeller fan and ensure that stress is not placed on the propeller fan when placing them aside.
  - Do not remove the fan motor harness.
  - Ensure that the fan motor harness does not come into contact with the edges of the heat exchanger or other components.



# Installation Procedure (2)

#### 3. Install the (A) drain pan heater.

#### 

• When drilling a hole, be careful not to damage the soundproofing material and other components on the back side.

- 1) Remove 2 screws from the bottom frame so that the plates of the drain pan heater can be inserted under the heat exchanger with ease.
- 2) Lift up the heat exchanger and insert the plates of the (A) drain pan heater under the heat exchanger.
  - The ground plate of the drain pan heater should be installed so that it firmly adheres to the bottom frame.
  - Install the drain pan heater in a position where it does not come into contact with the fan motor base.
- 3) Fix the (A) drain pan heater with the (B) screws. (3 locations)



#### 4. Route the harnesses.

1) Flex the sheet metal of the outdoor unit and pull the harness around.


# Installation Procedure (3)

 Connect the black harness to the leftmost terminal and the white harness to the second leftmost terminal.



#### 5. Cut the jumper.

- 1) Remove the electrical wiring box cover.
- 2) Cut the jumper (J9) of the PCB inside.



#### 6. Install each component to the original position.

• Be careful not to confuse screw types. Refer to "Installation Procedure (1)".

# 13.17 <KEH063A4E(A)> Drain Pan Heater

#### SAFETY CONSIDERATIONS

Read these **Safety Considerations** carefully before installing the drain pan heater. After completing the installation, check if the unit operates properly during the start-up operation.

Meaning of DANGER, WARNING, and CAUTION symbols



Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

- Inform users that they should store this installation manual for future reference.
- After completing the installation, make sure that the unit operates properly during the startup operation.
- All phases of the field-installation, including, but not limited to, electrical, piping, and safety, must be done in accordance with manufacturer's instructions and must comply with national, state, provincial, and local codes.
- This product is a heater designed to melt snow that is blown into the product from the outside to prevent the drain pan of the outdoor unit from freezing.
- Install the product with a snow-break hood on a high stand if this product is used in heavy snow areas.



Only personnel that have been trained to install, adjust, service or repair(hereinafter, "service") the equipment specified in this manual should service the equipment. The manufacturer will not be responsible for any injury or property damage arising from improper service or service procedures. If you service this unit, you assume responsibility for any injury or property damage which may result. In addition, in jurisdictions that require one or more licenses to service the equipment specified in this manual, only licensed personnel should service the equipment. Improper installation, adjustment, servicing or repair of the equipment specified in this manual, or attempting to install, adjust, service or repair the equipment specified in this manual without proper training may result in product damage, property damage, personal injury or death.



Do not touch the heater unit without wearing gloves.

The temperature of the heater unit will become high when the heater is turned on. Touching the heater unit with bare hands will result in burns or injury.



- Wear protective gloves at the time of installation. Touching the suction mouth or aluminum fin of the outdoor unit may result in injury.
- Do not install the product in places where there is danger of
   exposure to inflammable gas leakage.
   If the gas leaks and builds up around the unit, it may catch fire.
- Do not grab the top plate of the outdoor unit carelessly when removing the top plate.

The sharp edge of the top plate may cause injury.

- Do not install the outdoor unit in places where small animals may nest in the outdoor unit.
   If small animals intrude and touch the internal parts of the outdoor unit, the outdoor unit may malfunction, generate smoke, or ignite Advise the user to keep the place clean.
- Do not touch the heater unit with bare hands.
   The temperature of the heater unit will become high when the heater is turned on.
   Touching the bester unit with bare hands may result in hurns of

Touching the heater unit with bare hands may result in burns or injury.

#### PROP 65 WARNING FOR CALIFORNIA CONSUMERS

# 

Cancer and Reproductive Harm www.P65Warnings.ca.gov



- Request the dealer or an authorized technician to install the product. Improper installation of the product could result in water leakage, an electric shock, or fire.
- The product must be installed according to the instructions given in this manual. The Incomplete installation of the product could result in water leakage, an electric shock, or fire.
- Use the supplied or specified installation parts.
   Use of other parts could result in the unit becoming loose and falling, water leakage, electric shock, or fire.
- Turn off the power supply at the time of installation.
   Touching any electrical parts with the power supply turned on could result in electric shock.
- Use specified wires. Connect and fix the wires so that the wires will not put improper force on the terminal junctions. Wires connected or fixed improperly could result in terminal overheating, an electric shock, or fire.
- When wiring and connecting the indoor and outdoor units, carefully arrange the wiring so that they will not put improper force on the structures.

Install covers over the wires. Incomplete cover installation could result in terminal overheating, an electric shock, or fire.

# ACCESSORIES

Read these **Safety Considerations** carefully before installing the drain pan heater. After completing the installation, check if the unit operates properly during the start-up operation.

	KEH067A41E FTDBHMS	Keh063A4e FTDBHML	KEH063A4EA
A Drain Pan Heater	1	1	1
B M4 piercing screw	3	6	6
© Binding band	1	1	1
D Sealing Material	1	2	2
(multi-language)	1	1	1
F Electric Wiring   Diagram Label	1	1	1
G Information Label	1	1	1
H Alternate Mounting Plate	0	0	3

# TOOLS REQUIRED

- Electric Drill
- Phillips Screwdriver
- Nippers

# INSTALLATION PROCEDURE

WARNING

Be sure to check that the power supply of the product is turned off.

