# Knürr DCM®

**19" Server Rack System**

19" Heavy Duty Rack



**dafnia** ™
*Connect to Quality*

marketing@dafnia.com

www.dafnia.com

# Knürr DCM® conquers the world

**Standardization in the data center begins with the Knürr DCM®!**

The Knürr DCM® is the modular building block for all "in row" applications of Emerson Network Power's products. This means that linked racks in a rack suite work in perfect unison, as server racks, power racks, or as storage racks.
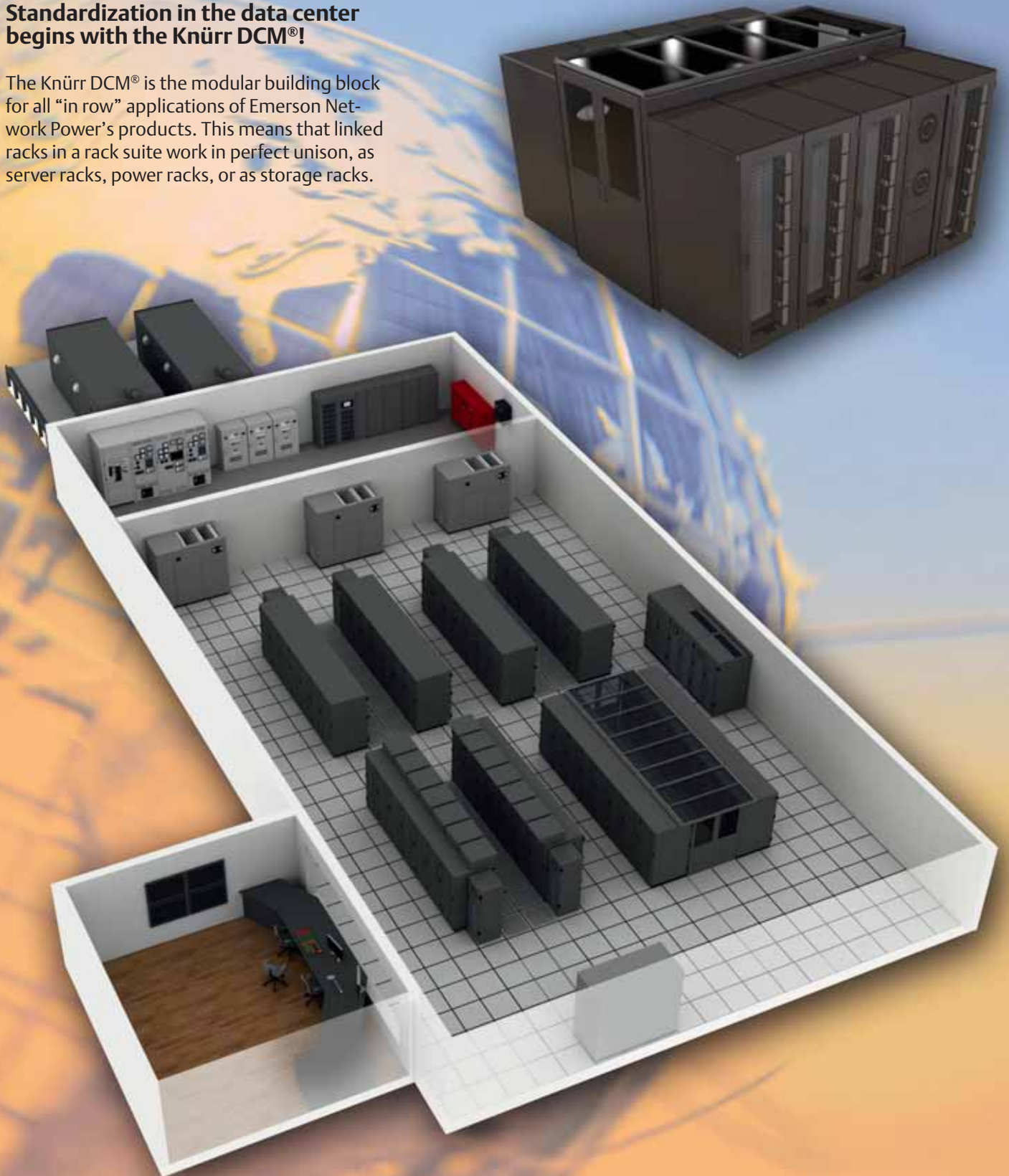
# Knürr DCM® – impressive rack dimensions

