

■ Integrated Cabinet Solutions  
For *Business-Critical Continuity™*

## Knurr® DCM Enclosures

*A Single Cabinet Platform Designed For The Global Market*



## It All Starts With The Knurr DCM

### A Global Cabinet For Your Universe

The Knurr DCM is a new platform from Emerson Network Power that lets facility managers and IT professionals manage server, switch, and termination applications.

**Knurr DCM was designed as the base element for all of Emerson Network Power's row and rack solutions and is compatible with all Liebert Power and Liebert Precision Cooling products.**

The Knurr DCM offers all the advanced features and innovative flexibility required to accommodate today's dense and complex IT systems and network gear.

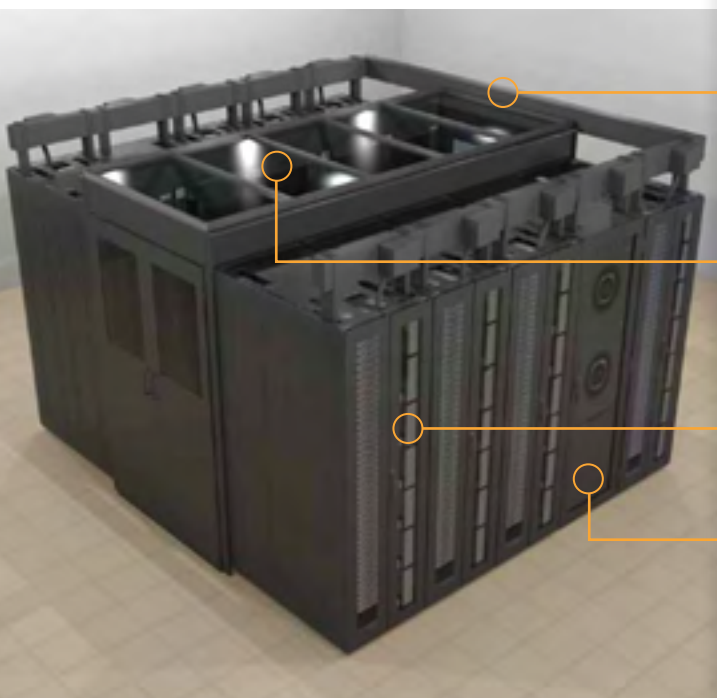
Knurr DCM simplifies equipment installation, improves cable management, and increases visibility and control of equipment inside the rack. The rack easily integrates power, cooling, and monitoring systems to provide a complete support system.



### Standardization For The Entire Data Center: It Starts With The Knurr DCM

Knurr DCM is the basic building block for all of the Emerson Network Power row- and rack-based solutions. It is also compatible with every Liebert power, cooling, monitoring and cable management product.

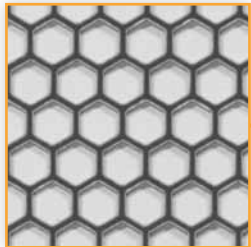
- Liebert XDR rear door cooling module, part of the Liebert XD system, attaches easily to the Knurr DCM rack — an extremely efficient high density cooling solution.
- Liebert MB Modular Bus Power distribution mounts directly to the frame of the Knurr DCM with tool-less mechanical fasteners. This mounting style not only brings high capacity power distribution directly to the rack and row level, but also saves significant amounts of labor time and cost.
- Emerson Network Power offers several methods of Cold Aisle Containment, with styles that either mount directly to the cabinet or to the ceiling in the data center. Containment is an effective means to increase capacity and efficiency of the room cooling system.
- Emerson Network Power family of rack PDUs effectively distribute power to the rack level. These PDUs are designed to easily mount in the Knurr DCM platform.
- The cabinet of the Liebert CRV row-based precision cooling system is based on the Knurr DCM frame — a perfect physical match that provides efficient, effective rack cooling.



# Features



**Roof Pre-Drilled For XDV**  
Accepts XDV With No Need For Drilling



**83+% Open Area**  
For Improved Airflow, Highest In The Industry



**Tool-Less Shelf**  
Mounts In Square Holes On 19" Rails In Seconds



**Spring Nut In T-Slot**  
Allows Component Mounting Anywhere In Cabinet Frame



**Doors Open to 135°**  
Lift-Off Tool-Less Internal Hinges Allow For Easy Door Removal And Greater Security



**Lightweight Aluminium Frame**  
Makes The Cabinet Easier For A Single Person To Move



**Tool-Less Cable Management on Frame**  
Insert And 1/4 Turn, Installs In A Second



**Low Profile Casters**  
Allows 42U Cabinet To Roll Through Standard Doorway

## Knurr Quick Ship

### You Need Cabinets Within A Week.

### Well, How Does Three Days Sound?

Because with the Knurr Quick Ship Program, you can order fully assembled cabinets and accessories to be shipped within 72 hours.

Get what you need, when you need it.

- Enclosure height of 42U.
- Widths of 24" or 32".
- Depth of 44".
- Side panels (with or without).
- Mounting and cable management options.

