This is how you can benefit from Emerson Network Power Rack PDUs

Featuring High Availability

Emerson Network Power rack PDUs are especially designed to provide maximum power densities and high temperature stability commonly required in modern data center racks. The system was developed to optimize basic availability of the power supply, minimizing downtimes as PDUs can be expanded easily. Additionally, Emerson Network Power offers requisite support enabling you to fulfill your service-level agreements.

- High temperature stability
- Modular hot-swap-enabled communications card
- Hydraulic-magnetic circuit breaker
- MPX™ rack PDU featuring an adaptive, modular system design
- Bistable / normally closed relay

Optimized Energy and Capacity Management

Thanks to highly accurate and comprehensive energy metering of the entire system up to the connection level. The superior visibility delivered by the MPX and MPH2™ rack PDUs for monitoring the energy consumption of your IT equipment enables you to scale your energy-consumption infrastructure and avoid unnecessary costs. These rack PDUs feature the lowest energy consumption in their class.

- Essential electrical parameters metered with an accuracy of ±1 %
- Lowest PDU power consumption of all switched rack PDUs in the industry
- Reports are compiled using a variety of Emerson Network Power DCIM solutions

Simplified Integration into Management Tools

MPX and MPH2 rack PDUs offer a simplified approach to implementation and change management that translates to real cost savings and operational advantages. These rack PDUs support all conventional management, authentication and encryption standards and protocols, allowing for integration into industry-leading Kernel-based Virtual Machine (KVM) systems, serial consoles and Emerson Network Power infrastructure management systems. Furthermore, MPX and MPH2 integrate the rack PDU monitoring and environment information at rack level in the superordinate data-center management software provided by Emerson Network Power or a third party.

- Up to four PDUs with one IP address within one Rack PDU Array™
- Integrated into KVM, serial consoles and infrastructure management appliances; integrated in Emerson Network Power software stack
- IPv6 support
- Remote authentication protocol support (LDAP, Active Directory, Radius, Kerberos, TACACS+) and encryption

Simpler Physical and Electrical Installation

Emerson Network Power rack PDUs are easy to install and use in trade-standard racks. The rack PDUs can be delivered pre-installed in purchased Emerson Network Power racks, saving time and money. Many important global power networks commonly used in data centers or remote locations are available – an Emerson Network Power expert can help you choose the right rack PDU to meet your needs.

- Special tool-less Knürr DCM rack fixture
- Can be pre-installed in Emerson Network Power rack solutions.
- Available in standard voltage / current strength combinations

Emerson Network Power Rack PDUs Europe

Product Series Overview

Overview: Emerson Network Power Rack PDUs Europe

	MPX - Adaptive Rack PDU			MPH2 - Managed Rack PDU				DI-STRIP Basic Rack PDU		
Features	**MPX-R**	**MPX-B**	**MPX-E**	**MPH2-R**	**MPH2-M**	**MPH2-C**	**MPH2-B**	**DI-STRIP RM**	**DI-STRIP M**	**DI-STRIP E**
Modular	■	■	■							
Local display	■	■	■*	■	■	■	■	■	■	
Remote interface	■	■	■*	■	■	■	■	■		
Metering per phase	■	■	■*	■	■	■	■	■	■	
Metering per group	■	■		■	■	■	■			
Metering per output	■			■	■					
Switch per output	■			■		■				
Metering parameter	A, V, W, kWh, VA, Hz, power factor crest factor	A, V, W, kWh, VA, Hz, power factor	A, V, W, kWh, Hz	A, V, W, kWh, VA, Hz, power factor crest factor	A, V, W, kWh, VA, Hz, power factor crest factor	A, V, W, kWh, VA, Hz, power factor	A, V, W, kWh, VA, Hz, power factor	A	A	
Input power	1ph + 3ph max 63A	1ph + 3ph max 63A	1ph + 3ph max 63A	1ph + 3ph max 32A	1ph + 3ph max 32A	1ph + 3ph max 32A	1ph + 3ph max 32A	1ph + 3ph max 32A	1ph + 3ph max 32A	1ph + 3ph max 32A
Outputs	IEC C13&C19 Schuko	IEC C13&C19 Schuko	IEC C13&C19 Schuko Switzerland GST18	IEC C13&C19	IEC C13&C19	IEC C13&C19	IEC C13&C19	IEC C13&C19 Schuko Switzerland France	IEC C13&C19 Schuko Switzerland France	IEC C13&C19 Schuko Switzerland France
Sensor connections	■	■	■*	■	■	■	■			

MPX and MPH2 accessories are similar, simplifying installation.