## The right rack size for every application

■ **Knürr Data Center Module**
The Knürr DCM® is the globally available rack from Emerson Network Power. Available all over the world for standardized data center planning.
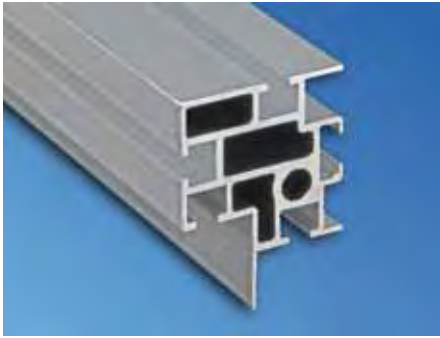
■ **Global standard**
The 2,000 mm height and 1,100 mm depth rack version is the global platform for rack suites at Emerson Network Power. Cooling racks, power racks and server racks on the basis of the Knürr DCM® platform guarantee integration into the rack suite.

■ **Metric measurements**
for global application

■ **Stable and secure**
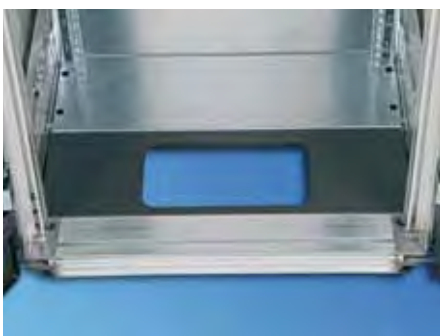DCM® earthquake-tested version available on request.

**Height**

**2,200 mm** / 47 U

**2,000 mm** / 42 U

**1,000 mm**
**1,100 mm**
**1,200 mm**

**Depth**

**Width**

**600 mm**
**800 mm**

1 DCM20059



3 DCM20030

## Knürr DCM®
### Strong points

**1 New Heavy Duty Rack**
Increased stability over the classic Miracel® for static load of 1,500 kg and more. Use of recently designed more stable extrusions and new, heavier duty corner joints.

**2 Threaded connection system**
Dismantling the rack guarantees easy accessibility, even to the most restricted areas

**3 Light aluminum frame**
Easier, lighter transport due to lower weight

**4 Convenient**
Door mounting without tools

**5 Low heavy duty castors**
Rack also can be moved safely, when it is fully equipped

**Integrated tilt restraint**
Quick and easy installation and deinstallation

**6 Cable management**
Guaranteed orderly and space-saving cable management. Adjustment to installation site; cable management can be selected from an extensive range of accessory components.

**7 Biggest possible perforation**
For improved airflow

**No more depth braces**
PDUs and cable management can also be housed in the space between the 19" level and the side panel

**8 Depth-adjustable air separation**
Cold/warm separation seals on the side panels and can therefore simply be shifted in depth



2 DCM20008
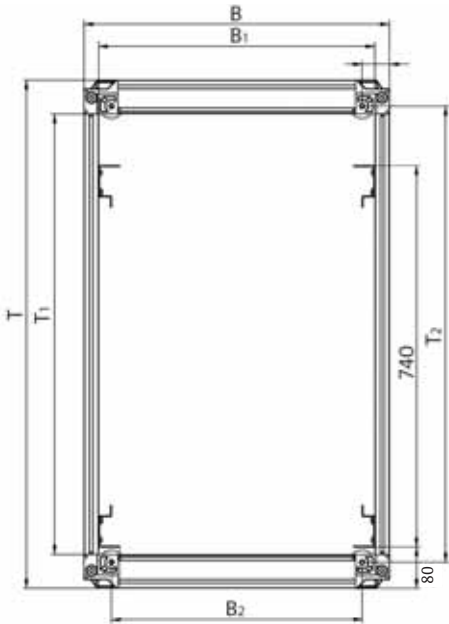


4 DCM20006



5 DCM20028



6 DCM20027



7 MIR20265

DCM20066



DCM
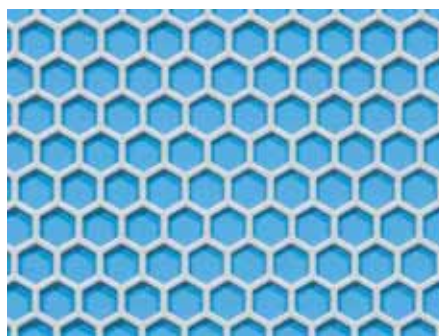
## Knürr DCM®
### Technical data

■ **Material**
- Extruded aluminum
- Corner piece, die-cast aluminum
- Covers, sheet steel, zinc-passivated
- Sheet steel doors

