

EQUIPMENT DATA SPECIFICATION AIR CONDITIONER

Dust & Dirt Environment Package NE060



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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 environments with dust from flour, coal, paper, wood, etc., that will clog the air conditioner filters and coils. The airborne oil in machine shops also will be captured by the air conditioner coils and restrict air flow.

2.0 **REQUIREMENTS**

• Type of Heat Exchange	Compressor based air conditioner
• Ambient Operating Temperature	$60^{\circ}\text{F} - 125^{\circ}\text{F}$
• Approvals and Stamps	UL, cUL, CE
• UL Type	12 or 4
• 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	6000 BTUH, Nominal
• Material Type	Powder coated cold rolled steel
Construction	Chassis:Rigid, insulated, closed loopShroud:Seam welded, sloped top, insulated
Refrigeration Circuit Protection	Electrostatic epoxy coated coils
Condensate Removal	Active evaporation utilizing superheated refrigerant coil
• Refrigerant	R422d
• Refrigerant Metering	Thermal expansion valve
Refrigerant Service Ports	High pressure Low pressure

٠	Digital Controller	
	o 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
	o 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) Evenerator low pressure for 2 minutes (CA)
		• Evaporator low pressure for 2 minutes (CA)
•	Compressor Head Pressure Control	Pressure controlled condenser fan switch
٠	Compressor Protection	Thermal/current overload switch (self-resetting)
•	Condenser Filter	High Capacity: 2" Pleated, 304 Stainless steel mesh, 250 micron, 94% efficiency
•	Electrical Connection	Terminal block Power On/Off switch
•	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: 97 lbs. 230 V: 98 lbs. 460 V: 142 lbs.
•	Shipping	Corrugated packaging and pallet
•	Warranty	5 years

3.0 **OPTIONS**

•	Louvered Security Filter Cover	Powder coated mild steel
•	NEMA Type	4X
•	Refrigeration Circuit Protection	Electrostatic epoxy coated coils, copper tubing brazed with 45% silver solder & epoxy coated
•	Integrated Heater	500W 1000W
•	Low Ambient	For operation at ambient temperatures below 60°F
•	Remote Controller	Digital controller supplied with 10 ft. cable & bracket for installation inside equipment cabinet
•	Dry Contact	Normally open
	(Operation when enclosure	Normally closed
	temperature exceeds maximum limit)	Normally open & normally closed
•	Custom Programming	Factory programming of digital controller for Celsius temperature or deviation from default settings
•	External Heat Control	100 W – 950W
•	High Ambient	For operation at ambient temperatures above 125°F
•	Open Door Kill Switch	Disables power to air conditioner when equipment enclosure door is open
•	Adjustable Temperature Probe	Monitor & maintain temperature at any point inside equipment enclosure
•	Controller Communication Output	Modbus RTU Ethernet/IP
•	Vibration Package	Protects air conditioner components from effects of moderate or severe vibration
•	Redundant System	Alternating operation of two air conditioners including backup mode in the event that one unit fails
4.0	ACCESSORIES	
•	Replacement Filters	High Capacity
•	Alarm & Controlling Web Server	XWEB300D

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5.0 CODES AND STANDARDS

- ANSI/UL 484
- ANSI/NFPA 70
- CSA-C22.2 No. 236-M90
- CSA-C22.2 No. 117
- CAN/CSA-C22.1
- EN Harmonized European Standards

 EN 378-1 through -4
 EN 60204-1
 EN 60529, IP
 EN 61000-3-11
 EN 61000-6-2
 EN 61000-6-4
- Room Air Conditioners (Special Purpose)
- National Electrical Code
- Heating and Cooling Equipment Room Air Conditioners (Special Purpose)
- Canadian Electrical Code, Part I.
- Refrigerating Systems and Heat Pumps Electrical Equipment of Machinery IP Code Electromagnetic Compatibility Emission
- Immunity