

# 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
$\cos \varphi$	total
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	<b>03.014.003.8</b>	1 unit
19"		479	3	Variant 2	<b>03.014.002.8</b>	1 unit
19"		479	3	Variant 3	<b>03.014.001.8</b>	1 unit
19"		479	3	Variant 4	<b>03.014.000.8</b>	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

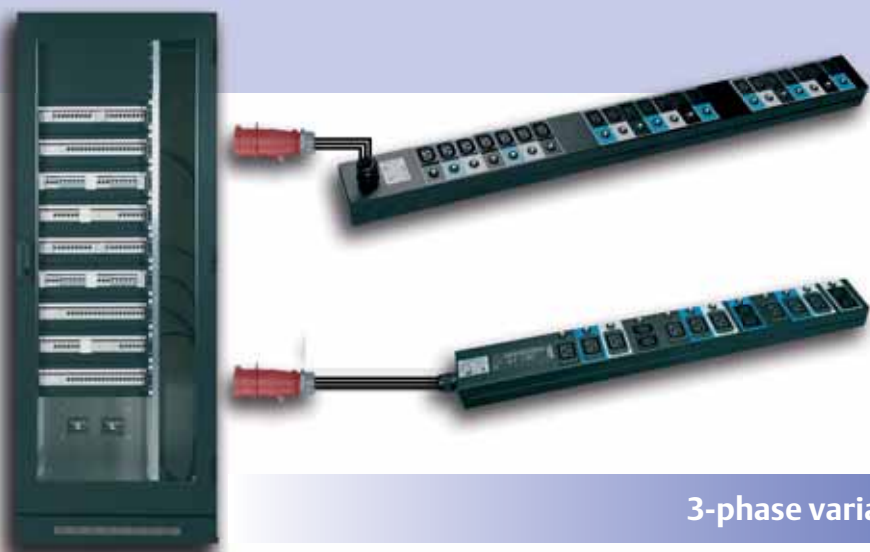
### Color

Black

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



## *... multifunctional use*



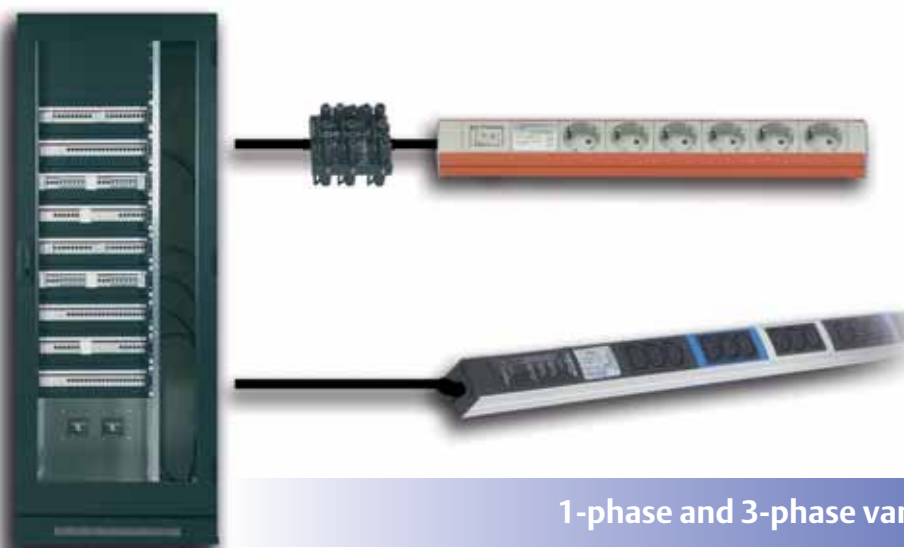
Connection example for 3-phase (32 A) power distribution in data centers with blade servers and pizza servers. Socket strip connection cable length can be freely selected (max. 20 m).

**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®**

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