The following items are available through the Knurr Quick Ship Program:



Part Number	Description
D4224442	42U x 24" W x 44" D with side panels
D4224440	42U x 24" W x 44" D with NO side panels
D4232442	42U x 32" W x 44" D with side panels
D4232440	42U x 32" W x 44" D with NO side panels

Accessory Part Numbers	Description
002185000	Fixed Tool less shelf
002185050	Cable Management Lobster Claw (10)
002185060	Cable Management Velcro Ring (10)
002185070	Cable Management Lobster Claw (100)
002185080	Cable Management Velcro Ring (100)
035351081	24 receptacle NEMA 5-20R, 30 Amp, L5-30 locking plug, 10' cord
035352061	24 receptacle IEC C-13, 30 Amp, L6-30 locking plug, 10' cord
539608G2	Tool less baying Kit for 42U cabinets

# Data Center Ready Racks

**Convenient two rack solution includes clustering kit.**



## Ready-To-Install Rack And Power Bundles

Protect your IT equipment with data center ready racks from Emerson Network Power, featuring the innovative Knurr DCM rack integrated with reliable Liebert power protection and monitoring products.

Components		Specifications							
Part Description	1 Rack; 1800W, 120V Power	1 Rack; 2700W, 120V Power	1 Rack; 2700W, 208V Power	1 Rack; 4800W, 120V Power	1 Rack; 4800W, 208V Power	1 Rack; 9000W, 208V Power	2 Racks; 4800W, 120V Power	2 Racks; 4800W, 208V Power	2 Racks; 9000W, 208V Power
Liebert Model Number	010200065	010200066	010200067	010200068	010200069	010200090	010200070	010200071	010200072
Knurr DCM Rack Enclosure*	42U *	42U *	42U *	42U *	42U *	42U *	(2) 42U *	(2) 42U *	(2) 42U *
Available Rack U	40U	40U	40U	38U	38U	36U	80U	80U	78U
Liebert GXT3 UPS W/rack mounting kit	2kVA/ 1800W 120V Input: NEMA 5-20P; Output: (6) 5-20R	3kVA/ 2700W 120V Input: NEMA L5-30P; Output: (6) 5-20R (1) L5-30R	3kVA/ 2700W 208V Input: NEMA L6-20P; Output (2) L6-15R (1) L6-20R	6kVA/ 4800W 120/208V Input: Nema L14-30P; Output: (4) NEMA L5-20R & (2) NEMA L5- 30R. Includes Maintenance Bypass. Battery: Internal Battery Kits	6kVA/ 4800W 120/208V Input: Nema L14-30P; Output: (4)NEMA L5-15/20R & (2) NEMA L6-30R. Includes Maintenance Bypass. Battery: Internal Battery Kits	10kVA/ 9000W 120/208V Input hardwired; Output (4) 5-20R, T-type (4) L6-30R Includes Maintenance Bypass Battery Internal Battery Kits	6kVA/ 4800W 120/208V Input: NEMA L14-30P Output: (4) NEMA L5-20R & (2) NEMA L5- 30R Includes Maintenance Bypass. Battery Internal Battery Kits	6kVA/ 4800W 120/208V Input: NEMA L14-30P Output: (4) NEMA L5- 15/20R & (2) NEMA L6- 30R Includes Maintenance Bypass. Battery Internal Battery Kits	10kVA/ 9000W 120/208V Input hardwired; Output (4) 5-20R, T-type (4) L6-30R Includes Maintenance Bypass Battery Internal Battery Kits
Knurr DI-STRIP Rack PDU	120V Input 5-20P Output (12) NEMA 5-20R (t-slot)	120V Input L5-30P locking Output (24) NEMA 5-20R (t-slot)	208V Input NEMA L6-20P Locking Output (12) IEC-C13	(2) 120V Input NEMA L5-30P Locking Output (24) NEMA 5-20R (t-slot)	208V Input NEMA L6-30P Locking Output (20) IEC-C13 & (4) IEC-C19	(2)208V Input NEMA L6-30P Locking Output (20) IEC-C13 & (4) IEC-C19	(2) 120V Input NEMA L5-30P Locking Output (24) NEMA 5-20R (t-slot)	208V Input NEMA L6-30P Locking Output (20) IEC-C13 & (4) IEC-C19	(2)208V Input NEMA L6-30P Locking Output (20) IEC-C13 & (4) IEC-C19
Liebert Intellislot UPS WebCard	YES	YES	YES	YES	YES	YES	YES	YES	YES
Liebert Multilink UPS Shutdown Software	5 Client	10 Client	10 Client	20 Client	20 Client	20 Client	20 Client	20 Client	20 Client

\* Knurr DCM Rack Enclosure includes two sets of 19" rails, mounting hardware, side panels, perforated doors, cable entry roof, low profile casters, and Velcro cable management strips. Cabinet dimensions: 78"H x 23"W x 44"D.

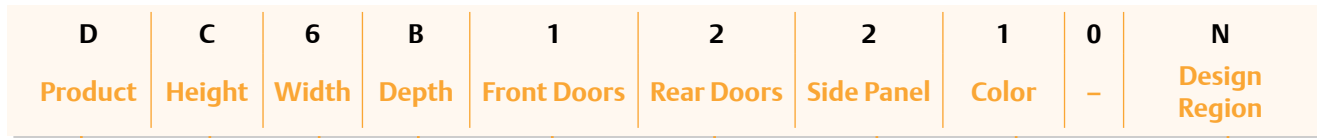
# Cabinet Part Numbering Description

## Use The Matrix To Create Your Part Number.

Choose, in order, the: height, width, depth, front door type, rear door type, and side panel number and type.

### Sample Part Number:

This part number indicates a DCM cabinet with 46" height frame, 23.6" width with sides, 43.3" depth with doors, single perforated front door, split perforated doors, two side panels, black paint and two sets of 19" rails.



