



Standard Efficiency Light Commercial Condenser Units DX/DZ

MECHANICAL GUIDE SPECIFICATIONS FOR DX/DZ SERIES COMMERCIAL CONDENSER UNITS 7.5 AND 10 TON AC, AND HEAT PUMP.

RELATED SECTIONS (As Specified by the Construction Specification Institute)

- Section 23 06 80 Schedules for Decentralized HVAC Equipment
 - 23 06 80.13 Decentralized Unitary HVAC Equipment Schedule:
 - Schedule is per the project specification requirements.
- Section 23 07 16 HVAC equipment insulation
 - 23 07 16.13.A. Evaporator fan compartment
- Section 23 09 13 Instrumentation and control devices for HVAC
 - 23 09 13.23 Sensors and Transmitters
 - 23 09 13.23.A. Thermostats
- Section 23 09 33 Electric and Electronic Control System for HVAC
 - 23 09 33.13.A. General
 - 23 09 33.13.B. Safeties
- Section 23 09 93 Sequence of Operations for HVAC Control
 - 23 09 93.13.A. INSERT SEQUENCE OF OPERATION
- Section 23 40 13 Panel Air Filters
 - 23 40 13.13.A. Standard filter section
- Section 23 81 26 Large-Capacity Split-System Air-Conditioners

GENERAL

- All units are charged with R-410A refrigerant and run-tested at the factory to check modes of operation and proper fan rotation.
- Unit meets ASHRAE 90.1 minimum efficiency requirements.
- Unit shall be designed to conform to ASHRAE 15.
- All units are rated in accordance with AHRI Standards 340/360.
- Units are ETL listed and certified under US and Canadian standards of safety requirements per UL 60335-2-40 4th Edition.
- Units shall be designed in accordance with ISO 9001 and shall be manufactured in a facility registered by ISO 9001:2015.
- Units shall be subjected to a completely automated run test on the assembly line. The data for each unit will be stored at the factory and must be available upon request.
- Units shall be designed to prevent water intrusion into the control box.
- Units are shake tested to assurance level 1, ASTM D4169 to ensure shipping reliability.

VOLTAGES

- All units are available in 208/240V 3-phase 60 Hz and 460V 3-phase 60 Hz.
- Main power supply voltage, phase, and frequency must match those required by the manufacturer.

WARRANTY

- Units feature 5-year parts and compressor warranty.
- Complete warranty details are available from your local dealer/contractor or at www.daikinac.com.

CABINET

- Unit cabinets are made with galvanized steel as follows, top panel 0.048" thick~19-gauge, access doors 0.034" ~21-gauge with a powder-paint finish on all the external surfaces. Service panels provide access to refrigeration and controls sections.

- Cabinet finish panel is tested for 500 hours in a salt spray test in accordance with ASTM B117 standard for salt spray resistance.

ACCESS PANEL

- All Cabinet panels are designed to be easily removable for servicing the Unit.

CONTROLS

- Units are factory-wired with color-coded wires with low-voltage control circuit protected by a resettable circuit breaker on the 24-v transformer side. Transformer shall have 75VA capability.
- Units have single-point power connections.
- Unit to be provided with a terminal block for connection and control wiring.
- Units come with a grounding lug as standard.
- Units come standard with 5kA SCCR rating.

COMPRESSORS

- Compressors are hermetically sealed scroll compressors and are factory mounted on rubber isolation grommets.
- Compressors shall be internally protected from high discharge pressure by an internal pressure relief valve and externally protected via a high pressure switch in the discharge line.

COILS

- Models utilize 7mm copper tube and aluminum fin condenser coils.
- Coils are leak-tested to 575 psig and pressure-tested to 450 psig.
- Heat Pump units have a TXV metering device.
- Condenser coils are qualified to UL 60335-2-40 burst test. Units include high- and low-pressure switches, service ports, and factory-installed filter driers. All heat pump (DZ) units use a refrigerant accumulator.

HEAT PUMP HEATING

- Condenser coil, compressors and refrigerant circuit are designed for heat pump operation. The refrigerant circuit contains a 4-way reversing valve to provide heat operation. Electric heating option is provided for auxiliary heating.

FANS

- Fan motors are single phase, ECM direct-drive, multi-speed motors. All motors are thermally protected and use permanently lubricated bearings.
- Outdoor condenser fans are direct-drive, permanently lubricated bearings, and contain overload protection.

COOLING/HEATING OPERATION RANGE OF OUTDOOR AMBIENT TEMPERATURE

- The Cooling/Heating operating range is between 55°F (0°F with Low Ambient Kit) and 115°F outdoor ambient temperature.

STORAGE AND HANDLING

- Unit to be stored and handled per manufacturer's recommendations.
- Unit to be stored in the upright position.

FIELD-INSTALLED OPTIONS

- Anchor Bracket Kit
- Low Ambient Kit
- Outdoor Thermostat with Lockout Stat (Required for DZ heat pump applications where ambient temperatures fall below 0°F with 50% or higher relative humidity)

