

EQUIPMENT DATA SPECIFICATION

AIR CONDITIONER NE040

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

• 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, 23.42A Inrush, 5.15A Running

207-253 VAC, 60 Hz, 13.65A Inrush, 3.07A Running 414-506 VAC, 60 Hz, 5.86A Inrush, 1.3A Running

• BTU Rating 4000 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 switchEvaporator low pressure switch
•	Digital Controller	
	o Controls	 Cooling set point Cooling set point differential Auxiliary set point: Dry contact Auxiliary set point differential
	 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	115 VAC / 230 VAC: 32"H x 11.8"W x 9.5"D 460 VAC: 38"H x 11.8"W x 9.5"D
•	Unit Weight	115 V: 66 lbs. 230 V: 72 lbs. 460 V: 99 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

○ 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