

EQUIPMENT DATA SPECIFICATION

AIR CONDITIONER HC151

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
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• 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 207-253 VAC, 60 Hz, 43.50A Inrush, 11.3A Running

414-506 VAC, 60 Hz, 20.84A Inrush, 5.7A Running

• BTU Rating 15,000 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	o 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 		
o Display	o 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 	230 V: 48"H x 15.9"W x 21.7"D		
	460 V: 56.6"H x 15.9"W x 21.7"D		
Unit Weight	230 V: 170 lbs.		
	460 V: 247 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

• 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
 EN 60204-1
 Refrigerating Systems and Heat Pumps
 Electrical Equipment of Machinery

o EN 60529, IP IP Code

o EN 61000-3-11 Electromagnetic Compatibility

○ EN 61000-6-2 Emission
 ○ EN 61000-6-4 Immunity

o 2011/65/EU Restriction of the use of certain hazardous substances in

electrical and electronic equipment

Hazardous Location Standards

o 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

o 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