Product	Height	Width	Depth	Front Doors	Rear Doors	Side Panel	Color	Continent of Design
<b>D= DCM</b>	<b>C= 1200mm (24U)</b>	<b>6=600mm (23.6")</b>	<b>A=1000mm (39.4")</b>	<b>0=No door</b>	<b>0=No door</b>	<b>0=None</b>	<b>1=Black RAL 7021</b>	<b>A=Asia Pacific</b>
	<b>K= 2000mm (42U)</b>	<b>7=700mm (27.6")</b>	<b>B=1100mm (43.3")</b>	<b>1=Single perforated door</b>	<b>1=Single perforated door</b>	<b>1= 1 Side panel</b>		<b>E=EMEA</b>
	<b>L= 2100mm (45U)</b>	<b>8=800mm (31.5")</b>	<b>C= 1200mm (47.3")</b>	<b>2=Split perforated doors</b>	<b>2=Split perforated doors</b>	<b>2= 2 Side panels</b>	<b>3=1 Partition</b>	<b>N=North America</b>
						<b>5=1 Side panel and 1 partition panel</b>		<b>G=Global</b>

## Multiple Sizes To Fit Your Needs

The table to the right shows the measurements for the different height, width and depth options available in the Knurr DCM Racks.

Part	Part Number	Description						
<b>H</b>	<b>Height</b>	<b>Frame</b>		<b>Leveling Feet</b>		<b>Casters</b>		
		IN	MM	IN	MM	IN	MM	
		C	46.0	1168	46.6	1186	47.1	1199
		K	77.5	1968	78.1	1986	78.6	1999
<b>W</b>	<b>Width</b>	<b>No Sides</b>		<b>With Sides</b>				
		IN	MM	IN	MM			
		6	23.3	591	23.6	600		
		7	27.2	691	27.6	700		
<b>D</b>	<b>Depth</b>	<b>No Doors</b>		<b>With Doors</b>				
		IN	MM	IN	MM			
		A	38.8	986	39.4	1000		
		B	42.8	1086	43.3	1100		
		C	46.7	1186	47.2	1200		

## DCM Rack Dimensions



### Dimensions That Meet Your Requirements

- The Knurr DCM cabinet is Emerson Network Power's global rack, available in all corners of the world for data center consistency.
- The 42U x 44" (1100mm) deep rack is the global standard for all of Emerson Network Power's row based Power and Cooling products, ensuring data center consistency.
- Metric footprint for global applications
- Seismic versions available.



# Cable Management

- Full height PDU bracket, that doubles as a cable management rail, available as an option.
- Two ¼ turn tool-less cable management pieces offer the ultimate in flexibility in cable management. These can be installed in any internal frame surface, on the outside edge of the 19" rail or on the PDU/Cable Management rail.
- The Knurr DCM top cover and horizontal cable routing system easily directs cables along the top of the row of racks.

## Cable Management

Description	Part Number
<b>Individual Cable Management</b>	
Velcro Piece, tool-less, pack of 10	002185060
Velcro Piece, tool-less, pack of 100	002185080
Lobster Claw Piece, tool-less, pack of 10	002185050
Lobster Claw Piece, tool-less, pack of 100	002185070
<b>Horizontal Cable Management 19" mount</b>	
1U 19" mount cable routing panel with D Rings	011171448
1U 19" mount cable routing panel with cable pass through	011170208
19" horizontal cable support trough	050400558

## Vertical Cable Management

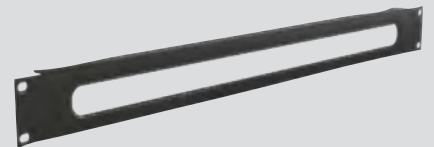
Description	Part Number
Kit of (2) 18U fingers with 1U center spacing, mounts tool lessly on 19" rails	010200078
Top Cover based Horizontal cable routing system, 1 piece includes front and rear horizontal trim pieces for 600mm (24") wide Knurr cabinets. Mounts tool-lessly on top cover.	537876G1
Top Cover based Horizontal cable routing system, 1 piece includes front and rear horizontal trim pieces for 700mm (28") wide Knurr cabinets. Mounts tool-lessly on top cover.	537887G1
Top Cover based Horizontal cable routing system, 1 piece includes front and rear horizontal trim pieces for 800mm (32") wide Knurr cabinets. Mounts tool-lessly on top cover.	537877G1
Kit of 2 front to back trim pieces for Knurr cabinets. 1 each for end of aisle. For 1000mm (40") deep Knurr cabinets. Mounts tool-lessly on top cover.	537878G1
Kit of 2 front to back trim pieces for Knurr cabinets. 1 each for end of aisle. For 1100mm (44") deep Knurr cabinets. Mounts tool-lessly on top cover.	537879G1
Kit of 2 front to back trim pieces for Knurr cabinets. 1 each for end of aisle. For 1200mm (48") deep Knurr cabinets. Mounts tool-lessly on top cover.	537880G1