■ **Installation dimensions in acc. with IEC 60297-1 and IEC 60297-2**
- Height: 42 U / 47 U
(1 U = 44.45 mm)
- Width:482.6 mm (19" structure)

■ **Space**
- Front jumpering space, 80 mm
- Door opening angle 130° in the rack suite and 180° as individual rack

■ **Configurations**
- Stationary, on leveling feet
- Mobile with castor bracked and leveling feet

■ **Finish / Color**
- Basic rack, polished
- Visible surface of covers, powder-coated, dark gray RAL 7021

■ **Static load rating**
- 15,000 N (stationary model)
- 10,000 N (mobile model)

■ **Tests according to version**
- IP test in acc. with IEC 60529
- Earthing and protective conductor test in acc. with DIN EN 60950

Further standards and tests on request.

■ **Rack suites**
To create a rack suite with "n" racks, you require:
- n-1 racks without side panels and 1 rack with side panels
- In a rack suite, per connection you require one set of rack connectors
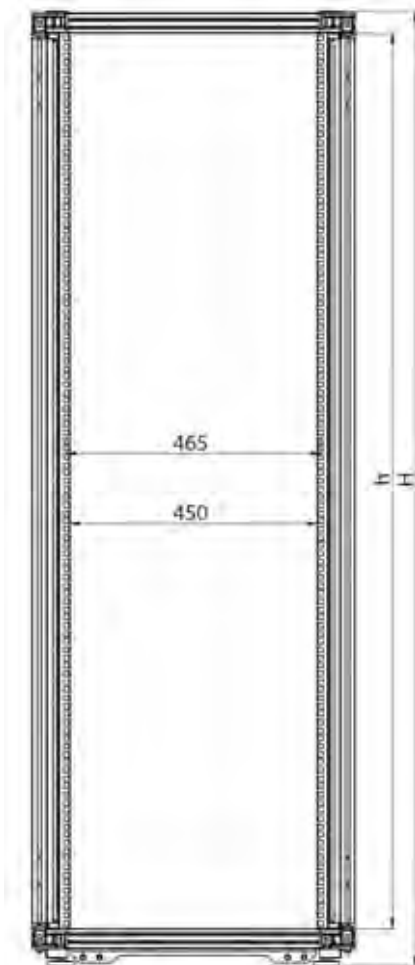
| Nom. dim. | W | $W_1$ | $W_2$ | D | $D_1$ | $D_2$ |
|---|---|---|---|---|---|---|
| W 600 / D 1000 | 591 | 535 | 485 | 986 | 856 | 885 |
| W 600 / D 1100 | 591 | 535 | 485 | 1086 | 956 | 985 |
| W 600 / D 1200 | 591 | 535 | 485 | 1186 | 1056 | 1085 |
| | | | | | | |
| W 800 / D 1000 | 791 | 735 | 685 | 986 | 856 | 885 |
| W 800 / D 1100 | 791 | 735 | 685 | 1086 | 956 | 985 |
| W 800 / D 1200 | 791 | 735 | 685 | 1186 | 1056 | 1085 |

| Nom. height | H | h |
|---|---|---|
| H 2000 | 1996 | 1872.60 |
| H 2200 | 2218 | 2094.85 |

# Knürr DCM®
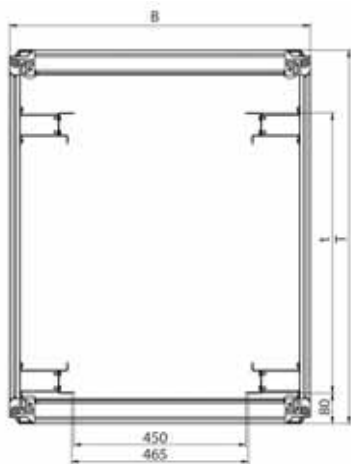
DCM20003



DCM20063     **Section width 800 mm**



DCM20062     **Section width 600 mm**

**Dimensions in mm:** W = Width
H = Height
D = Depth
h = installation height
d = useful depth
L = length

U = standard height unit
1 U = 44.45 mm
UP = unit of packaging
kg = weight

= Express item

**Conversion:** 1 mm = 0.03937 inch    1 kg = 2.2046 pound
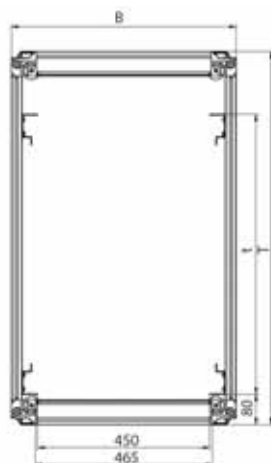
## Knürr DCM® 19" Heavy Duty Server Rack
### Width 600 and 800, stationary