* Only with MPX-PEM monitored

MPX™ – Adaptive Rack PDU

Respond to change and maximize profits

No-one can make definite predictions about the power-supply demands the future will bring. But one thing is certain: the versatile, adaptive MPX rack PDUs equip you with the wherewithal to face all eventualities. They enable you to react quickly to changes in rack equipment and provide dynamic capacities, offering:

- **Modular hot-swap-enabled output power**
- **Modular hot-swap-enabled communication**
- **Modular input power.**

German Design Award SPECIAL MENTION 2013

reddot design award winner 2011

Benefits of MPX

- **Adaptive** capacity, distribution, monitoring, control and administration of critical equipment.
- **Flexibility** in reacting to constant changes – modules can be regrouped to accommodate altered requirements.
- **Only purchase what you really need** and utilize existing investments.
- **Reliable communication.**

Developed for critical environments

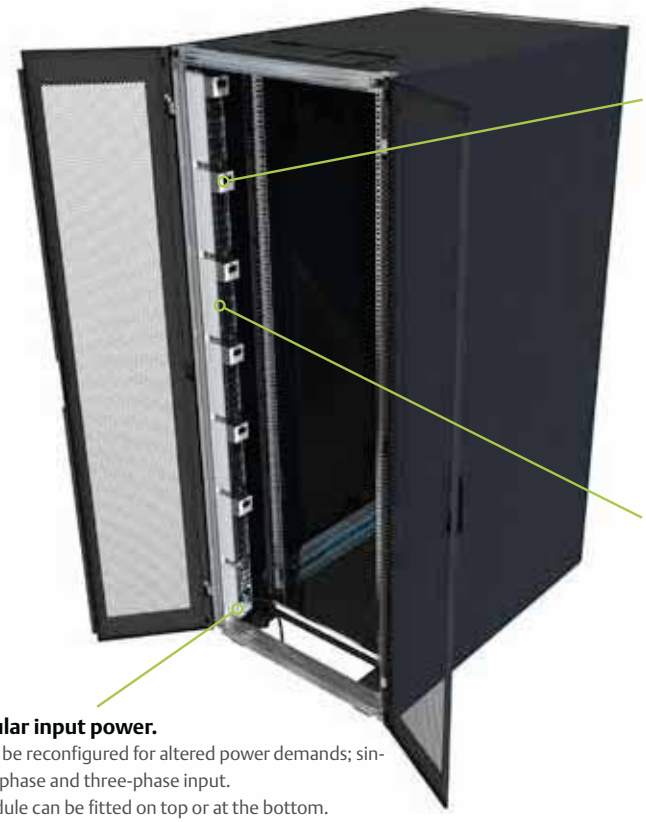
- **Critical rack operating temperature** – of up to 60° C suitable for high temperatures inside racks.
- **Accurate voltage and current metering** with tolerances of ±1 % offer a comprehensive overview.
- **Energy and power metered** with outstanding precision all the way through to output level.
- **Extensive alert function; including notification before failure occurs.**
- **Monitoring of environment conditions** including alerts and alarms.
- **Notification** upon failure or if individual components are removed.

Flexible, configurable input and output distribution

The scalable design of the MPX rack PDU allows on-site configuration that meets the current requirements of the IT equipment. It is the perfect solution for coping with the ever increasing demands of expanding data centers. You can set up your IT equipment at another location or add new components to extend your environment. All you need to do in this case is simply reconfigure the power supply and the power distribution.

Equipped to face the demands of today and tomorrow

The MPX rack PDU supports a variety of configurations for single-phase and three-phase power inputs enabling changes while retaining the distribution infrastructure.



Hot-swap-enabled output module
Simple implementation for quick start-up of IT equipment.

Outputs and modules
Outputs can be controlled and measured remotely thereby increasing flexibility and on-site security.

Modular input power.
- Can be reconfigured for altered power demands; single-phase and three-phase input.
- Module can be fitted on top or at the bottom.

MPX™

Benefits of the modular MPX rack PDU

INPUT POWER
- Configurable: 20 to 60 A (USA); 16 to 63 A (EU).
- Single-phase and three-phase.
- Cable routing possible from above and below.