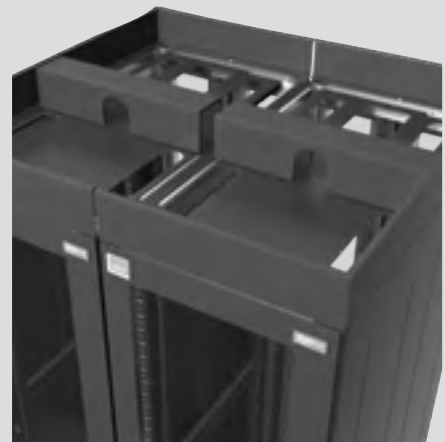
Velcro Piece, tool-less



Lobster Claw Piece, tool-less



1U 19" Mount Cable Routing Panel, with cable pass through

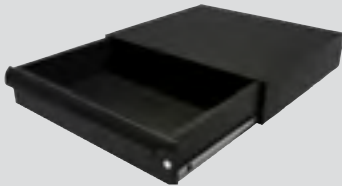


Top Cover Horizontal Cable Routing System and Front To Back Trim Pieces

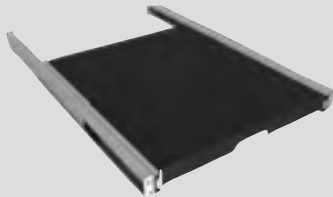
# Air Blanking Panels, Shelves And Drawers



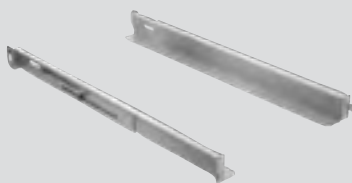
Fixed tool-less shelf



2U Drawer, mounts on 19" rails



Tool-less Telescopic Shelf



"L" Shaped Depth Support Rail



Tool-less Blanking Panel

## Shelves, Blanking Panels and Drawers

Description	Part Number
Fixed tool-less shelf, 150 lb rating	002185000
2U fully closable and lockable drawer, mounts on 19" rails	011139278
Tool-less telescopic shelf, 150 lb rating	535809G1
"L" shaped depth support rails, 2 pieces	536645G1L
1U tool less blanking panel that mounts simply in 19" rails with square holes. Qty: Box of 10	010200087
2U tool less blanking panel that mounts simply in 19" rails with square holes. Qty: Box of 5	010200088



Tool-less Telescopic Shelf

## Vertical Blanking Panels

Full height vertical blanking panels that mount to outside edge of 19" rail and extend to the plane of the side panel. The vertical panels for the DCM rail utilize 2 half height panels per side. Each kit is enough for 1 cabinet. Each panel has three 1U vertical cutouts that may be used for cable pass through or mounting, or may be covered with the included metal blanking panels.



Dimension	Part Number
42U x 700mm (28")	539952G1L
42U x 800mm (32")	539957G1L
45U x 700mm (28")	539961G1L
45U x 800mm (32")	539962G1L

## Air Diverter for IT Switches

4U	540785G1L
12U	540785G2L
15 U	540785G3L

## Set of (2) 19" Rails

24U	539991G1
42U	539814G1
45U	539818G1

# Side Panels, Partition Panels, And Doors

## Knurr Handles And Lock Accessories

Handles and Lock Accessories	Part Number
Handle for Knurr DCM Cabinet	000784649
Lock Insert kit for DCM Handle, 1 insert and 2 keys	540275G1L
Side panel insert and 2 keys	011399067L

## Knurr Partition Panels

Partition Panels	Part Number
42U x 40" (2000x1000)	539920G1L
42U x 44" (2000x1100)	539920G3L
42u x 48" (2000x1200)	539920G5L
45U x 40" (2100x1000)	539920G7L
45U x 44" (2100x1100)	539920G9L
45U x 48" (2100x1200)	539920G11L

## Knurr DCM® Side Panels

Side Panels	Part Number
24U x 40" (1200x1000)	538521G1L
24U x 44" (1200x1100)	538521G2L
24U x 48" (1200x1200)	538521G3L
42U x 40" (2000x1000)	538521G4L
42U x 44" (2000x1100)	538521G5L
42u x 48" (2000x1200)	538521G6L
45U x 40" (2100x1000)	538521G7L
45U x 44" (2100x1100)	538521G8L
45U x 48" (2100x1200)	538521G9L

## Knurr DCM® Doors



Doors	Part Number
24U x 24" (1200x600) single door	538444G1L
24U x 28" (1200x700) single door	538444G2L
24U x 32" (1200x800) single door	538444G3L
24U x 24" 1(200x600) split door	539273G1L
24U x 28" 1(200x700) split door	539273G2L
24U x 32" 1(200x800) split door	539273G3L
42U x 24" (2000x600) single door	538444G4L
42U x 28" (2000x700) single door	538444G5L
42U x 32" (2000x800) single door	538444G6L
42U x 24" (2000x600) split door	539273G4L
42U x 28" (2000x700) split door	539273G5L
42U x 32" (2000x800) split door	539273G6L
45U x 24" (2100x600) single door	538444G7L
45U x 28" (2100x700) single door	538444G8L
45U x 32" (2100x800) single door	538444G9L
45U x 24" (2100x600) split door	539273G7L
45U x 28" (2100x700) split door	539273G8L
45U x 32" (2100x800) split door	539273G9L



Handle for Knurr  
DCM Cabinet



Partition Panel  
42u x 48"



Side Panel

- Doors come standard with push button lock insert. Cabinet can be left unlocked or locked for greater security.
- Additional locking systems, including unique lock inserts or electronic locks available as options.
- The 42U x 24" (600mm) wide product readily accepts the Liebert XDR rear door high density cooling system. This system provides 20kW of passive cooling, essentially rendering the cabinet "heat neutral" up to the rated heat load.
- Open base for cable entrance. Leveling feet are standard with casters an easy add option.
- All panels (tops, side panels and 19" rails) are electrically grounded to the frame. A grounding plug is provided, making it easy to install your ground wire to electrically ground the cabinet to building earth.
- Side panels have optional locking system and are easily released.