Some stages in the installation procedure differ by model of the outdoor unit. Refer to the instructions for the relevant model.

TYPE A MODELS: RX09/12NMVJU, RX09/12AXVJU,RXN09/12, RXL09/12

TYPE B MODELS: RX18/24NMVJU,RXN18/24, RXL15

TYPE C MODELS: 2/3/4MXS,2/3MXL

TYPE D MODELS: RX18/24AXVJU

#### 1. REMOVE EACH COMPONENT OF THE OUTDOOR UNIT,

- 1) Remove the top plate.
- 2) Affix the (E) electric wiring diagram label where there is enough space available on the back of the top plate.
- 3) Remove the screws from the protective wire mesh if one is fitted. (2 screws) (For type B and C models only.)
- 4) Remove the front plate.
- 5) Remove the anti-drip cover. (For type B and C models only)
- 6) Affix the  $^{\textcircled{G}}$  information label near the manufacture's label.
- The appearance of the outdoor unit and the number of screws may differ from some models.
- Screw types for each component are indicated as below.

No Icon: Hexagon tapping screw

 $\triangle$  : Truss head tapping screw

### For Type A and D Models





#### 2. Remove the fan motor base.

- 1) Remove the fixing screws at the lower section of the fan motor base. (2 screws)
- 2) Remove the fan motor base together with the propeller fan and ensure that stress is not placed on the propeller fan when placing them aside,
- Do not remove the fan motor harness.
- Ensure that the fan motor harness does not come into contact with the edges of the heat exchanger or other components.



#### 3. INSTALL THE DRAIN PAN HEATER.

When drilling a hole, be careful not to damage the soundproofing material and other components on the back side.

1) For type D models, exchange the pre-mounted mounting plates for 2 of the 🕀 alternate mounting plates as indicated below:



- 2) Remove 1 screw from the bottom frame (and 1 screw from the left frame for type D models) so that the plates of the <sup>(A)</sup> drain pan heater can be inserted under the heat exchanger with ease.
- 3) Lift up the heat exchanger, and insert the plates of the (A) drain pan heater under the heat exchanger.
- The ground plate of the (A) drain pan heater should be installed so that, in type A models, it firmly adheres to the bottom frame and, in type B and C models, it firmly adheres to the partition plate.
- Install the (A) drain pan heater in a position where it does not come into contact with the fan motor base.
- 4) If there are no holes, drill φ1/8 inch (φ3.2mm) holes in the bottom frame or the partition plate (model type dependent) to fix the drain pan heater.
- Place the actual components to ensure positioning is correct before drilling holes.
- The holes can be made with the included piercing-screw as well.
- 5) Fix the B drain pan heater with the B piercing screws.
- 6) Reattach the screw that was removed from the bottom frame (as well as the screw that was removed from the left frame for type D models).



#### 4. ROUTE THE HARNESSES.

CAUTION

When drilling a hole, be careful not to damage the soundproofing material and other components on the back side.

#### For type A Models

- 1) If there is no hole, drill a  $\phi$ 1/8 inch ( $\phi$ 3.2mm) hole in the partition plate. (1 location)
- 2) Fix in place the binding band attached to the (A) drain pan heater harness by screwing the (B) M4 piercing screw into the hole. (1 location)
- 3) Install the fan motor base.
- Be careful not to confuse screw types. Refer to "Installation Procedure (2)".
- 4) Place the (A) drain pan heater harness on top of the fan motor harness, and fix it in place with the (D) sealing material.



#### For type B, C, and D Models

- 1) If there is no hole, drill \$\phi1/8\$ inch (\$\phi3.2mm) holes in the partition plate. (3 locations)
- 2) Fix the (A) drain pan heater harness in place by screwing the (B) M4 piercing screws into the holes. (3 locations)
- 3) Install the fan motor base.
- Be careful not to confuse screw types. Refer to "Installation Procedure (2)".
- 4) Trim the electrical wiring box with nippers at the locations shown in the figures, then cover the trimmed edges with the <sup>®</sup> sealing material.
- 5) Insert the (a) drain pan heater harness into the space that was trimmed, and fix it in place using the (D) sealing material.





# 5. Connect the terminals of the drain pan heater to the terminal block of the outdoor unit.

- 1) Connect the thermostat-side terminal (black harness) to the leftmost terminal and the heater-side terminal (white harness) to the second leftmost terminal.
- For type C models, connect to the last terminal block of the terminal blocks in use.
- 2) Bundle the drain pan heater harness so that there is no slack, and secure it with the binding band. (1 location)
- For type C models, connect to the last terminal block of the terminal blocks in use.



## 13.18 <KPS034A41> Snow Hood (Intake Side Plate)





# 13.19 <KPS034D42> Snow Hood (Intake Rear Plate)





# 13.20 <KPS034A43> Snow Hood (Outlet)





# 13.21 <KPS063A41> Snow Hood (Intake Side Plate)





# 13.22 <KPS063A44> Snow Hood (Intake Rear Plate)





# 13.23 <KPS063A47> Snow Hood (Outlet)







- Warning Ask a qualified installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
  - Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorised parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
  - Read the user's manual carefully before using this product. The user's manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

If you have any inquiries, please contact your local importer, distributor and/or retailer.

#### Cautions on product corrosion

1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced. 2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided. If you need to install the outdoor unit close to the sea shore, contact your local distributor.