OUTPUT DISTRIBUTOR
- Scalable, combination-compatible and can be replaced during operation
- Single-phase NEMA 5-20R, IEC-C13, IEC-C19, Schuko, Switzerland, GST18.
- Load balance.

MODULARITY
- Input modules.
- Output modules.
- External display.
- External sensors.
- RPC2 communication card.

MONITORING
- Three levels: Input level, module level, output level.
- Temperature and humidity.
- Door contacts and floating break input contacts.

REMOTE CONTROLLED SOCKETS
- Socket level.

Featuring High Availability

- Heat resistant up to 60° C ensuring reliable operation in the warm aisle.
- Modular hot-swap-enabled output module, controller card and sensors; can be exchanged or updated during operation.
- Special switch relay (normally closed); connected servers have an uninterrupted power supply even in the event of failure.
- Redundant power supply for control electronics.
- Fixed databus on the busbar.
- Complete data tapping on the Power Entry Module (PEM) (without any additional external monitoring devices).
- Proactive alert by additional metering of the neutral conductor and crest factor (assessment of network quality facilitating early detection of power-supply unit failures).

Maximum Flexibility and Scalability

- All modules configured in line with requirements (patented quick-mount fitting for safe installation).
- One busbar for different networks and power levels – input module can be freely selected. All other components are "hot-swap-enabled" when running operation.
- Mobile display for reading all MPX data on the rack.
- Optical slot-space display (easy server slot-space identification at the push of a button).

Highest Possible Power Levels in all Areas

- Power feed of max. 3 x 63 A; optimal for Blade server applications.
- Only one IP address for up to 4 rails with 24 modules.
- Plug and Play for numerous sensors.
- Extensive monitoring with a metering accuracy of ±1 % right through to output level.
- Module and sensor autodetect function with operating software.
- Minimal power loss for MPX systems.

The busbar (MPX™ PRC):
Serves as power and communication distribution for all supported modules. Available in two heights to accommodate different rack heights.

Output module (MPX™ BRM):
Provides overload protection by distributing power to individual servers. Available functions: Elementary, Branch Metering and Output Metering with switch function.

Power-rail spacer:
Reserves unused space until needed for an MPX™ module.

BDM™ local display module
Extended diagnostic functionality; customer-convenient display. Features include detailed information about alerts and specific labeling for outputs.

SN sensors:
Consolidates environmental monitoring of temperature, humidity and potential-free input contacts with the power supply at rack level.

Communication module (RPC2):
Installed in the power input module and offers an extendable interface for network communication, sensors and the local display.

Input module (MPX™ PEM):
Routes the input power to the busbar system of the Elementary model (without RPC2™) and the version with input metering (includes pre-installed RPC2™).

MPX™

Four equipment models for different requirements

The MPX modular rack PDU consists of various components. The basic element is a busbar, which is responsible for the power and communication distribution to the individual modules. The input power is routed via the MPX Power Entry Module (MPX PEM) to the MPX system. Different output modules (MPX Branch Receptacle Modules, MPX BRM) are available depending on requirements. Four different variants can be set up depending on the component population of the busbars:

1. MPX Elementary

Modular basic power distribution without metering and control function. An upgrade to another equipment model is quick and easy.

2. MPX Elementary Phase Monitored

Modular power distribution with metering on input. An upgrade to a superordinate line is possible by populating with appropriate output modules.

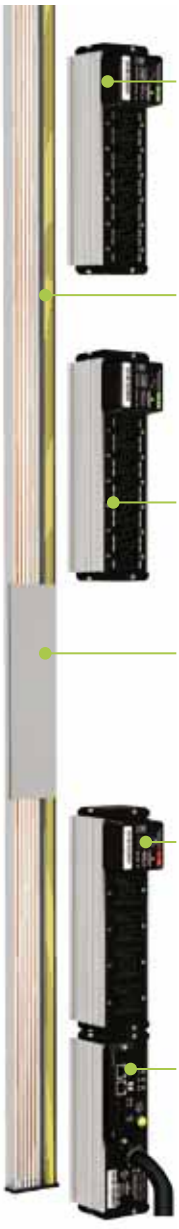
3. Branch-Monitored MPX

Modular power distribution with metering on input and each output module. An upgrade or downgrade to another line is possible if installed with appropriate output modules.