– Perforated front door
– Perforated rear double door
– Special 19" server extrusions for mounting all trade standard 19" servers
– Installation in acc. with IEC 297-3
– Cable entry via top cover and bottom
– Cable entry on the top cover, can be completely removed at the rear, allowing top cover removal and replacement after cabling

■ **Jumpering space**
At the front: 80 mm

■ **Load rating**
15,000 N static

■ **Protection rating**
IP 20

■ **Tests**
- Earth in acc. with DIN EN60950
- IP test in acc. with DIN 40 050 / IEC 529

■ **Airflow**
- Perforation: 83 %

■ **Material/ Finish**
- Basic rack, extruded aluminum, polished
- Corner piece, die-cast aluminum, polished
- Doors, sheet steel, powder-coated texture
- Covers, zinc-passivated sheet steel, powder-coated texture

■ **Color**
Visible surface of covers
RAL 7021 dark gray

■ **Supply schedule**
1 basic frame
4 19" server extrusions, sheet steel incl. U marking
2 side panels with quick connectors
1 top cover with cable entry (three-piece sliding plates, can also be opened completely)
1 front door, single, perforated with handle and mounting for cylinder lock
1 rear door, double, perforated, sheet steel, with handle and mounting for cylinder lock
4 leveling feet
1 complete earthing set (VDE 0100)

■ **How supplied**
Assembled

■ **Note**
Also order mounting adapters for 19" server extrusion for mounting Knürr accessories. (See page 1.9)

| W | H | D | U | d | Model | Order no. | UP |
|---|---|---|---|---|---|---|---|
| 600 | 2000 | 1000 | 42 | 740 | Stationary, with side panels | **01.147.712.8** | 1 unit |
| 600 | 2000 | 1100 | 42 | 740 | Stationary, with side panels | **01.147.713.8** | 1 unit |
| 600 | 2000 | 1200 | 42 | 740 | Stationary, with side panels | **01.147.714.8** | 1 unit |
| 600 | 2200 | 1000 | 47 | 740 | Stationary, with side panels | **01.147.724.8** | 1 unit |
| 600 | 2200 | 1100 | 47 | 740 | Stationary, with side panels | **01.147.725.8** | 1 unit |
| 600 | 2200 | 1200 | 47 | 740 | Stationary, with side panels | **01.147.726.8** | 1 unit |
| | | | | | | | |
| 600 | 2000 | 1000 | 42 | 740 | Stationary, no side panels | **01.147.762.8** | 1 unit |
| 600 | 2000 | 1100 | 42 | 740 | Stationary, no side panels | **01.147.763.8** | 1 unit |
| 600 | 2000 | 1200 | 42 | 740 | Stationary, no side panels | **01.147.764.8** | 1 unit |
| 600 | 2200 | 1000 | 47 | 740 | Stationary, no side panels | **01.147.774.8** | 1 unit |
| 600 | 2200 | 1100 | 47 | 740 | Stationary, no side panels | **01.147.775.8** | 1 unit |
| 600 | 2200 | 1200 | 47 | 740 | Stationary, no side panels | **01.147.776.8** | 1 unit |
| | | | | | | | |
| 800 | 2000 | 1000 | 42 | 740 | Stationary, with side panels | **01.147.720.8** | 1 unit |
| 800 | 2000 | 1100 | 42 | 740 | Stationary, with side panels | **01.147.721.8** | 1 unit |
| 800 | 2000 | 1200 | 42 | 740 | Stationary, with side panels | **01.147.722.8** | 1 unit |
| 800 | 2200 | 1000 | 47 | 740 | Stationary, with side panels | **01.147.732.8** | 1 unit |
| 800 | 2200 | 1100 | 47 | 740 | Stationary, with side panels | **01.147.733.8** | 1 unit |
| 800 | 2200 | 1200 | 47 | 740 | Stationary, with side panels | **01.147.734.8** | 1 unit |
| | | | | | | | |
| 800 | 2000 | 1000 | 42 | 740 | Stationary, no side panels | **01.147.770.8** | 1 unit |
| 800 | 2000 | 1100 | 42 | 740 | Stationary, no side panels | **01.147.771.8** | 1 unit |
| 800 | 2000 | 1200 | 42 | 740 | Stationary, no side panels | **01.147.772.8** | 1 unit |
| 800 | 2200 | 1000 | 47 | 740 | Stationary, no side panels | **01.147.782.8** | 1 unit |
| 800 | 2200 | 1100 | 47 | 740 | Stationary, no side panels | **01.147.783.8** | 1 unit |
| 800 | 2200 | 1200 | 47 | 740 | Stationary, no side panels | **01.147.784.8** | 1 unit |