# Cable Hardware And Accessories



Low profile 1/4 turn fastener



High profile 1/4 turn fastener



1/4 Turn Metal Fastener



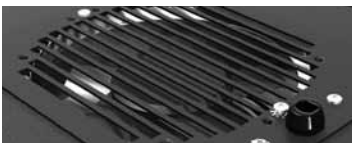
Horizontal Caster Bracket



Floor Anchor Kit



Tool-less Baying/Cluster Kit



Fan For Top Cover



Anti Tip Leg System

## Hardware And Other Rack Accessories

Description	Part Number
M5 cage nuts, screws and washers, bag of 50 each	538569G1
M5 Spring Nuts, bag of 50	050413409
Low profile, 1/4 turn plastic mechanical fastener, bag of 10	010200085
High profile, 1/4 turn plastic mechanical fastener, bag of 10	010200086
1/4 turn metal mechanical fastener, bag of 10	536650G1

## Caster Kits

Description	Part Number
Set of 2 for 600mm (24") wide Knurr DCM cabinet	539994G1
Set of 2 for 700mm (28") wide Knurr DCM cabinet	539996G1
Set of 2 for 800mm (32") wide Knurr DCM cabinet	539997G1

## Floor Anchor Kit

Description	Part Number
Set of 4 floor anchor kits	011309347

## Baying / Cluster Kits

Description	Part Number
24U Tool less baying/cluster kit, 1 set to cluster 2 cabinets	539608G1
42U Tool less baying/cluster kit, 1 set to cluster 2 cabinets	539608G2
45U Tool less baying/cluster kit, 1 set to cluster 2 cabinets	539608G3

## Fans For Top Cover

Description	Part Number
1000L Low noise	163796G1L
1000H high ambient	163796G3L

## Anti Tip Leg System

Description	Part Number
Anti Tip Leg System	540254G1L

## Rack PDU (Power Distribution Units)

It is rare to have a rack discussion without also talking about the rack PDU. According to Data Center Users' Group™ findings, the average power consumption in the Enterprise Data Center is now approximately 8kW per rack, with projections to grow to 10kW per rack by 2012. In the Small to Medium Business space, (SMB) the average today is 6kW per rack. Couple this increased power density with various monitoring and control needs, and the issue of proper PDU selection becomes critical to effective Data Center infrastructure deployment.

The Emerson Network Power family of rack PDU features varying levels of monitoring and control. These PDUs offer choices of input phase, input/output ampacity and input/output voltage to provide you with the best solution for the application you are facing today, or foresee in the future.

### Highest Standard Operating Temperature in the Industry:

Each rack PDU is rated for operation up to 55C/131F, delivering reliable performance in hostile back-of-the-rack environments.

### Broadest Offering of Rack PDU:

Basic to adaptive solutions to fit any rack distribution needs.

### Rugged Construction:

Engineered to be reliable and long lasting.

**Note:** For more information on configuring a rack PDU to meet specific site needs, consult Emerson Network Power Rack PDU Systems Product Selection Guide (SL-20828)

#### Liebert MPX:

This Adaptive Rack PDU offers breakthrough, configurable/modular power and management technology for the dynamic Data Center, where change in receptacle type and/or voltage may be foreseen over the upcoming years. This family offers products ranging from 1.9kW-14.4kw of output.



#### Liebert MPH:

The Managed Rack PDU offers several levels of metering in addition to control capabilities with connected equipment. This family offers products ranging from 1.9kW to 8.6kW.



#### Knurr DI-STRIP:

For Data Centers with basic distribution needs, the Basic Rack PDU delivers simple and expandable distribution in a robust package. The basic offering from Knurr, is available in a family of products ranging from 1.4-24.4kW of output.



Number of Rack PDU's required to supply 8kW of Output Power, based on Input Phase, Input Amps and Supply.

Input Phase	Input Amps	Input Voltage	kW Output	# PDUs
1	15	120	1.4	6
1	20	120	1.9	5
1	30	120	2.9	3
1	15	208	2.5	4
1	30	208	5.0	2
3	30	208	8.6	1
3	60	208	17.3	1

## Liebert MPX — Adaptive Rack PDU



Now you can meet the challenge of future connected power requirements with Liebert MPX, the most responsive and adaptive rack PDU available. Thanks to Liebert MPX adaptive technology, you can economically increase the availability of critical systems by leveraging hot-swappable modular power — and manage it all the way to the receptacle level.

### Reconfigurable Power Capacity And Distribution

Liebert MPX is the perfect choice to respond to the needs of a growing data center. Relocate or add IT equipment to support changing needs, by easily reconfiguring the power input and distribution.

#### Liebert MPX Features:

- Industry leading operating temperature — up to 55 °C /131 °F to support hot Internal rack environments.
- Accurate power metering of +/-1% voltage & current for assured oversight.
- Energy and power metering down to the individual receptacle.
- Comprehensive alarming including notification of overloaded branch circuits.
- Environmental sensing with threshold and alarm set-points.
- Notification on the loss or removal of individual rack equipment loads.
- IP consolidation via Rack PDU Array™.

#### Liebert MPX Benefits:

- Adaptive capacity, distribution, monitoring, control and management of critical devices.
- Flexibility to respond to constant change.
- Buy only what you need and build on your investment.
- Secure communication.