4. Receptacle Managed MPX

Modular power distribution with input, metering, each output module and each output. Individual outputs can also be switched on and off remotely. A downgrade to another line is possible if installed with the appropriate output modules.

A combination of the "Elementary Phase Monitored", "Branch-Monitored" and "Receptacle Managed" lines on a shared busbar is also possible and is one of the exceptional features of the MPX. Interfaces for the network communication, sensors and/or local display are provided by the Rack PDU Card (RPC) in the MPX PEM. The RPC Card enables connection to an optional RPC Basic Display Module (RPC BDM) to display local status and alerts.



Output module
Receptacle Managed

Busbar (MPX^T PRC)
Distributes power and communication signals to all modules.

Branch-Monitored output module (MPX BRM)

Spacer for busbars
Fills unused gaps until a Liebert MPX module is upgraded.

Output module e. g. Elementary (MPX BRM)

Input module (MPX PEM)
Routes input power and data (depending on the module type) to the busbar system.

MPX™ – Configuration models in Europe

		Order number	Four equipment models			
			MPX™ Elementary	**MPX™** Elementary Phase-Monitored	**MPX™** Branch-Monitored	**MPX™** Receptacle Managed
Busbar	Length 1035	MPXPRC-V1035XXX	■	■	■	■
	Length 1880	MPXPRC-V1880XXX	■	■	■	■
Input Modules	1ph 32A fixed*	MPXPEM-EHAEXQ30	■			
		MPXPEM-EHABXQ30		■	■	■
	3ph 16A fixed	MPXPEM-EHAEXT30	■			
		MPXPEM-EHABXT30		■	■	■
	3ph 32A fixed	MPXPEM-EHAEXR30	■			
		MPXPEM-EHABXR30		■	■	■
	3ph 63A fixed	MPXPEM-EHBEXZ30	■			
		MPXPEM-EHBBXZ30		■	■	■
Elementary Output Modules	IEC-C13 L1	MPXBRM-EEBC7N1N	■	■		
	IEC-C13 L2	MPXBRM-EEBC7N2N	■	■		
	IEC-C13 L3	MPXBRM-EEBC7N3N	■	■		
	IEC-C19 L1	MPXBRM-EEBC4O1N	■	■		
	IEC-C19 L2	MPXBRM-EEBC4O2N	■	■		
	IEC-C19 L3	MPXBRM-EEBC4O3N	■	■		
	Schuko L1	MPXBRM-EEBC3P1N	■	■		
	Schuko L2	MPXBRM-EEBC3P2N	■	■		
	Schuko L3	MPXBRM-EEBC3P3N	■	■		
	Switzerland T23	MPXBRM-EEBC4S1N	■	■		
	Switzerland T23	MPXBRM-EEBC4S2N	■	■		
	Switzerland T23	MPXBRM-EEBC4S3N	■	■		
	GST18	MPXBRM-EEBC9U1N	■	■		
	GST18	MPXBRM-EEBC9U2N	■	■		
	GST18	MPXBRM-EEBC9U3N	■	■		
Branch-Monitored Output Modules	IEC-C13 L1	MPXBRM-EBBC6N1N			■	
	IEC-C13 L2	MPXBRM-EBBC6N2N			■	
	IEC-C13 L3	MPXBRM-EBBC6N3N			■	
	IEC-C19 L1	MPXBRM-EBBC4O1N			■	
	IEC-C19 L2	MPXBRM-EBBC4O2N			■	
	IEC-C19 L3	MPXBRM-EBBC4O3N			■	
	Schuko L1	MPXBRM-EBBC3P1N			■	
	Schuko L2	MPXBRM-EBBC3P2N			■	
	Schuko L3	MPXBRM-EBBC3P3N			■	
Receptacle Managed Output Modules	IEC-C13 L1	MPXBRM-ERBC6N1N				■
	IEC-C13 L2	MPXBRM-ERBC6N2N				■
	IEC-C13 L3	MPXBRM-ERBC6N3N				■
	IEC-C19 L1	MPXBRM-ERBC4O1N				■
	IEC-C19 L2	MPXBRM-ERBC4O2N				■
	IEC-C19 L3	MPXBRM-ERBC4O3N				■
	Schuko L1	MPXBRM-ERBC3P1N				■
	Schuko L2	MPXBRM-ERBC3P2N				■
	Schuko L3	MPXBRM-ERBC3P3N				■
Sensors	1xTemp.	SN-Z01		■	■	■
	3xTemp.	SN-Z02		■	■	■
	3xT. + 1xHum	SN-Z03		■	■	■
	1xTemp. Mod.	SN-T		■	■	■
	Temp/Hum Mod.	SN-TH		■	■	■
	2xDoor Mod.	SN-2D		■	■	■
	3xInput Mod.	SN-3C		■	■	■
External Display		RPCBDM-1000		■	■	■

Upgrade possible

← Different combinations available →

*Note: One-phase input modules can only be populated with L1 modules.

