PRIME®

NATURAL AIR COOLING
5kW MODULAR DATA CENTER
FOR ENTERPRISE SOLUTIONS

MODEL: PRM-E2A-5
5kW 61U RACK MDC

PRIME's Modular Data Centers are a prefabricated and efficient solution for 5G Macro Sites and Enterprise applications. The Natural Air Cooling system cuts energy costs dramatically – using 75% less water and 50% less energy than traditional cooling solutions. The prefabricated structure integrates multiple physical infrastructure subsystems; all components are fully inspected and tested prior to the unit being shipped out to the customer. PRIME's MDCs are easy to operate and maintain.

FEATURES & BENEFITS
- Save Time & Money
- Rapid Deployment
- Stable, Reliable & Scalable
- Self-Monitoring Real-Time PLC Control
- Self-Regulating Climate Control

APPLICATIONS
- Enterprise Solutions
  - Small Businesses
  - Manufacturing
  - Retail Stores
  - Hotels
  - Streaming/Gaming
  - Smart Homes
- Emergency Services

Cooling Fans

Intelligent PDUs

Air & Chemical Filters

PLC Panel

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COOLING
Cooling Type: Natural Air & Evaporation
Cooling Option: DX (direct expansion)
Cooling Capacity: 5kW
Internal Operating Humidity: 10% - 95%
Internal Operating Temperature:
   60.08ºF ~ 80.0ºF/15.6ºC ~ 26.7ºC

POWER DISTRIBUTION
Maximum IT Load: 5kW
Nominal Input Voltage: 200-220VAC, 3 Phase, 50/60Hz
Maximum Input Current: 32A
Power Distribution: Circuit breaker panel
PDU: Rack Mount, 32A, AP1000 Series, 2 per rack
   Input: 200-220VAC. Output: 200-220V
   Outlets: C13 x 14, C19 x 2
PDU Options: On/Off switches & output meters

SPECIFICATIONS
Estimated Weight: 1102lbs/500kg
Physical Measurements:
Rack Measurements: 1pc 21U, 1pc 40U
   MDC Measurements (Exterior):
   59.06in (W) x 56.1in (D) x 77.95in (H)
   1500mm (W) x 1425mm (D) x 1980mm (H)
   MDC Measurements (Interior):
   17.72in (W) x 29.53in (D) x 70in (H) 2*40U
   450mm (W) x 750mm (D) x 1778mm (H) 2*40U

OPERATING CONDITIONS
Elevation: 0 – 3,280ft/1,000m max. 9,842ft/3,000m
   Altitude over 1000 meters -
   power switch capacity will reduce 1% per 100 meters
Temperature: 5ºF ~ 113ºF/-20ºC ~ 45ºC
Humidity: 5% - 100% RH, non-condensing
Application: Indoor
Seismic Grade: Optional - Depends on installation
                site and environment

MODULE ACCESSORIES
Water hose: Corrugated stainless steel tubing, 5m
Air filter: G4 air filter, 3 pcs
Humidifier 350 x 600 x 200mm, 1pc

PLC MONITORING & CONTROL
Data Center Management System:
   Power, Cooling, Security, Environmental Monitoring
   & Control, PUE Display
Serial Device Server: RS485 Connection,
                         TCP/IP Communication
Monitoring Points (partial): Input Voltage, Current,
   Frequency, Active Power, Power, Cooling Temperature,
   Cooling Operation Status, Filters, Temperature, Humidity,
   Smoke, Leaks, Door Access
Warning Alert Notification (partial): Visual on PLC, and
   65dB Alarms for Power Failure, Over-Voltage, Current
   Overload, On/Off Switching, Overheating, Water Leaks,
   Smoke, Filters, Doors
Telecommunication: MQTT (Standard),
Telecommunication Options: SNMP/ HTTP

ACCESS
Door Lock: Deadbolt & key
Door Lock Options: Electronic lock, Bluetooth,
                      key card, APP

