

EQUIPMENT DATA SPECIFICATION

AIR CONDITIONER NE080

Hazardous Location Systems



TABLE OF CONTENTS

- 1.0 SCOPE
- 2.0 REQUIREMENTS
- 3.0 OPTIONS
- 4.0 ACCESSORIES
- 5.0 CODES AND STANDARDS

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
110-120 VAC, 60 Hz, 42.41A Inrush, 7.83A Running

220-240 VAC, 60 Hz, 21.15A Inrush, 4.80A Running 440-480 VAC, 60 Hz, 10.13A Inrush, 2.30A 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

High pressure Refrigerant Service Ports Low pressure Condenser high pressure switch **Compressor Protection** Evaporator low pressure switch Digital Controller Controls Cooling set point Cooling set point differential o Auxiliary set point: Dry contact Auxiliary set point differential Display Enclosure air temperature Pressure controlled condenser fan switch Compressor Head Pressure Control **Compressor Protection** Thermal/current overload switch (self-resetting) Standard: Expanded aluminum, 250 micron, 60% efficiency Condenser Filter **Electrical Connection** Terminal block 120 V / 230 V: 36"H x 11.8"W x 15.02"D **Dimensions** 480 V: 44.63"H x 11.8"W x 15.02"D 120 V: 97 lbs. Unit Weight 230 V: 98 lbs. 480 V: 142 lbs. Corrugated packaging and pallet Shipping 3.0 **OPTIONS** Material Type 316 stainless steel housing, #4 Finish **Refrigeration Circuit Protection** Electrostatic epoxy coated evaporator coil Epoxy coated refrigeration tubing 2" Pleated, 304 Stainless steel mesh, 250 micron, 94% efficiency High Capacity Condenser Filter 304 or 316 Stainless Steel Louvered Security Filter Cover Low Ambient For operation at ambient temperatures below 60°F Normally open **Dry Contact** (High Temperature Warning) Factory programming of digital controller for Celsius **Custom Programming**

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