

Knürr PowerTrans®

Power Distributor Rack for Data Centers



Knürr PowerTrans®

Central connection unit for power supplies for individual server racks.



The new Knürr PowerTrans® Rack provides the interface between the low voltage feed and the “Power Distribution Unit (PDU)” of the DI-STRIP® family, plus further components for feeding servers and other IT devices.

The rack is equipped with the existing PowerTrans® 19” slot-in units by simply slotting and securing them into a free spot. The electrical connection to the rack is set up immediately.

The power distribution is performed in the individual slot-in units, and therefore no longer has to be installed fixed in the building. Up to 8 slot-in units can be integrated. Each slot-in unit is supplied with an A and B feed (redundancy). With max. 250A/phase loads of up to 329 kVA can be supplied from just one single rack.

Knürr Miracel® serves as a rack basis, whose main features include the unsurpassed aluminum extrusion with multifunctional T-slot. It is light, easy to assemble, offers numerous equipping options, and is incredibly stable into the bargain. In relation to the installation area, the internal space provided for built-in components is an impressive accomplishment.

■ made
■ in
■ Germany





1 MIR20388

PowerTrans® Strong points

1 Equipping and installation

The outputs on the slot-ins can be flexibly equipped as requested by the customer with a wide range of features, with various CEE and GST 18 type plug-in connections (e.g. BladePower® or PizzaPower®, DI-STRIP TriplePower®, as well as flexible distribution with the GST18i5 distributor block, 3-phase).

2 Two 3-phase feeds

- Feed A and feed B both three-phase with max. 250A/phase L1, L2, L3, N, PE
- Ideal for providing feed redundancy

3 Cable management

Convenient cable routing from above and below.

4 Plug & Play

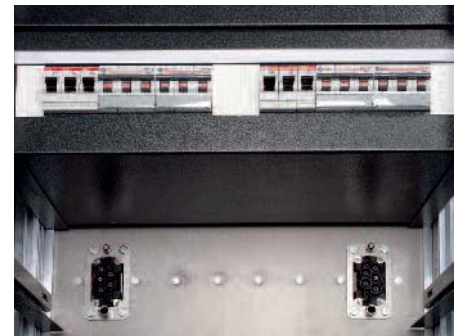
Only the main feed on the rack must be installed by an electrician. The individual slot-in units and the PDUs can be connected per Plug & Play installation, thereby allowing cost-effective later extensions.



2 MIR20390



3 MIR20391



4 MIR20386



MIR20377

PowerTrans® 19" Power Distribution Rack

- Feed of 2 separate 3-phase 400V mains, L1, L2, L3, N, PE
- Each with a 250A circuit breaker in the input
- Distribution to the individual plugs via busbars and contact-safe plug-in connections
- Up to 8 slot-in units with A feed and B feed are possible

Material/finish

- Basic rack, extruded aluminum, polished
- Corner piece, die-cast aluminum, polished
- Glass infill front door, single safety glass panel, 4mm
- Covers, zinc-passivated sheet steel, powder-coated texture

Color

RAL 7021 dark-grey

Supply schedule

- 1 rack with covers and front door
- 1 plinth for cable entry on the side and rear with leveling feet (0-25mm)
- 2 plinth trims for front and rear, with vent slots and fixing for filter mat
- 2 plinth trims, closed
- 1 set of busbars, safe from contact for A feed and B feed
- 2 circuit breakers with max. 250 A
- 16 power supply plugs for the slot-in units wired on the busbars
- 5 multifunctional braces with jumper bracket
- 2 19" T-slot extrusions
- 16 slot-in rails
- 1 complete earthing set
- 1 complete locking set

How supplied

Assembled

W	H	D	HU	h	d	Kg	Model	Order no.	UP
800	2120	1000						03.014.501.8	1 unit



Variant 1

MIR20407



Variant 2

MIR20411



Variant 3

MIR20415



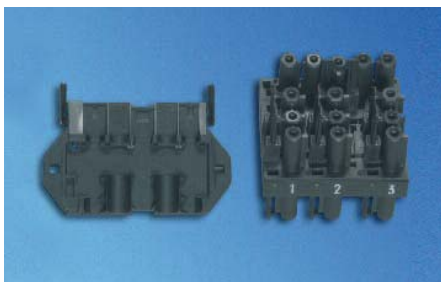
Variant 4

MIR20383



Variant 5

MIR20418



DOS20103

PowerTrans® 19" Slot-In

- 19" slot-in housing
- Width: 19"
- Height: 3 U
- Depth: 480 mm
- Color: RAL 7021 dark-grey
- 2 separate 3-phase inputs with max. 63A phase current
- Outputs acc. to variants 1-4

Variant 1 slot-in

- 2 protected 3-phase outputs, 230V/400V 32A via IEC60309 socket, 3Ph/N/PE 6h, red
- Suitable for connecting 2 Pizza-Power 3-phase (03.631.021.1) or 2 BladePower 3-phase (03.630.015.1)