Simple integration into DCIM systems

The MPH2™ and MPX™ rack PDUs can be administrated locally and remotely. Thanks to the metering of all electrical parameters right up to output, phase, bank or rack PDU levels, as well as the integration of environment sensors, these rack PDUs are key when recording power consumption and environment information at rack level. Since they support all important industry standards and protocols for administration, authentication and encryption, these products can easily be integrated into any existing network or system architecture.

Flexible local and remote management

The integrated MPH2 standard display provides readings of all important rack-related information. **The optional BDM local display** is available for MPH2 or MPX and can easily be mounted to where it can best be read.

Remote communication at rack PDU level is delivered by the modular hot-swap-enabled **RPC2™ card**, which is maintenance – friendly and provides seamless extendability. RPC2 features:

- **Supports up to four PDUs within one PDU Rack Array™:** Minimizes number of IP addresses.
- **Supports up to ten environment sensors:** Consolidates power and environment monitoring at rack level.
- **Supports Web UI, CLI, SSH and Telnet:** Windows, Linux and network administrators can use their preferred communication to the rack PDU.
- **Supports all standard remote authentication and encryption protocols:** Simple integration into existing security infrastructure.
- **Supports SNMP v1, v2 and v3:** For secure communication across network management systems.
- **Supports IPv4 and IPv6:** Future-proof IP support for rack PDUs.
- **Data protocols:** All data is automatically stored making trouble shooting easy without involving external management software.

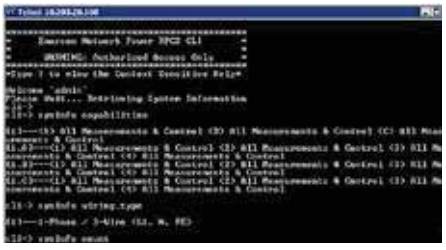
Remote monitoring interface featuring:

- Snapshot of all electrical parameters on output, group, phase and entire levels.
- Snapshot of environment-sensor metering values and status.
- Threshold value configuration, alert and notification.
- Control of individual outputs and groups.
- Status information and configuration of all outputs.
- Network management settings.

The **Avocent Rack Power Manager** which includes access and control functions, enables central administration of all rack PDUs in the data center, simplifying administration and monitoring of your PDUs.

The **Rack Power Manager** is equipped with state-of-the-art monitoring capabilities that enable intelligent server grouping across disparate racks. It also enables custom reporting, scheduled regular reports and the ability to set real-time threshold alerts to give you the highest quality information on your data center's power infrastructure so as to truly leverage the investment in PDUs.

- Measure and Track Power Costs – The Rack Power Manager calculates and compares cost across multiple levels (rack, row, data centers or companies) to track cost over a period of time and also measure the impact of any consolidation or expansion projects.
- Review Historical Capacity and Consumption Reports – Plan for future expansion or new facilities more accurately based on real historical data.
- Protect Against Downtime – Help get a total reading on power usage for the data center and set a maximum threshold of power usage. Set alerts to know when the threshold is reached or exceeded and allow time to make changes.
- Precision planning – Help IT identify what electrical infrastructure to build into a new location or disaster recovery site. The design can be based on real historical data rather than maximum values or estimates.



Command-line interface

User interface

Avocent® Rack Power Manager

Optimal Utilization of Your Rack PDU Investment

The MPX™ and MPH2™ rack PDUs can be integrated in industry-leading KVM systems, serial consoles and Emerson Network Power infrastructure management systems. Furthermore, the rack PDU monitoring and environment information can be integrated into comprehensive data-center management software provided by Emerson Network Power or a third party. The information provided by this intelligent rack PDU offers Emerson Network Power's customers a comprehensive, user-friendly power distribution and administrative solution.

