PROLINE® Network Sealed Environmental Packages

PROLINE® Voice/Data and Server Cabinet, Type 12

Industry Standards

EIA RS-310-D

UL 508A Listed; Type 12; File Number E61997
cUL Listed per CSA C22.2 No 94; Type 12; File Number E61997

NEMA/EEMAC, Type 12

Application

Robustly built and sealed for use in wet, dusty or hot environments, PROLINE® Type 12 Cabinets have optional cutouts to air condition voice/data equipment and servers.

Features

- Three-point locking handles on all doors provide easy but controlled access; two keys included
- Fully welded frame safely supports sensitive equipment
- Fully gasketed to keep contaminants away from equipment, reducing maintenance costs
- Two sets of 19-in. rack angles support both front and rear of equipment
- Rack angles are infinitely adjustable from front to rear for positioning flexibility
- Mobile base provides easy placement of cabinet
- Levelers and anti-tip bracket secure cabinet to the floor

Specifications

- Welded 12 gauge steel frame with integral struts
- Front window door made of 16 or 14 gauge steel with safety glass window
- Solid 16 or 14 gauge steel back door
- Standard package has solid 16 or 14 gauge steel sides
- AC package has cutout for easy in-the-field installation of any CR29 Series Air Conditioner (shipped separately)
- Models available with EIA Universal standard 3/8-in. square or 10-32 tapped holes
- Mobile base includes casters, levelers and gland plate
- Gland plate allows easy routing of cable

Finish

Pretreated steel coated with RAL 9005 black or RAL 7035 light-gray textured, low-gloss polyester powder paint. Other finishes available—contact Hoffman Customer Service.

Load Rating

Static Load Rating: 2500 lb. (1134 kg)
A cabinet has a static load when:

- it is in its final, permanent, fully secured location
- its levelers are fully extended
- the anti-tip bracket is installed
- its load is uniformly applied to the two sets of rack-mounting angles, and
- the casters are not supporting any load (use the casters only to move the cabinet to its final location before loading)

Never move a cabinet with its maximum static load applied.
Contact Hoffman if further information is needed.

Casters Maximum Load: 1000 lb. (453 kg)
Exercise care when using casters to move the cabinet. Do not use casters to move a cabinet with more than 1000 lb. (453 kg) load. Avoid tipping and damage to the cabinet and its contents by slowly moving the cabinet on its casters across smooth, flat flooring. Avoid obstructions such as:

- large cracks
- floor displacement
- seams
- gravel

Never use casters while transporting a cabinet by truck on roadways.
Contact Hoffman if further information is needed.

Accessories

See the Package Components table and, for AC Ready Cabinet, CR29 air conditioner specifications in the Thermal chapter. Air conditioner will be shipped separately. It cannot be factory installed.

Bulletin: DPC, DPSR

Standard Product

Catalog Number	AxBxC mm	AxBxC in.	Cabinet, Package Type	Finish	Rack Units	Hole Type	Rack Angle
PDCP2078B12	2085 x 708 x 799	82.10 x 27.87 x 31.46	Voice Data, Standard	DataCom Black	42	Tapped	PRA1920TPL1
PDCP2078G12	2085 x 708 x 799	82.10 x 27.87 x 31.46	Voice Data, Standard	PROLINE Gray	42	Tapped	PRA1920TPL1
PSC20610B12	2085 x 608 x 999	82.10 x 23.94 x 39.34	Server, Standard	DataCom Black	42	Square	PRA1920THL1
PSC20610G12	2085 x 608 x 999	82.10 x 23.94 x 39.34	Server, Standard	PROLINE Gray	42	Square	PRA1920THL1
PDCP2078BAC	2085 x 708 x 799	82.10 x 27.87 x 31.46	Voice Data, AC Ready	DataCom Black	42	Tapped	PRA1920TPL1
PDCP2078GAC	2085 x 708 x 799	82.10 x 27.87 x 31.46	Voice Data, AC Ready	PROLINE Gray	42	Tapped	PRA1920TPL1
PSC20610BAC	2085 x 608 x 999	82.10 x 23.94 x 39.34	Server, AC Ready	DataCom Black	42	Square	PRA1920THL1
PSC20610GAC	2085 x 608 x 999	82.10 x 23.94 x 39.34	Server, AC Ready	PROLINE Gray	42	Square	PRA1920THL1