### Liebert Power Monitoring Capabilities

The operation of Liebert MPX can be monitored using:

- Liebert RPC Rack PDU Card
- Liebert Nform Monitoring System
- Liebert SiteScan® Web Centralized Monitoring System
- Secure Web/SNMP Interfaces
- Liebert RPC-BDM Local Display Module

### Scalable Design Allows Onsite Configuration To Fit Immediate IT Equipment Needs

The Liebert MPX Adaptive Rack PDU features essential characteristics to support fast-paced, growing data centers. Hot swappable output power deploys easily to get IT equipment online quickly.

To configure your Liebert MPX, simply follow these easy steps:

- 1. Select a Power Rail Chassis** — distributes power and communications to all of the support modules
- 2. Select a Power Entry Module** — connects input power to power rail chassis. May be reconfigured to support changing power needs, single and three phase input. Can be positioned for top or bottom rack entrance.
- 3. Select an Input Power Cord** — allows easy power reconfiguration to change input power to meet changing requirements.
- 4. Select the Rack PDU Card (Liebert RPC)** — provides upgradable network communications, sensor and local display interface.
- 5. Select the Rack PDU Display** — displays power parameters and alarms for up to four Liebert MPX systems. Display orients for horizontal or vertical installation and reading.
- 6. Select Branch Receptacle Modules** — provide hot swappable output power connectivity and communications management. May be remotely controlled and metered, providing operator flexibility and allowing increased site security.



# Liebert MPH

## Liebert MPH Features:

- Monitors electrical and environmental parameters with set threshold and alarm tools.
- Industry leading operating temperature—up to 55 °C/131 °F to support hot internal rack environments.
- Controls and manages individual receptacles.
- Predicts overcurrent conditions before they become critical.
- Remote monitoring at strip and branch.
- Card-based communications. Local displays are easily located to suit a crowded and changing rack environment.
- Supports mounting in 19" EIA, 42U rack environments—offered in vertical, zero U and rackmount form factors.
- Allows you to predict failing conditions before they occur and proactively manage connected equipment for maximum uptime.
- Flexible power cord mount is user adjustable for horizontal or vertical orientations.

Part Number	Voltage	Amps	Input Phase	Input Plug	Output Receptacles	Branch Monitored / Receptacle Controlled	Form Factor
MPH-NBR09AXXC30	120	20	1PH	L5-20P	(9) Nema 5-20R	Branch Monitored	Rackmount
MPH-NBR09AXXD30	120	30	1PH	L5-30P	(9) Nema 5-20R	Branch Monitored	Rackmount
MPH-NBR09NXXE30	200-240	20	1PH	L6-20P	(9) C-13	Branch Monitored	Rackmount
MPH-NBR09NXXF30	200-240	30	1PH	L6-30P	(9) C-13	Branch Monitored	Rackmount
MPH-NBV27AXXC30	120	20	1PH	L5-20P	(27) Nema 5-20R	Branch Monitored	Vertical
MPH-NBV27AXXD30	120	30	1PH	L5-30P	(27) Nema 5-20R	Branch Monitored	Vertical
MPH-NBV27NXXE30	200-240	20	1PH	L6-20P	(27) C-13	Branch Monitored	Vertical
MPH-NBV27NXXF30	200-240	30	1PH	L6-30P	(27) C-13	Branch Monitored	Vertical
MPH-NBV27NOXF30	200-240	30	1PH	L6-30P	(21) C-13 & (6) C-19	Branch Monitored	Vertical
MPH-NBV27AXXH30	120/208	30	3PH	L21-30P	(27) Nema 5-20R	Branch Monitored	Vertical
MPH-NBV27NXXH30	120/208	30	3PH	L21-30P	(27) C-13	Branch Monitored	Vertical
MPH-NBV27ANXH30	120/208	30	3PH	L21-30P	(21) C-13 & (6) 5-20R	Branch Monitored	Vertical
MPH-NBV27NOXH30	120/208	30	3PH	L21-30P	(21) C-13 & (6) C-19	Branch Monitored	Vertical
MPH-NCR09AXXC30	120	20	1PH	L5-20P	(9) Nema 5-20R	Receptacle Controlled	Rackmount
MPH-NCR09AXXD30	120	30	1PH	L5-30P	(9) Nema 5-20R	Receptacle Controlled	Rackmount
MPH-NCR09NXXE30	200-240	20	1PH	L6-20P	(9) C-13	Receptacle Controlled	Rackmount
MPH-NCR09NXXF30	200-240	30	1PH	L6-30P	(9) C-13	Receptacle Controlled	Rackmount
MPH-NCV27AXXC30	120	20	1PH	L5-20P	(27) Nema 5-20R	Receptacle Controlled	Vertical
MPH-NCV27AXXD30	120	30	1PH	L5-30P	(27) Nema 5-20R	Receptacle Controlled	Vertical
MPH-NCV27NXXE30	200-240	20	1PH	L6-20P	(27) C-13	Receptacle Controlled	Vertical
MPH-NCV27NXXF30	200-240	30	1PH	L6-30P	(27) C-13	Receptacle Controlled	Vertical
MPH-NCV27NOXF30	200-240	30	1PH	L6-30P	(21) C-13 & (6) C-19	Receptacle Controlled	Vertical
MPH-NCV27AXXH30	120/208	30	3PH	L21-30P	(27) Nema 5-20R	Receptacle Controlled	Vertical
MPH-NCV27NXXH30	120/208	30	3PH	L21-30P	(27) C-13	Receptacle Controlled	Vertical
MPH-NCV27ANXH30	120/208	30	3PH	L21-30P	(21) C-13 & (6) 5-20R T-Slots	Receptacle Controlled	Vertical
MPH-NCV27NOXH30	120/208	30	3PH	L21-30P	(21) C-13 & (6) C-19	Receptacle Controlled	Vertical