Integration into the **Avocent® Advanced Console Server, MergePoint™ Unity KVM Switches** and **Universal Management Gateway-Appliances** offers the following benefits:

- Rack PDUs are integrated into the out-of-band-management solution.
- Rack PDUs are included in a consolidated access and control solution.
- The number of IP addresses required for rack PDU administration are minimized.

By consolidating all data-center management functionality into a single interface, **Avocent DSView™ 4** management software delivers the complete data-center control necessary for the 24/7 data center.

The software enables secure, out-of-band, centralized management of all connected IT and network devices in complex and geographically dispersed data centers.

When used in conjunction with KVM appliances, serial console appliances, service processor gateways and PDUs, the hardware and software combine to allow IT administrators to remotely access, monitor and control target devices on multiple platforms at numerous locations–anywhere, anytime.

Used in combination with rack PDUs, DSView4 management software ensures:

- that PDUs are part of a consolidated access and control solution.
- simple assignment of IT equipment to PDU outputs they are connected to.
- that PDUs are part of a consolidated authentication, authorization and audit solution.

Integration into **Liebert® Nform™** and **Liebert SiteScan®** delivers:

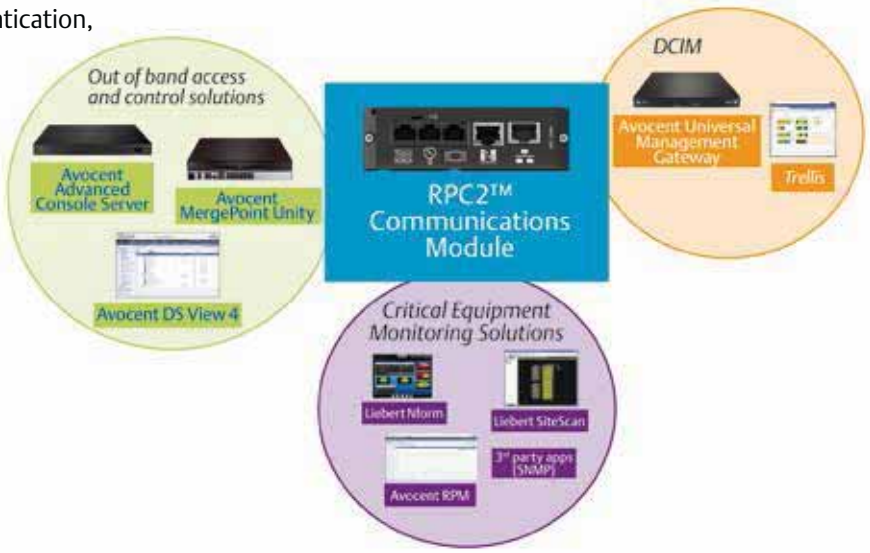
- Inclusion of rack PDUs in a consolidated monitoring solution for data centers at infrastructure level.
- Real-time monitoring and control of almost every component of the critical support equipment.
- Date analysis and trend reports.
- Event management.

The **Trellis™** platform is a trailblazing DCIM innovation from Emerson Network Power. It minimizes IT risks while increasing operating efficiency, overcoming challenges and preparing you for the future.

For both expansion and consolidation, as well as planning IT measures, constant monitoring, tracking and an overview of real-time infrastructure metered values and data are necessary for precision planning and making informed decisions. The Trellis platform provides all relevant information when you need it enabling data center administration without having to use several tools.

With real-time visualization, power-supply monitoring and mobile access offered by the Trellis™ platform you can:

- Reduce inefficiencies without interrupting running processes.
- Postpone investments and increase your operating margin.
- Improve the Service Level Agreement with comprehensive transparency across the entire infrastructure.
- Reduce operating costs without compromising availability and adaptability.
- Manage remote resources more effectively.
- Increase overall efficiency by gaining a better insight into the data center.



DOS20153

MPX™ – Input Module/Power Supply

Elementary and Monitored type
- The MPX PEM is fixed on the MPX PRC and provides the connection to the power supply.
- Fixed-connection cable; 3 m long.
- With IEC60309 plug, 1Ph/N/PE 6h blue, 3Ph/N/PE 6h red.