PROLINE® Network Sealed Environmental Packages

Package Components

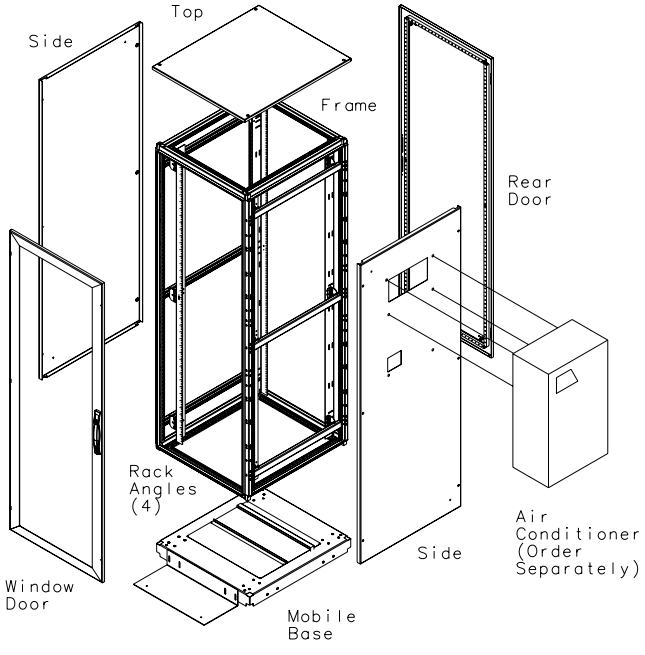
Catalog Number	AxBxC mm	AxBxC in.	Description	Finish
PFD2078B	2000 x 700 x 800	78.70 x 27.60 x 31.50	Frame	Black
PFD2078G	2000 x 700 x 800	78.70 x 27.60 x 31.50	Frame	Gray
PFD20610B	2000 x 600 x 1000	78.70 x 23.60 x 39.40	Frame	Black
PFD20610G	2000 x 600 x 1000	78.70 x 23.60 x 39.40	Frame	Gray
PDWG206B	2000 x 600	78.70 x 23.60	Window Doors	Black
PDWG206G	2000 x 600	78.70 x 23.60	Window Doors	Gray
PDWG207B	2000 x 700	78.70 x 27.60	Window Doors	Black
PDWG207G	2000 x 700	78.70 x 27.60	Window Doors	Gray
PDS206B	2000 x 600	78.70 x 23.60	Solid Doors	Black
PDS206G	2000 x 600	78.70 x 23.60	Solid Doors	Gray
PDS207B	2000 x 700	78.70 x 27.60	Solid Doors	Black
PDS207G	2000 x 700	78.70 x 27.60	Solid Doors	Gray
PSS208B	2000 x 800	78.74 x 31.50	Solid Sides	Black
PSS208G	2000 x 800	78.74 x 31.50	Solid Sides	Gray
PSS2010B	2000 x 1000	78.74 x 39.37	Solid Sides	Black
PSS2010G	2000 x 1000	78.74 x 39.37	Solid Sides	Gray
PSS208ACB	2000 x 800	78.74 x 31.50	Sides with AC Cutout	Black
PSS208ACG	2000 x 800	78.74 x 31.50	Sides with AC Cutout	Gray
PSS2010ACB	2000 x 1000	78.74 x 39.37	Sides with AC Cutout	Black
PSS2010ACG	2000 x 1000	78.74 x 39.37	Sides with AC Cutout	Gray
PT78B	700 x 800	27.56 x 31.50	Top	Black
PT78G	700 x 800	27.56 x 31.50	Top	Gray
PT610B	600 x 1000	23.62 x 39.37	Top	Black
PT610G	600 x 1000	23.62 x 39.37	Top	Gray
PBMG78B	700 x 800	27.60 x 31.50	Mobile Base	Black
PBMG610B	600 x 1000	23.60 x 39.37	Mobile Base	Black

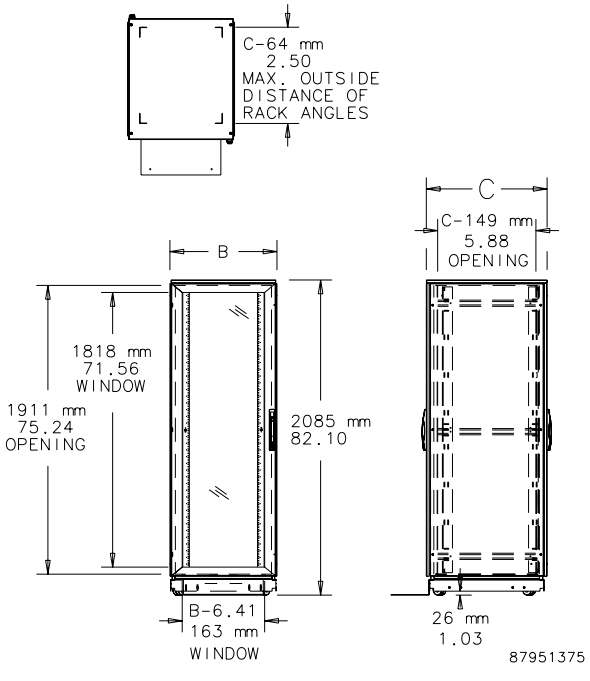
AC Ready PROLINE Cabinet

	BTUs	Watts
AC Ready PROLINE Cabinet	2200/4000	650/1172

For other AC sizes, contact Hoffman.

See Air Conditioner Sizing and CR Mid-Size Air Conditioners for details.





