



## Standard Efficiency Light Commercial Splits Condenser and Heat Pump Units DC3SEA/DH4SEA

### MECHANICAL GUIDE SPECIFICATIONS FOR DC3SEA/DH4SEA SERIES COMMERCIAL CONDENSER UNITS 3-5 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-32 refrigerant and run-tested at the factory to check modes of operation and proper fan rotation.
- All units are rated in accordance with AHRI Standards 210/240.
- Units are ETL listed and certified under US and Canadian standards of safety requirements per UL 60335-2-40 4<sup>th</sup> 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](http://www.daikinac.com).

#### CABINET

- Unit cabinets are made with galvanized steel as follows, top panel 0.034" thick~21-gauge, control panel cover 0.036" thick" ~20-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 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 5MM copper tube and aluminum fin condenser coils.
- Coils are leak-tested to 450 psig and all units are leak tested when refrigerant charged.
- 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 (DH) 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

- Condenser fan motors are Three phase PSC motors. All motors are thermally protected and use permanently lubricated bearings.

#### COOLING/HEATING OPERATION RANGE OF OUTDOOR AMBIENT TEMPERATURE

- The Cooling/Heating operating range is between 55°F (0°F with Low Ambient Kit) and 125°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)
- Anti short cycle kit
- Hard start kit
- Liquid line solenoid kit