# Knurr DI-STRIP



## Knurr DI-STRIP Features:

- Multiple configurations and input power options available, including international compatibility.
- The addition of the Basic Rack PDU Expansion Unit allows for growth.
- 10ft. (3m) power supply cable offers room for movement.
- Reliable and robust solution.
- Worldwide approvals and certification.
- Full-length brass busbar on Standard models enhances operational reliability.
- Standard system extruded casing and a HighPower system heavy duty casing provide durability.
- Industry leading operating temperature — up to 55°C/131°F to support hot internal rack environments.
- Simple and quick installation on the rack's extrusion requires minimal space and reduces installation time.

## Knurr DI-STRIP Basic

P/N	Amps	Input Phase	Voltage	Input Plug	Output Receptacles	Mounting Configuration
035351011	15A	1PH	120V	5-15P	(9) 5-15R	Vertical
035351041	20A	1PH	120V	L5-20P	(9) 5-20R	Vertical
035351021	15A	1PH	120V	5-15P	(12) 5-15R	Vertical
035351031	15A	1PH	120V	5-15P	(18) 5-15R	Vertical
035351051	20A	1PH	120V	5-20P	(12) 5-20R	Vertical
035351061	20A	1PH	120V	L5-20P	(12) 5-20R	Vertical
035351071	20A	1PH	120V	IEC-C20	(12) 5-20R	Vertical
035351081	30A	1PH	120V	L5-30P	(24) 5-20R	Vertical
035352011	20A	1PH	208-240V	L6-20P	(9) IEC-C13	Rack Mount
035352021	20A	1PH	208-240V	IEC-C20 Inlet	(9) IEC-C13	Rack Mount
035352041	20A	1PH	208-240V	IEC-C20	(9) IEC-C13	Rack Mount
035352051	30A	1PH	208-240V	L6-30P	(4) IEC-C14	Rack Mount
035352031	20A	1PH	208-240V	L6-20P	(12) IEC-C13	Vertical
035352041	20A	1PH	208-240V	IEC-C20 Inlet	(12) IEC-C13	Vertical
035352061	30A	1PH	208-240V	L6-30P	(24) IEC-C13	Vertical
035352078	30A	1PH	208-240V	L6-30P	(20) IEC-C13 and (4) IEC-C19	Vertical
035353011	30A	3PH	120/208V	L21-20P	(6) IEC-C19	Vertical
035353021	20A	3PH	120/208V	L21-20P	(18) IEC-C13 and (6) IEC-C19	Vertical
035353031	20A	3PH	120/208V	L21-20P	(27) IEC-C13 and (6) IEC-C19	Vertical
035353041	20A	3PH	120/208V	L21-20P	(27) 5-20R	Vertical
035353051	30A	3PH	120/208V	L21-30P	(18) IEC-C13 and (6) IEC-C19	Vertical
035353061	30A	3PH	120/208V	L21-30P	(27) IEC-C13 and (6) IEC-C19	Vertical
035353078	60A	3PH	120/208V	IEC60309	(42) IEC-C13 and (6) IEC-C19	Vertical
035353088	50A	3PH	120/208V	2 X IEC60309	(42) IEC-C13 and (6) IEC-C19	Vertical

# Rack PDU Mounting Brackets For Knurr DCM

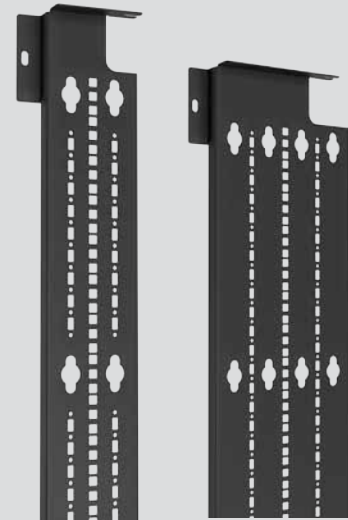
All Liebert and Knurr Rack PDUs easily integrate into the Knurr DCM cabinet.

Description	Part Number
<b>PDU Mounting Brackets for both Rail Systems (DCM and Z Shaped)</b>	
2 piece PDU mounting bracket system for 700mm (28") and 800mm (32") wide cabinets with Knurr DCM rail system. Holds (1) 2" wide max PDU with quick mount system. All Knurr DI-STRIP and Liebert MPH in catalog *EXCEPT* 03535302078, 0353532088	
For right hand rail	539917G1L
For left hand rail	539918G1L

Description	Part Number
Full height PDU mounting bracket, 4" wide. Holds (2) 2" wide max PDU's with Quick Mount button system (all Knurr DI-STRIP and Liebert MPH listed in catalog) *EXCEPT* 035352078, 0353532088	
42U cabinets	539486G1L
45U cabinets	539487G1L
Full height PDU mounting bracket, 8" wide. Holds (3) 2" wide max PDU's with Quick Mount button system (all Knurr DI-STRIP and Liebert MPH listed in catalog) or (1) Liebert MPX PDU. *EXCEPT* 0353532078, 0353532088. *NOTE* 8" bracket may only be used on 1100mm and 12000 mm deep cabinets	
42U cabinets	540084G1L
45U cabinets	540085G1L



PDU Mounting Bracket



Full Height PDU Mounting Brackets (4" and 8")

## Liebert MB Modular Busway



**Liebert MB Busway provides high density power distribution to the rack while eliminating cable clutter that can reduce airflow.**

### System Compatibility

Liebert MB is compatible with the Knurr DCM rack and the entire family of Liebert power products—rack and room PDUs, UPS systems and surge protective devices—providing power distribution and protection.