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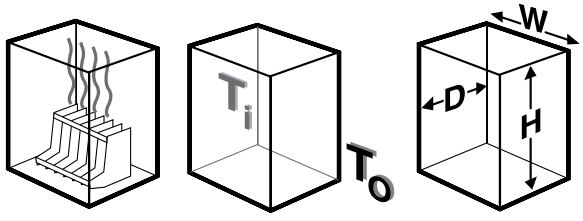
Thermal Management Sizing and Selection Software

Designed to assist you in determining the most suitable choices of air conditioners, heat exchangers or fans for your application. Download a free copy of our selection software by visiting our web site: hoffmanonline.com.
Click on **Thermal Management** chapter.

Air Conditioner Sizing



Air conditioners are appropriate for applications in which:
- The temperature inside the enclosure must be maintained at or below ambient temperature.
- Humidity must be removed from the enclosure.
- Ambient air contaminants must be kept out of the enclosure.

The following air conditioner sizing procedure applies to uninsulated, sealed and gasketed enclosures in indoor locations.

Step 1. Determine the internal heat load in watts (W)
Add the maximum heat output specifications for all equipment to be installed in cabinet.
Conversion: 1 W = 3.413 BTU/hr.

Step 2. Determine the desired temperature difference (ΔT) between the ambient temperature and the temperature inside the cabinet
Subtract the desired maximum temperature inside the cabinet (T_i) from the maximum expected temperature (T_o) outside the cabinet.

$$T_o - T_i = \Delta T$$

Conversion: 1 K or C ΔT = 1.8 F ΔT

Step 3. Determine the exposed surface area of the cabinet in square feet.
Use the following formula to determine area when H, W and D are the cabinet dimensions in inches.
2[(H x W) + (H x D) + (W x D)] ÷144 = Area ($ft.^2$)
Conversion: If dimensions are in millimeters, substitute 1,000,000 for 144. Then multiply the result by 10.76 to convert from m^2 to $ft.^2$

Step 4. Determine the air conditioner capacity required
Use the following formula:
(Watts x 3.413) + [(1.25 x Area in $ft.^2$) x ΔT in F] = BTU/hr.
Required air conditioner capacity in BTU/hr.

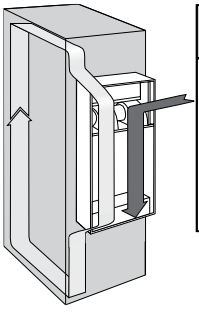
Use this formula to determine the required cooling capacity needed to maintain the desired operating temperature for your enclosure. This selection procedure applies to uninsulated, sealed, gasketed enclosures in indoor locations.

All industrial air conditioners are rated at their maximum operating point. Operating an air conditioner at temperatures below maximum conditions will result in reduced cooling capacity. In other words, operating 95 F ambient and 95 F enclosure temperature results in a 10 percent to 20 percent reduction in the rated capacity.

Full cooling capacity is probably not necessary at lower ambient temperatures.

PROLINE® Network Sealed Environmental Packages

CR Mid-Size Air Conditioners



⚠ WARNING

Secure cabinet to the floor prior to installing air conditioner.
Otherwise, the cabinet will tip over when air conditioner is installed.

Industry Standards

UL/cUL Listed; File No. SA6453

CE

Maintains UL/cUL Type 12 rating when properly installed on a UL/cUL Type 12 rated enclosure.

Application

These air conditioners fit in the AC cutout provided in the AC-ready Voice/Data and Server Cabinet Packages. The air conditioners are shipped separately; they cannot be factory installed in the cabinets.

Closed Loop Cooling
Recirculated air inside the air conditioner is kept separate from the ambient airflow system. This protects the electronic controls and prevents shutdowns caused by heat, humidity, dust and other contaminants.

Features

- Thermostat control and EMI/RFI noise suppressor included
- Closed-loop cooling separates clean, recirculated air from ambient airflow system
- Front cover hinges open for quick access to all components
- Filter can be inverted to double operating time between cleanings and/or filter replacement
- Filterless operation possible in many applications
- For a typical application, unique condensate management system evaporates moisture from enclosure
- High performance fans and blowers are ideal for densely packed enclosures
- All units use a universally accepted CFC-free or environmentally safe refrigerant
- Mounting hardware, gasket kit, mounting template and instruction manual furnished

Finish

RAL 7035 light-gray polyester powder paint

Bulletin: MCL

Standard Product

Catalog Number	Voltage	Hz	Phase	BTU/Hr. @ 131 F/131 F[a]	Amps @ 131 F/131 F	BTU/Hr. @ 95 F/95 F[a]	Amps @ 95 F/95 F	Max Amb. Temp. (F/C)	Ship Wt. (lb./kg)
CR290216G002	115	50/60	1	2000/2200	7.4/7.4	1700/2000	7.0/6.0	131/55	98/44
CR290226G002	230	50/60	1	2500/2700	4.6/3.9	1900/2300	4.4/3.3	131/55	98/44
CR290416G002	115	50/60	1	3500/4000	13.5/13.5	2400/2800	10.7/9.6	131/55	118/54
CR290426G002	230	50/60	1	3500/4000	6.7/6.6	2400/2800	5.9/5.3	131/55	118/54

[a] Because air conditioners provide less cooling at lower operating temperatures, two cooling capacity ratings are provided.