EQUIPMENT DATA SPECIFICATION
AIR CONDITIONER
NE040

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 — 4000 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 (Operation when enclosure temperature exceeds maximum limit)	Normally open Normally closed 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