DCM20022



DCM20065    **section width 800 mm**



DCM20064    **section width 600 mm**

## Knürr DCM® 19" Heavy Duty Server Rack
### Widths 600 and 800, mobile

– Perforated front door
– Perforated rear double door
– Special 19" server extrusions for mounting all trade standard 19" servers
– Components in acc. with IEC 297-3
– Mobile, heavy duty castors with high floor clearance
– Cable entry via top cover and bottom cover
– Cable entry on the top cover, can be completely removed at the rear, allowing top cover removal and replacement after cabling

■ **Jumpering space**
At the front: 80 mm

■ **Load rating**
15,000 N static
10,000 N mobile in data center with load

■ **Protection rating**
IP 20

■ **Tests**
- Earthing in acc. with VDE 0100 T 540
- IP test in acc. with DIN 40 050 / IEC 529

■ **Airflow**
- Perforation: 83 %

■ **Material / Finish**
- Basic rack, extruded aluminum, polished
- Corner piece, die-cast aluminum, polished
- Doors, sheet steel, powder-coated texture
- Covers, zinc-passivated sheet steel, powder-coated texture

■ **Color**
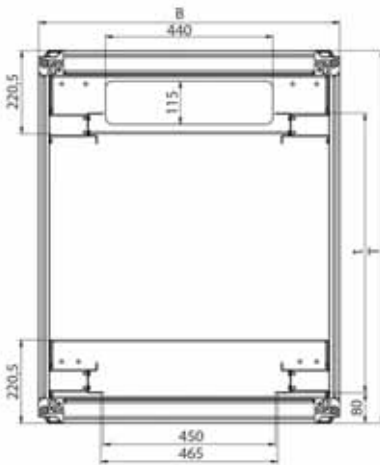Visible surface of covers
RAL 7021 dark gray

■ **Supply schedule**
1 basic frame
4 19" server extrusions, sheet steel incl. U marking
2 side panels with quick connectors
1 top cover with cable entry (three-piece sliding plates, can also be opened completely)
1 front door, single, perforated with handle and mounting for cylinder lock
1 rear door, double, perforated, sheet steel, with handle and mounting for cylinder lock
2 castor mounts with heavy duty castors with integrated cable entry
4 leveling feet
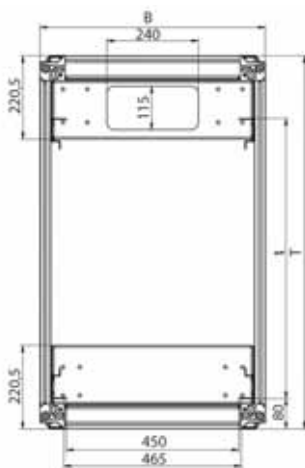1 complete earthing set (VDE 0100)

■ **How supplied**
Assembled

■ **Note**
Also order mounting adapters for 19" server extrusion for mounting Knürr accessories. (See page 1.9)