ADDITIONAL FEATURES
L Style Bracket: Installed to 19in/482.6mm rack,
                    load 110lbs/50kg
Lighting: 2pcs 24V LED light, 11in/300mm
             (with on/off switch, can be connected in series)

Prime Wire & Cable, Inc.
Diamond Bar, CA 91765

primewirecable.com

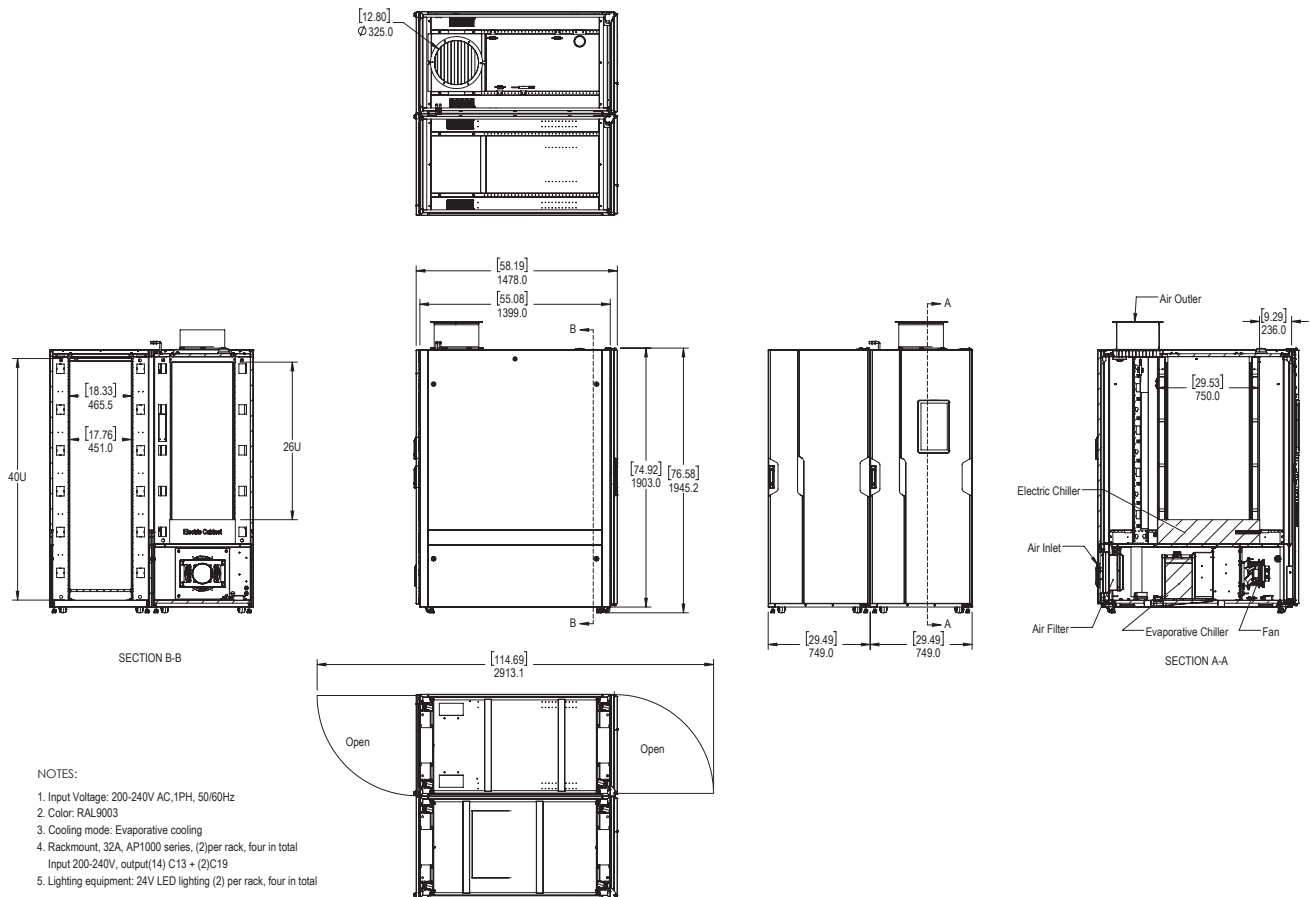datacenters@primewirecable.com

909.718.5258

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[12.80]
Ø 325.0

[58.19]
1478.0

[55.08]
1399.0

B

[18.33]
465.5

[17.76]
451.0

40U

26U

[74.92]
1903.0

[76.58]
1945.2

B

SECTION B-B

[114.69]
2913.1

Open

Open

A

[9.29]
236.0

Air Outler

[29.53]
750.0

Electric Chiller

Air Inlet

Air Filter

Evaporative Chiller

Fan

SECTION A-A

[29.49]
749.0

[29.49]
749.0

A

A

NOTES:
1. Input Voltage: 200-240V AC,1PH, 50/60Hz
2. Color: RAL9003
3. Cooling mode: Evaporative cooling
4. Rackmount, 32A, AP1000 series, (2)per rack, four in total
   Input 200-240V, output(14) C13 + (2)C19
5. Lighting equipment: 24V LED lighting (2) per rack, four in total

NOTE:

