

## **EQUIPMENT DATA SPECIFICATION**

### **AIR CONDITIONER HC101**

#### **Hazardous Location Systems**



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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 – 122°F
- Approvals and Stamps cUL<sub>US</sub> (Safety), cMET<sub>US</sub> (Haz Loc), CE
- Area Classification Class I, Division 2, Groups A, B, C & D, T4
- UL Type 4X
- Voltage 108-132 VAC, 60 Hz, 64.50A Inrush, 19.4A Running  
207-253 VAC, 60 Hz, 31.50A Inrush, 8.2A Running  
440-480 VAC, 60 Hz, 15.09A Inrush, 4.2A Running
- BTU Rating 10,000 BTUH, Nominal
- Material Type 304 stainless steel housing, #4 Finish
- Construction Chassis: Rigid, insulated, closed loop  
Shroud: Seam welded, sloped top, insulated
- Refrigeration Circuit Protection Electrostatic epoxy coated condenser coil
- 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
    - Enclosure air 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 15”D
  - 480 V: 57.6”H x 15.9”W x 15”D
- Unit Weight
  - 120 V: 162 lbs.
  - 230 V: 166 lbs.
  - 480 V: 232 lbs.
- Shipping
  - Corrugated packaging and pallet

### 3.0 OPTIONS

- Material Type
  - 316 stainless steel housing, #4 Finish
- Refrigeration Circuit Protection
  - Electrostatic epoxy coated evaporator coil
  - Epoxy coated refrigeration tubing
- 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
 (High Temperature Warning)
- Custom Programming
  - Factory programming of digital controller for Celsius temperature or deviation from default settings

- Extended Temperature Probe Monitor & maintain temperature at any point inside equipment enclosure
- Remote Controller Digital controller supplied with 10 ft. cable & bracket for installation inside equipment cabinet
- Vibration Package Protects air conditioner components from effects of moderate or severe vibration

#### 4.0 ACCESSORIES

- Replacement Filters Standard  
High Capacity

#### 5.0 CODES AND STANDARDS

- ANSI/UL 484 Room Air Conditioners (Special Purpose)
- UL508A Industrial Control Panels (Complies when installed with UL508A approved industrial control panels)
- 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.
- 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
  - 2011/65/EU Restriction of the use of certain hazardous substances in electrical and electronic equipment
- Hazardous Location Standards
  - ANSI/ISA-12.12.01-2015 Nonincendive Electrical Equipment for use in Class I and II, Division 2 and Class III, division 1 and 2 Hazardous (Classified) Locations
  - CAN/CSA C22.2 No. 213-15 Nonincendive Electrical Equipment for use in Class I and II, Division 2 and Class III, Division 1 and 2 Hazardous (Classified) Locations