| W | H | D | U | d | Model | Order no. | UP | |
|---|---|---|---|---|-------|-----------|-----|---|
| 600 | 2000 | 1000 | 42 | 740 | Mobile, with side panels | **01.147.612.8** | 1 unit |
| 600 | 2000 | 1100 | 42 | 740 | Mobile, with side panels | **01.147.613.8** | 1 unit |
| 600 | 2000 | 1200 | 42 | 740 | Mobile, with side panels | **01.147.614.8** | 1 unit |
| 600 | 2200 | 1000 | 47 | 740 | Mobile, with side panels | **01.147.624.8** | 1 unit |
| 600 | 2200 | 1100 | 47 | 740 | Mobile, with side panels | **01.147.625.8** | 1 unit |
| 600 | 2200 | 1200 | 47 | 740 | Mobile, with side panels | **01.147.626.8** | 1 unit |
| | | | | | | | | |
| 600 | 2000 | 1000 | 42 | 740 | Mobile, with side panels | **01.147.662.8** | 1 unit |
| 600 | 2000 | 1100 | 42 | 740 | Mobile, with side panels | **01.147.663.8** | 1 unit |
| 600 | 2000 | 1200 | 42 | 740 | Mobile, with side panels | **01.147.664.8** | 1 unit |
| 600 | 2200 | 1000 | 47 | 740 | Mobile, with side panels | **01.147.674.8** | 1 unit |
| 600 | 2200 | 1100 | 47 | 740 | Mobile, with side panels | **01.147.675.8** | 1 unit |
| 600 | 2200 | 1200 | 47 | 740 | Mobile, with side panels | **01.147.676.8** | 1 unit |
| | | | | | | | | |
| 800 | 2000 | 1000 | 42 | 740 | Mobile, with side panels | **01.147.620.8** | 1 unit |
| 800 | 2000 | 1100 | 42 | 740 | Mobile, with side panels | **01.147.621.8** | 1 unit |
| 800 | 2000 | 1200 | 42 | 740 | Mobile, with side panels | **01.147.622.8** | 1 unit |
| 800 | 2200 | 1000 | 47 | 740 | Mobile, with side panels | **01.147.632.8** | 1 unit |
| 800 | 2200 | 1100 | 47 | 740 | Mobile, with side panels | **01.147.633.8** | 1 unit |
| 800 | 2200 | 1200 | 47 | 740 | Mobile, with side panels | **01.147.634.8** | 1 unit |
| | | | | | | | | |
| 800 | 2000 | 1000 | 42 | 740 | Mobile, with side panels | **01.147.670.8** | 1 unit |
| 800 | 2000 | 1100 | 42 | 740 | Mobile, with side panels | **01.147.671.8** | 1 unit |
| 800 | 2000 | 1200 | 42 | 740 | Mobile, with side panels | **01.147.672.8** | 1 unit |
| 800 | 2200 | 1000 | 47 | 740 | Mobile, with side panels | **01.147.682.8** | 1 unit |
| 800 | 2200 | 1100 | 47 | 740 | Mobile, with side panels | **01.147.683.8** | 1 unit |
| 800 | 2200 | 1200 | 47 | 740 | Mobile, with side panels | **01.147.684.8** | 1 unit |

dafnia™
*Connect to Quality*

### DCM® Heavy Duty Plinth, stationary, height 100 mm

DCM20037

– Stationary
– Cable entry possible from all sides
– Panels front and rear with vent slots and installation option for filter mat

■ **Load rating**
10,000 N static

■ **Material**
Sheet steel

■ **Finish**
Powder-coated texture, RAL 7021

■ **Supply schedule**
4 plinth corners with leveling
2 plinth panels with slots
2 plinth panels closed on the side
Mounting material

■ **How supplied**
Flat-packed kit

| W | H | D | Model | Order no. | UP |
|---|---|---|-------|-----------|-----|
| 600 | 100 | 1000 | | **01.147.738.8** | 1 unit |
| 600 | 100 | 1100 | | **01.147.739.8** | 1 unit |
| 600 | 100 | 1200 | | **01.147.740.8** | 1 unit |
| | | | | | |
| 800 | 100 | 1000 | | **01.147.746.8** | 1 unit |
| 800 | 100 | 1100 | | **01.147.747.8** | 1 unit |
| 800 | 100 | 1200 | | **01.147.748.8** | 1 unit |

### DCM® Heavy Duty Plinth, stationary, height 200 mm

DCM20037b

– Stationary incl. leveling option
– Cable entry possible from all sides
– Panels front and rear with vent slots and installation option for filter mat

■ **Load rating**
10,000 N static

■ **Material**
Sheet steel

■ **Finish**
Powder-coated texture, RAL 7021

■ **Supply schedule**
4 plinth corners, incl. leveling feet
8 panels
Mounting material

