

**EQUIPMENT DATA SPECIFICATION
AIR CONDITIONER
CS020**

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 – 131°F
- Approvals and Stamps UL, cUL, CE
- UL Type 4X
- Voltage 103.5-126.5 VAC, 60 Hz, 10.63A Inrush, 4.1A Running
207-253 VAC, 60 Hz, 8.84A Inrush, 2.00A Running
- BTU Rating 2000 BTUH, Nominal
- Material Type 304 or 316 Stainless Steel, #4 Finish
- Construction Chassis: Rigid, insulated, closed loop
Shroud: Seam welded, 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 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 8 ft. cable & bracket for installation inside equipment cabinet
- 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: 20”H x 10”W x 10”D
- Unit Weight
 - 115 V / 230 V: 44 lbs.
- Shipping
 - Corrugated packaging and pallet
- Warranty
 - 5 years

3.0 OPTIONS

- Integrated Heater 500W
- Dry Contact Normally open
(Operation when enclosure temperature exceeds maximum limit) 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 – 950 W
- High Ambient For operation at ambient temperatures above 131°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

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