

EQUIPMENT DATA SPECIFICATION

AIR CONDITIONER NE080

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 $60^{\circ}\text{F} - 122^{\circ}\text{F}$

• Approvals and Stamps _CUL_{US} (Safety), _CMET_{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, 42.41A Inrush, 7.83A Running

207-253 VAC, 60 Hz, 21.15A Inrush, 4.80A Running 414-506 VAC, 60 Hz, 10.13A Inrush, 2.4A Running

• BTU Rating 8000 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 R422d

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	115 V / 230 V: 36"H x 11.8"W x 15.1"D
		460 V: 44.63"H x 11.8"W x 15.1"D
•	Unit Weight	115 V: 102 lbs.
		230 V: 103 lbs.
		460 V: 142 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