EQUIPMENT DATA SPECIFICATION
AIR CONDITIONER

Telecom Package
NE040-D48

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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 with telecommunications or digital signage outdoor enclosures.

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 — 4 or 4X
- Voltage — 43-53 VDC, 25.3A, Running
- BTU Rating — 4000 BTUH, Nominal
- Material Type — Type 4: Powder coated mild steel
Type 4X: 304 or 316 Stainless Steel, #4 Finish
- Construction — Chassis: Rigid, insulated, closed loop
Shroud: Seam welded, sloped top, insulated
- Condensate Removal — Active evaporation utilizing superheated refrigerant coil
- Refrigerant — R134a
- 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 10 ft. cable & bracket for installation inside equipment cabinet
- Compressor Head Pressure Control — Temperature operated condenser fan
- Compressor Protection — Compressor motor drive controller
- Condenser Filter — Standard: Expanded aluminum, 250 micron, 60% efficiency
- Louvered Security Filter Cover — Type 4: Powder coated mild steel
Type 4X: 304 or 316 Stainless Steel, #4 Finish
- Electrical Connection — Terminal block
Power On/Off switch
- Dimensions — 35.27”H x 11.8”W x 9.5”D
- Unit Weight — 103 lbs.
- Shipping — Corrugated packaging and pallet
- Warranty — 5 years

3.0 OPTIONS

• Condenser Filter	High Capacity: 2" Pleated, 304 Stainless steel mesh, 250 micron, 94% efficiency
• Refrigeration Circuit Protection	Electrostatic epoxy coated coils, copper tubing brazed with 45% silver solder & epoxy coated
• 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
• 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

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