EQUIPMENT DATA SPECIFICATION

AIR CONDITIONER
CS020

Hazardous Location Systems

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TABLE OF CONTENTS

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 – 118°F
• Approvals and Stamps	$_{C}UL_{US}$ (Safety), $_{C}MET_{US}$ (Haz Loc), CE
• Area Classification	Class I, Division 2, Groups A, B, C & D, T6
• UL Type	4X
• Voltage	103.5-126.5 VAC, 60 Hz, 10.63A Inrush, 4.1A Running 207-253 VAC, 60 Hz, 8.84A Inrush, 2.0A Running
• BTU Rating	2000 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	R134a
• 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 Protection: Thermal/current overload switch (self-resetting)
- Condenser Filter: Standard: Expanded aluminum, 250 micron, 60% efficiency
- Electrical Connection: Terminal block
- Dimensions: 20”H x 10”W x 10”D
- Unit Weight: 115 V: 44 lbs.
  230 V: 49 lbs.
- Shipping: Corrugated packaging and pallet
- Warranty: 5 years

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 (High Temperature Warning): Normally open
- 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

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