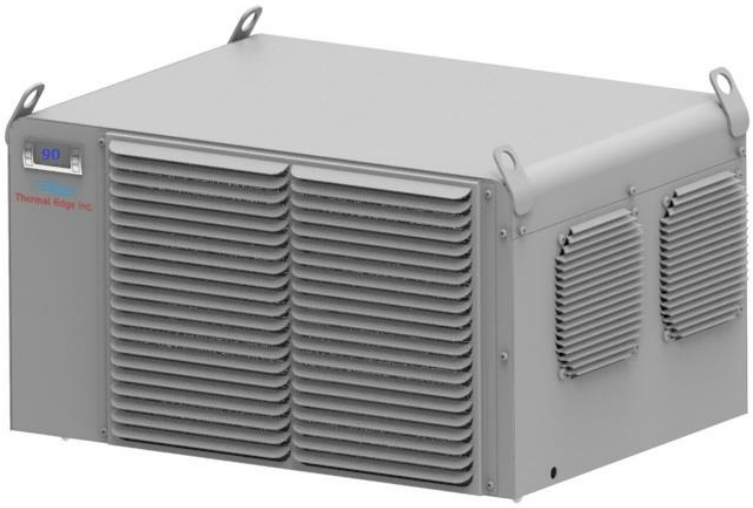
EQUIPMENT DATA SPECIFICATION

AIR CONDITIONER
TM061

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 — $_{C}UL_{US}$ (Safety), $_{C}MET_{US}$ (Haz Loc), CE
- Area Classification — Class I, Division 2, Groups A, B, C & D, T4
- UL Type — 4X
- Voltage — 103.5-126.5 VAC, 60 Hz, 35.7A Inrush, 10.6A Running
  207-253 VAC, 60 Hz, 22.7A Inrush, 6.0A Running
  414-506 VAC, 60 Hz, 11.35A Inrush, 3.0A Running
- BTU Rating — 6000 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

- Digital Controller
  - Controls
    - Cooling set point
    - Cooling set point differential
    - Compressor protection:
      - Anti-short cycle delay
      - Condenser high temperature limit
      - Evaporator low pressure limit
    - Probes displayed:
      - Evaporator temperature
      - Condenser temperature
    - Auxiliary set points:
      - Heater
      - Dry contact
    - Auxiliary set point differential
  - Alarms
    - Enclosure probe failure (P1)
    - Condenser probe failure (P2)
    - Maximum temperature for 3 minutes (HA)
    - Minimum temperature for 3 minutes (LA)
    - Condenser high temperature for 3 minutes (HA2)
    - Condenser low temperature for 3 minutes (LA2)
    - Evaporator low pressure for 2 minutes (CA)
- Compressor Protection — Thermal/current overload switch (self-resetting)
- Condenser Filter — Filter free
- Electrical Connection — Terminal block
- Dimensions — UL Type 12: 15.6”H x 26.3”W x 20.2”D
  UL Types 4 & 4X: 15.6”H x 30.6”W x 20.2”D
- Unit Weight — 115 V: 111 lbs.
  230 V: 111 lbs.
  460 V: 154 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
• Condenser Filter	Standard Capacity: Expanded aluminum, 250 micron, 60% efficiency High Capacity: 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
• Vibration Package	Protects air conditioner components from effects of moderate or severe vibration

4.0 ACCESSORIES

• Replacement Filters	Standard Capacity 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