- Rackmount Liebert MB installs on top of Knurr DCM rack.
- Works with Liebert MPX, Liebert MPH and Knurr DI-STRIP Rack PDUs.
- Works with row-based UPS and distribution.

### Flexibility

- Easy to change bus plugs.
- Available in 100, 225 & 400A ratings.
- Increases space efficiency and improves airflow.
- Integrates easily into new or existing datacenter layouts.
- Provides dual bus or single bus configurations.

### Higher Availability

- Fully rated design.
- Certified to UL 857 & CSA 22.2.
- Hot swappable bus plugs keep systems up and running even during changes.

### Lowest Total Cost Of Ownership.

- Requires fewer and less expensive power cables.
- Installs with 15-30% less time and cost compared to cables and conduit.
- Installs with tool-less mounting to Knurr DCM Racks.
- Plug-n-play bus plugs to rack PDU's can be installed by anyone—no electrician needed.

### Ideal Applications

- Data centers of any size.
- Raised and non-raised floors.
- Single or Dual bus configurations.
- Low or high-density power distribution.
- Data centers with frequent configuration changes.



Part No: 539619G1L

- Supports single feed.
- Use 1 bracket for every 5' bus run.



Part No: 540536G1L

- Supports A and B feeds.
- Use 1 bracket for every 5' bus run.

**Modular Busway Mounting Bracket**

## Cold Aisle Containment

**Emerson Network Power offers three types of Cold Aisle Containment systems and flexible door options.**

### Cool Cap

This door, ceiling or combined solution is designed for Knurr DCM cabinets. Cool Cap is physically attached to the rack, and features swing doors with Lexan (polycarbonate) windows. The ceiling structure is very similar in concept to a drop ceiling. It has sheet metal runners that span the width of the aisle, allowing Lexan (instead of foam) sheets to be dropped in.

### Flex Cap

This door, ceiling or combined solution uses a curtain design to accommodate non-uniform rack heights. While it is the most flexible solution to deploy, it does require a drop ceiling for it to work. The design is a simple one that incorporates standard fire detection and suppression.

### Dome Cap

This ceiling solution that is designed exclusively for a 4' aisle and requires a uniform row to work. If that uniformity is present, this is the simplest ceiling solution to implement. It can be used in conjunction with any of the door solutions to make it a combined solution.

### Door Options

Swing doors or curtain doors can be chosen for the ends of the aisle. In the event of an emergency, the cold aisle can be quickly exited by simply pushing the doors open, or moving the curtain out of the way. The doors are fitted with Lexan windows.



### Cool Cap

This is a door, ceiling or combined solution designed for Knurr DCM cabinets, but in a uniform row, should work with the vast majority of other rack manufacturer's racks as well.

The top covers are transparent Lexan so the room's lighting can be used. The covers are easy to remove for servicing.

Since it attaches directly to the rack, it is essential that the two rows of racks have uniform heights along the total length of the aisle. The Cool Cap requires a continuous run, so there cannot be gaps, such as missing cabinets in the line-up or obstructions, such as columns or pillars in the row.

## Flex Cap

Flex Cap is a door, ceiling or combined solution that uses a curtain design to accommodate non-uniform rack heights and third party racks. The Flex Cap solution requires a drop ceiling. If a dropped ceiling is present, this is the simplest combined solution to deploy.

Most curtain system products require hardware to be installed. The Flex Cap solution is completely tool-less. It starts with a small clip that mounts on the drop ceiling runner. This clip has a small, round ball at the end that slides into a track on the aluminum extrusion that holds the vinyl material. Since the ball turns freely in the slot, the extrusion can be installed at any angle on the drop ceiling. It is not dependent on running parallel to either the long or the short runner in a drop ceiling, it can run at an angle.

For fire protection purposes there is a fusible link in the clip that mounts on the runner. When the room heats up to 135°F, the fusible line melts and the film along with the aluminum extrusion drops to the floor allowing the suppression system to operate fully.



## Dome Cap

The Dome Cap ceiling solution is truly unique. Designed exclusively for a 4' aisle, the Dome Cap requires a uniform height of rack heights and two uniform rows of racks to work. It will work with virtually any rack manufacturer's products. This is the easiest ceiling solution to deploy. It can be used in conjunction with any of the door types to make it a combined solution.

The Dome Cap consists of an aluminum box header that straddles the cold aisle with a 20' length of the same vinyl film used in the Flex Cap solution. It pulls out the length of the aisle and is held in place on the edges by a sheet metal guide.

For fire protection purposes, the Dome Cap also uses fusible links. The fusible links melt at 135°F, or may be wired into an audible alarm on the smoke detector. When the temperature reaches 135°F, or when the alarm sounds, the link is broken and the film safely retracts into the fire resistant aluminum header. Guides ensure that the film retracts smoothly when the fusible links are separated.

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