■ **How supplied**
Flat-packed kit

| W | H | D | Model | Order no. | UP |
|---|---|---|-------|-----------|-----|
| 600 | 200 | 1000 | | **01.147.788.8** | 1 unit |
| 600 | 200 | 1100 | | **01.147.789.8** | 1 unit |
| 600 | 200 | 1200 | | **01.147.790.8** | 1 unit |
| | | | | | |
| 800 | 200 | 1000 | | **01.147.796.8** | 1 unit |
| 800 | 200 | 1100 | | **01.147.797.8** | 1 unit |
| 800 | 200 | 1200 | | **01.147.798.8** | 1 unit |
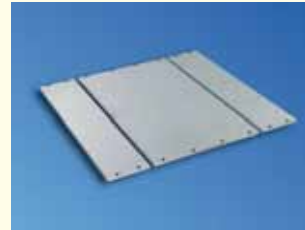
### DCM® Bottom Cover, 3-piece

DCM20032

– For covering the rack button
– For flexible cable entry on the front and rear
– For racks with castor bracket

■ **Material/ Finish**
Sheet steel, 1.5 mm, zinc-passivated

■ **Supply schedule**
3 bottom covers
2 mounting brackets
Mounting material

■ **How supplied**
Flat-packed kit

| W | H | D | Model | Order no. | UP |
|---|---|---|-------|-----------|-----|
| 600 | 1000 | | No cable entry | **01.147.834.0** | 1 unit |
| 600 | 1100 | | No cable entry | **01.147.835.0** | 1 unit |
| 600 | 1200 | | No cable entry | **01.147.840.0** | 1 unit |
| | | | | | |
| 800 | 1000 | | No cable entry | **01.147.838.0** | 1 unit |
| 800 | 1100 | | No cable entry | **01.147.839.0** | 1 unit |
| 800 | 1200 | | No cable entry | **01.147.844.0** | 1 unit |
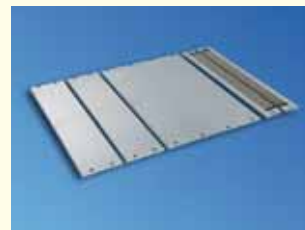
### DCM® bottom cover for cable entry with rubber sealing

DCM20035

– For covering the rack underside
– With rubber sealing for flexible cable entry on the front and rear
– For racks without castor bracket

■ **Material/ Finish**
Sheet steel, 1.5 mm, zinc-passivated
Sponge rubber, 50 mm x 50 mm

■ **Supply schedule**
1 cable entry
3 bottom covers
2 mounting brackets
Mounting material

■ **How supplied**
Flat-packed kit

| W | H | D | Model | Order no. | UP |
|---|---|---|-------|-----------|-----|
| 600 | 1000 | | With cable entry | **01.147.846.0** | 1 unit |
| 600 | 1100 | | With cable entry | **01.147.847.0** | 1 unit |
| 600 | 1200 | | With cable entry | **01.147.852.0** | 1 unit |
| | | | | | |
| 800 | 1000 | | With cable entry | **01.147.850.0** | 1 unit |
| 800 | 1100 | | With cable entry | **01.147.851.0** | 1 unit |
| 800 | 1200 | | With cable entry | **01.147.856.0** | 1 unit |

DCM20026

## Tilt Restraint for DCM®

– Quick and easy mounting and removal
– Integrated in the DCM rack
– Use only as required

■ **Supply schedule**
2 anti-tilt restrainers

■ **How supplied**
Flat-packed kit

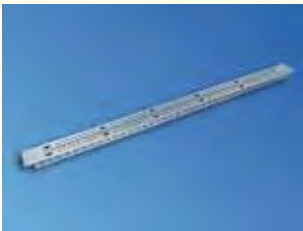| W | H | D | U | Model | Order no. | UP |
|---|---|---|---|-------|-----------|-----|
| | | | | | 01.147.641.9 | 1 unit |



DCM20052

## DCM® Mounting Adapter for 19" Server Extrusion

– For mounting Knürr standard components (storage shelves, drawers, chassis runners, keyboard runners, etc.) in 19" installation space

■ **Material**
Sheet steel, zinc-passivated

■ **Supply schedule**
4 adapters

| W | H | D | U | h | d | kg | Model | Order no. | UP |
|---|---|---|---|---|---|----|-------|-----------|-----|
| 44 | 44 | 44 | 1 | | | | | 01.147.640.9 | 1 set |



DCM20040



DCM20009   DCM20010

## DCM® PDU Bracket

– For orderly cable management in the rack
– For hanging in trade-standard PDUs without tools
– Especially ideal for Knürr and Liebert PDUs

■ **Material/Finish**
Sheet steel 1.5 mm, zinc passivated, powder-coated

■ **Color**
RAL 7021 dark gray

■ **Dimensions**
L 150 x W 28 mm:

