

# EQUIPMENT DATA SPECIFICATION AIR CONDITIONER HC121

# Food & Beverage Package



#### TABLE OF CONTENTS

- 1.0 SCOPE
- 2.0 REQUIREMENTS
- 3.0 OPTIONS
- 4.0 ACCESSORIES
- 5.0 CODES AND STANDARDS

### **SPECIFICATION**

#### 1.0 SCOPE

This specification covers the minimum general and specific requirements for the Air Conditioner unit that is subject to a regular schedule of plant or machine wash downs with water and/or chemicals.

# 2.0 REQUIREMENTS

• Ambient Operating Temperature  $60^{\circ}\text{F} - 131^{\circ}\text{F}$ 

Approvals and Stamps
 UL, cUL, CE

• UL Type 4X

• Voltage 103.5-126.5 VAC, 60 Hz, 64.50A Inrush, 19.4A Running

207-253 VAC, 60 Hz, 31.50A Inrush, 8.2A Running 414-506 VAC, 60 Hz, 15.09A Inrush, 4.1A Running

• BTU Rating 12,000 BTUH, Nominal

Material Type
 304 Stainless Steel, #4 Finish

Construction
 Chassis: Rigid, insulated, closed loop

Shroud: Seam welded, sloped top, insulated

• Refrigeration Circuit Protection Electrostatic epoxy coated coils

Condensate Removal Active evaporation utilizing superheated refrigerant coil

Refrigerant R438a

• Refrigerant Metering Thermal expansion valve

• Refrigerant Service Ports High pressure

Low pressure

• Digital Controller

o Controls o Cooling set point

Cooling set point differential

o Compressor protection:

Anti-short cycle delay

o Condenser high temperature limit

o Evaporator low pressure limit

Probes displayed:

o Evaporator temperature

Condenser temperature

Auxiliary set points:

o Heater

o Dry contact

Auxiliary set point differential

o Alarms o Enclosure probe failure (P1)

o Condenser probe failure (P2)

Maximum temperature for 3 minutes (HA)

o Minimum temperature for 3 minutes (LA)

Condenser high temperature for 3 minutes (HA2)

o Condenser low temperature for 3 minutes (LA2)

Evaporator low pressure for 2 minutes (CA)

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

• Louvered Security Filter Cover 304 Stainless Steel

• Electrical Connection Terminal block

Power On/Off switch

• Dimensions 115 V / 230 V: 48"H x 15.9"W x 15.1"D

460 V: 56.6"H x 15.9"W x 15.1"D

• Unit Weight 115 V: 167 lbs.

230 V: 163 lbs. 460 V: 237 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

Filter Hood Additional wash down protection for standard filter

Material Type
 316 Stainless Steel, #4 Finish

Louvered Security Filter Cover
 316 Stainless Steel

• Refrigeration Circuit Protection Electrostatic epoxy coated coils, copper tubing brazed with 45%

silver solder & epoxy coated

• Integrated Heater 500W

1000W 1500W

• 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 Heater Control
 100 W – 950W

• 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

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

o EN 378-1 through -4 Refrigerating Systems and Heat Pumps

o EN 60204-1 Electrical Equipment of Machinery

○ EN 60529, IP IP Code

EN 00329, IF

○ EN 61000-3-11 Electromagnetic Compatibility

○ EN 61000-6-2 Emission ○ EN 61000-6-4 Immunity