

**EQUIPMENT DATA SPECIFICATION
AIR CONDITIONER
HC121**

Hazardous Location Package



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SPECIFICATION

1.0 SCOPE

This specification covers the minimum general and specific requirements for the Air Conditioner unit for electrical enclosures used in hazardous locations.

2.0 REQUIREMENTS

- Type of Heat Exchange Compressor based air conditioner
- Ambient Operating Temperature 60°F – 125°F
- Approvals and Stamps CE
- Area Classification Class 1, Division 2, Groups B, C & D
- NEMA Type 4X
- Voltage 110-120 VAC, 60 Hz, 64.50A Inrush, 19.4A Running
220-240 VAC, 60 Hz, 31.50A Inrush, 8.2A Running
440-480 VAC, 60 Hz, 15.09A Inrush, 3.93A Running
- BTU Rating 12,000 BTUH, Nominal
- Material Type 304 or 316 Stainless Steel, #4 Finish
- Construction Chassis: Rigid, insulated, closed loop
Shroud: Seam welded, sloped top, insulated
- Refrigeration Circuit Protection Electrostatic epoxy coated coils
- Condensate Removal Active evaporation utilizing superheated refrigerant coil
- Refrigerant R438a
- Refrigerant Metering Thermal expansion valve

- Refrigerant Service Ports
 - High pressure
 - Low pressure
- Compressor Protection
 - Condenser high pressure switch
 - Evaporator low pressure switch
- Digital Controller
 - Controls
 - Cooling set point
 - Cooling set point differential
 - Auxiliary set point: Dry contact
 - Auxiliary set point differential
 - Display
 - Evaporator temperature
- Compressor Head Pressure Control
 - Pressure controlled condenser fan switch
- Compressor Protection
 - Thermal/current overload switch (self-resetting)
- Condenser Filter
 - Standard: Expanded aluminum, 250 micron, 60% efficiency
- Electrical Connection
 - Terminal block
- Dimensions
 - 120 V / 230 V: 48”H x 15.9”W x 21.7”D
 - 480 V: 56.6”H x 15.9”W x 21.7”D
- Unit Weight
 - 120 V / 230 V: 182 lbs.
 - 480 V: 239 lbs.
- Shipping
 - Corrugated packaging and pallet

3.0 OPTIONS

- High Capacity Condenser Filter
 - 2” Pleated, 304 Stainless steel mesh, 250 micron, 94% efficiency
- Louvered Security Filter Cover
 - 304 or 316 Stainless Steel
- Low Ambient
 - For operation at ambient temperatures below 60°F
- Dry Contact
 - Normally open & normally closed
 - (Operation when enclosure temperature exceeds maximum limit)
- Custom Programming
 - Factory programming of digital controller for Celsius temperature or deviation from default settings
- High Ambient
 - For operation at ambient temperatures above 125°F

- Adjustable Temperature Probe Monitor & maintain temperature at any point inside equipment enclosure
- Vibration Package Protects air conditioner components from effects of moderate or severe vibration

4.0 ACCESSORIES

- Replacement Filters Standard
High Capacity
- Alarm & Controlling Web Server XWEB300D-8B000 – for up to 6 air conditioners
XWEB300D-8F000 – for up to 18 air conditioners

5.0 CODES AND STANDARDS

- ANSI/UL 484 Room Air Conditioners (Special Purpose)
- ANSI/NFPA 70 National Electrical Code
- CSA-C22.2 No. 236-M90 Heating and Cooling Equipment
- CSA-C22.2 No. 117 Room Air Conditioners (Special Purpose)
- CAN/CSA-C22.1 Canadian Electrical Code, Part I.
- EN Harmonized European Standards
 - EN 378-1 through -4 Refrigerating Systems and Heat Pumps
 - EN 60204-1 Electrical Equipment of Machinery
 - EN 60529, IP IP Code
 - EN 61000-3-11 Electromagnetic Compatibility
 - EN 61000-6-2 Emission
 - EN 61000-6-4 Immunity
- Hazardous Location Standards
 - ANSI/UL 1203 Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations
 - UL 698 Industrial Control Equipment for Use in Hazardous (Classified) Locations
 - ANSI/UL 877 Circuit Breakers and Circuit-Breaker Enclosures for Use in Hazardous (Classified) Locations
 - UL 886 Outlet Boxes and Fittings for Use in Hazardous (Classified) Locations
 - ANSI/UL 894 Switches for Use in Hazardous (Classified) Locations
 - ANSI/UL 1002 Electrically Operated Valves for Use in Hazardous (Classified) Locations
 - ANSI/UL 1010 Receptacle-Plug Combinations for Use in Hazardous (Classified) Locations
 - ANSI/UL 913 Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II and III, Division 1, Hazardous (Classified) Locations
 - ANSI/ISA-12.12.01 Non-Incendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous

- UL 1604 (Classified) Locations
Electrical Equipment for Use in Class I and II, Division 2, and Class III Hazardous (Classified) Locations
- ANSI/NFPA 496 Purged and Pressurized Enclosures for Electrical Equipment
- IEC 60529 Classification of Degrees of Protection Provided by Enclosures
- CSA-C22.2 No. 30-1986 Explosion-Proof Enclosures for Use in Class I Hazardous Locations
- CSA-C22.2 No. 25-1966 Enclosures for Use in Class II Groups E, F and G Hazardous Locations
- CAN/CSA-E61241-1-1-2002 Limitation - Specification for Apparatus Electrical Apparatus for Use in the Presence of Combustible Dust - Part 1-1: Electrical Apparatus Protected by Enclosures and Surface Temperature
- CAN/CSA-C22.2 No. 157-1992 Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations
- CSA-C22.2 No. 213-1987 Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations
- ANSI/NFPA 496 Purged and Pressurized Enclosures for Electrical Equipment