1. Installation shall comply with all applicable national, state and local electrical regulations
2. Refer to the product manual for additional details prior to installation and site preparation work
3. Net weight of unit is 1102lbs/500kg
4. Cable entry at top and bottom of the unit
5. Front and rear service access required
6. Air flow and service requirements, as well as minimum clearance to fire
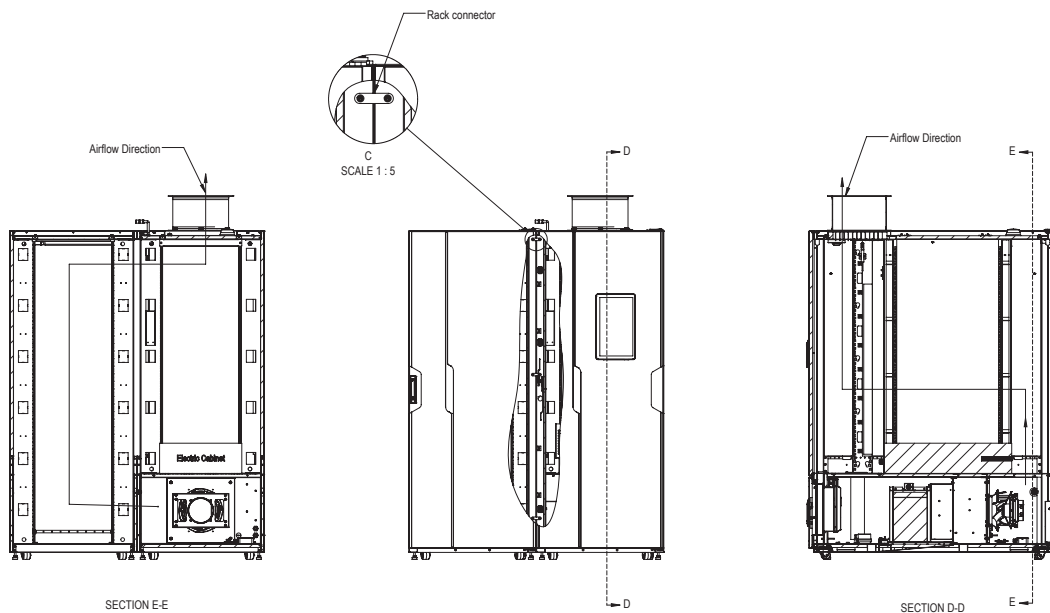   suppression systems should be considered when selecting a location for the unit

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MODEL: PRM-E2A-5
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Rack connector

C
SCALE 1 : 5

Airflow Direction

SECTION E-E

SECTION D-D

Airflow Direction

NOTES:
1. Rack connectors (3) per front and read

NOTE:
1. Installation shall comply with all applicable national, state and local electrical regulations
2. Refer to the product manual for additional details prior to installation and site preparation work
3. Net weight of unit is 1102lbs/500kg
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