Variant 2 slot-in

- 4 protected 1-phase outputs, 230V 32A via IEC60309 socket, 1Ph/N/PE 6h, blue
- Suitable for connecting 4 Pizza-Power 1-phase (03.631.007.1) or 4 BladePower 1-phase (03.630.005.1)

Variant 3 slot-in

- 6 protected 1-phase outputs 230V/400V 16A via GST18i5 Euro installed socket, 3Ph
- Suitable for connecting GST18i5 distributor block, 3-phase (04.000.038.9, for flexible distribution to 1-phase socket strips) as well as connecting a TriplePower 3-phase (03.600.024.1 or 03.600.048.1)

Variant 4 slot-in

- Empty housing
- For customer-specific equipping

Variant 5 slot-in

Measurement system for your energy monitoring

This slot-in unit allows you to measure and monitor the electrical measured variables at the early main distributor stage. This slot-in unit will replace standard analog volt and ampere meters and measuring devices for power outputs and power factor $\cos \varphi$. The required measured variables can be "customized" in 6 display panels. The system can also be connected to an LAN. The measured values are then displayed and saved on a PC in the LAN or on the Internet.

- Clear and transparent displays
- Customized setting of measured variables for standard displays
- Wide range of application with flexible adjustment of input variables
- Connection error detection with installation
- Communication with LAN enables integration into energy management
- Easy reading and display of measured data with MS Excel allows the user to flexibly configure their own solutions

The following can be measured and saved:

Voltage	Phase – N and Phase – Phase
Current	per phase
Current	in the N-conductor
Effective power	per phase
Apparent power	per phase
$\cos \varphi$	per phase
Effective power	total
Reactive power	total
Apparent power	total
Frequency	total
$\cos \varphi$	total
Effective power	total
Reactive energy	total
Apparent power	total

How supplied

Assembled

W	H	D	HU	Model	Order-no.	UP
19"		479	3	Variant 1	03.014.003.8	1 unit
19"		479	3	Variant 2	03.014.002.8	1 unit
19"		479	3	Variant 3	03.014.001.8	1 unit
19"		479	3	Variant 4	03.014.000.8	1 unit
19"		479	3	Variant 5	On request	1 unit

GST18i5 Distributor Block, 3-phase

- For individual connection at the customer
- Modular plug-in connection
- Suitable for connection to variant 3 via GST18i5 connection cable, for distributing 3-phase 16 A on various 1-phase sockets

- with GST18 input.
- Including mounting panel

Color

Black

Model	Length	Order-no.	UP
GST18i5 Distributor Block, 3-phase		04.000.038.9	1 unit
GST18i5 Connection Cable	5m	00.060.905.9	1 unit
GST18i5 Connection Cable	10m	00.060.906.9	1 unit
GST18i5 Connection Cable	15m	00.060.907.9	1 unit
GST18i5 Connection Cable	20m	00.060.908.9	1 unit

... multifunctional use



Connection example for 3-phase (32 A) power distribution in data centers with blade servers and pizza servers. Socket strip connection cable length can be freely selected (max. 20 m).

3-phase variant: Bladepower® and PizzaPower®



Connection example for 1-phase (32 A) power distribution in data centers with blade servers and pizza servers. Socket strip connection cable length can be freely selected (max. 20 m).

1-phase variant: Bladepower® and PizzaPower®



Connection example for 1-phase and 3-phase (16 A) power distribution in network racks. Socket strip connection cable length can be freely selected (max. 20m).

1-phase and 3-phase variant: DISTRIP® and TriplePower®

Emerson Network Power is a consistent global technology leader and recognised expert that helps to secure business-critical processes, and by doing so contributes to a “business-critical continuity”.

A series of the most diverse applications, including the tried, tested and proven Knürr rack system solutions and the thermal management connected with them, ensure the required network stability with the highest technological adaptability at the same time.

Knürr system solutions in the world of information and network technology are part of an adaptive Emerson Network Power architecture, which flexibly adjusts to all changes concerning security/safety, high-density and all associated capacities. Companies profit in a sustainable and long-term way from the high IT availability, operative flexibility and impressive reduction in investment and operating costs.

Knürr AG is recognised around the world as one of the leading developers, manufacturers and distributors of rack and enclosure platforms in the indoor and outdoor area, including all relevant active/passive components of 19” structures and the technologies connected with them.

Knürr is certified in accordance with EN ISO 9001 and the EN ISO 14001 standard. Knürr’s quality management continuously guarantees the highest level of quality in all areas of the company.

Emerson Network Power

The global leader in enabling business-critical continuity

- AC Power Systems
- Embedded Power
- Power Switching & Controls
- Connectivity
- Integrated Cabinet Solutions
- Precision Cooling
- DC Power Systems
- Outside Plant
- Services

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- Surge & Signal Protection
- Rack & Enclosure Systems