

**EQUIPMENT DATA SPECIFICATION
AIR CONDITIONER
NE030**

Waste Water Treatment Package



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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 all levels of water treatment, disposal or purification.

2.0 REQUIREMENTS

- Type of Heat Exchange Compressor based air conditioner
- Ambient Operating Temperature 60°F – 125°F
- Approvals and Stamps UL, cUL, CE
- 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 3000 BTUH, Nominal
- Material Type 304 or 316 Stainless Steel, #4 Finish
- Construction Chassis: Rigid, insulated, closed loop
Shroud: Seam welded, sloped top, insulated
- Refrigeration Circuit Protection Electrostatic epoxy coated coils, copper tubing brazed with 45% silver solder & epoxy coated
- Condensate Removal Active evaporation utilizing superheated refrigerant coil
- Refrigerant R422d
- Refrigerant Metering Thermal expansion valve
- Refrigerant Service Ports High pressure
Low pressure

- Digital Controller
 - 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
 - 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)
 - Evaporator low pressure for 2 minutes (CA)
 - Remote Mount
 - Digital controller supplied with 8 ft. cable & bracket for installation inside equipment cabinet
- 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
Power On/Off switch
- Dimensions 115 V / 230 V: 32”H x 11.8”W x 9.5”D
460 V: 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

- High Capacity Condenser Filter 2” Pleated, 304 Stainless steel mesh, 250 micron, 94% efficiency
- Louvered Security Filter Cover 304 or 316 Stainless Steel
- Integrated Heater 500W
1000W
- Low Ambient For operation at ambient temperatures below 60°F
- 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 Heater 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 Standard
High Capacity
- Alarm & Controlling Web Server XWEB300D

5.0 CODES AND STANDARDS

- ANSI/UL 484 Room Air Conditioners (Special Purpose)
- 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.
- EN Harmonized European Standards
 - EN 378-1 through -4 Refrigerating Systems and Heat Pumps
 - EN 60204-1 Electrical Equipment of Machinery
 - EN 60529, IP IP Code
 - EN 61000-3-11 Electromagnetic Compatibility
 - EN 61000-6-2 Emission
 - EN 61000-6-4 Immunity