■ **Supply schedule**
1 PDU bracket
Mounting material

■ **How supplied**
Flat-packed kit

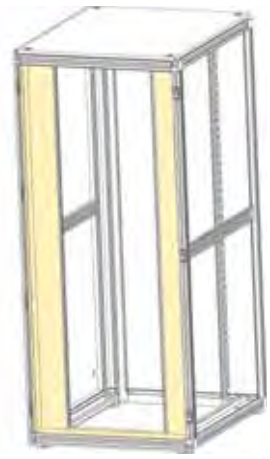| W | H | D | U | Model | Order no. | UP |
|-----|------|----|----|-------|-----------|-----|
| 150 | 2000 | 25 | 41 | | 01.147.816.8 | 1 set |
| 150 | 2200 | 25 | 47 | | 01.247.817.8 | 1 set |

**Dimensions in mm:** W = Width
H = Height
D = Depth
h = installation height
d = useful depth
L = length

U = standard height unit
1 U = 44.45 mm
UP = unit of packaging
kg = weight

= Express item

**Conversion:** 1 mm = 0.03937 inch    1 kg = 2.2046 pound



LUF20033a

## DCM® air partitioning, closed

– Quick and easy cold/warm area separation upgrade in the rack
– Side panels closed
– Screwed on the side on the 19" extrusions
– Sealing to the side panels or to the same level in the linked rack with foam elements, consequently stepless depth adjustable
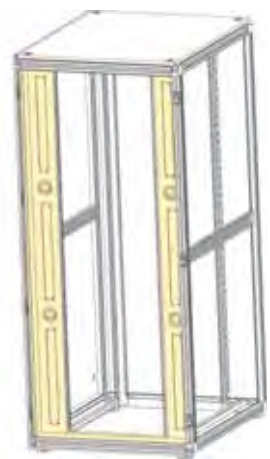
■ **Material**
Sheet steel

■ **Cross brace finish/color**
Powder-coated, RAL 7021, dark gray Texture

■ **Supply schedule**
2 side panels, left/right
2 panels, top/bottom
Mounting material

■ **How supplied**
Flat-packed kit

| W | H | D | Model | Order no. | UP |
|-----|------|----|-------|-----------|-----|
| 600 | 2000 | 20 | No cut-outs, for racks without castor bracket | 01.147.898.8 | 1 unit |
| 600 | 2000 | 20 | No cut-outs, for racks without castor bracket | 01.147.901.8 | 1 unit |
| 600 | 2200 | 20 | No cut-outs, for racks without castor bracket | 01.147.899.8 | 1 unit |
| 600 | 2200 | 20 | No cut-outs, for racks without castor bracket | 01.147.902.8 | 1 unit |
| 800 | 2000 | 20 | No cut-outs, for racks without castor bracket | 01.147.889.8 | 1 unit |
| 800 | 2000 | 20 | No cut-outs, for racks without castor bracket | 01.147.895.8 | 1 unit |
| 800 | 2200 | 20 | No cut-outs, for racks without castor bracket | 01.147.890.8 | 1 unit |
| 800 | 2200 | 20 | No cut-outs, for racks without castor bracket | 01.147.896.8 | 1 unit |



LUF20033b

## DCM® air partitioning with 3x 1 U panels, vertical

– Quick and easy cold/warm area separation upgrade in the rack
– Side panels with 2 cut-outs each for cable routing
– 3 x 1 U cut-outs, covered with panels
– Screwed on the side on the 19" extrusions
– Sealing to the side panels or to the same level in the linked rack with foam elements, consequently stepless depth adjustable

■ **Material**
Sheet steel

■ **Cross brace finish/color**
Powder-coated texture, RAL 7021, dark gray

■ **Supply schedule**
2 side panels, left/right
2 panels, top/bottom
Mounting material

■ **How supplied**
Flat-packed kit

| W | H | D | Model | Order no. | UP |
|-----|------|----|-------|-----------|-----|
| 800 | 2000 | 20 | 3x 1 U panels, for racks with castor bracket | 01.147.904.8 | 1 unit |
| 800 | 2000 | 20 | 3x 1 U panels, for racks with castor bracket | 01.147.907.8 | 1 unit |
| 800 | 2200 | 20 | 3x 1 U panels, for racks with castor bracket | 01.147.905.8 | 1 unit |
| 800 | 2200 | 20 | 3x 1 U panels, for racks with castor bracket | 01.147.908.8 | 1 unit |