Monitored type
- The MPX PEM provides connection to the databus for data communication.
- Integrated RPC2 communication card enables remote monitoring and maintenance of the MPX modules.
- Provides the following phase-input data: voltage, current, effective power, consumption and frequency.
- Power alarm functions for individual phases and their operating status are also supported.
- Further important features: Three displays inform the user on the current status of each individual input. An acoustic alarm is activated at certain overload conditions.
- The communication card centralizes the MPXs local and remote administration.
- Serves as the connection point for versatile support options and devices, such as the display module (RPC BDM), various sensors and connection to other MPX™ or MPH2™ systems, for example.
- Has RJ-45 ports for all connections (except USB port) and does not require any special cabling.

Technical Data Interfaces:
- RJ-45 LAN port (10/100 MBit) – for local network (LAN) connection via an Ethernet cable.
- Expansion / administration port for local configuration using a computer / laptop, for creating a link-up of several PDUs (MPX or MPH).
- Serial interface RS232.
- Display port for connecting the RPC BDM (display module).
- External sensor port for connecting optional sensors.
- Remote management: Onboard Web interface, CLI, SNMPv1,2,3, SSH, Telnet Syslog, compatible with Avocent ACS, UMG & MPU, SiteScan, DSView, Rack Power Manager, Nform & Trellis as well as Nagios or other management software programs.
- Authentication: local, remote: Active Directory, LDAP, TACACS, Radius, Kerberos.
- Encryption: MD5, AES, DES.

Material / Finish
- Enclosure: aluminum.
- Cover: sheet steel.
- Power contacts: silver-plated.
- Databus contacts: gold-plated (only Monitored type)

Dimensions
- Width: 75 mm.
- Height: 65 mm.
- Feed cable: 3 m.

Color
- Enclosure: aluminum/RAL7021 dark-gray

Certification
- CE label in accordance with Low Voltage Directive 2006/95/EC.
- EMC Directive 2004/108/EC.
- BV BG.

Standard inclusion
- 1 x MPX PEM power input module.
- Including connection cable.
- Including RPC2 communication card (only Monitored type).

L	W	H	U	Feed	Load rating	Type	Order No.	UP
220	75	65		Fixed	230 VAC, max. 32 A	Elementary	**MPXPEM-EHAEXQ30**	1 unit
220	75	65		Fixed	230/400 VAC, max. 16 A	Elementary	**MPXPEM-EHAEXT30**	1 unit
220	75	65		Fixed	230/400 VAC, max. 32 A	Elementary	**MPXPEM-EHAEXR30**	1 unit
266	75	65		Fixed	230/400 VAC, max. 63 A	Elementary	**MPXPEM-EHBEXZ30**	1 unit
220	75	65		Fixed	230 VAC, max. 32 A	Monitored	**MPXPEM-EHABXQ30**	1 unit
220	75	65		Fixed	230/400 VAC, max. 16 A	Monitored	**MPXPEM-EHABXT30**	1 unit
220	75	65		Fixed	230/400 VAC, max. 32 A	Monitored	**MPXPEM-EHABXR30**	1 unit
266	75	65		Fixed	230/400 VAC, max. 63 A	Monitored	**MPXPEM-EHBBXZ30**	1 unit

Dimensions in mm:				Conversion:
W = Width	n = Number of sockets	U = Standard rack unit		1 mm = 0.03937 inch
H = Height	F1 = Standard side panel	1 U = 44.45 mm		1 kg = 2.2046 pounds
L = Length	F2 = Design side panel	UP = Packaging unit		
S = Switch	19" = ideal for 19" components	Safe = child-proof		

Replace **.x** with the number of the color combination you require: **.1** = RAL 7035, **.6** = RAL 7035/RAL 2003

DOS20153

MPX™ BRM – Output Module

- The MPX BRM enables the distribution to the individual consumers.
- Each module taps a color-coded phase.
- All modules are protected against overload with a 20 A circuit breaker.
- Modules can be exchanged during operation thereby facilitating user-specific installation without having to shut down the MPX.
- Up to 3 BRM output modules can be installed on a 1,035 mm PRC busbar; up to 6 BRM output modules can be installed on a 1,880 mm PRC busbar.

Material / Finish
- Enclosure: aluminum.
- Cover: sheet steel.
- Power contacts: sliver-plated.
- Databus contacts: gold-plated (only type B and R).

Dimensions
- Width: 75 mm.
- Height: 65 mm.

Color
- Enclosure: aluminum/RAL7021 dark-gray

Certification
- CE label in accordance with Low Voltage Directive 2006/95/EC.
- EMC Directive 2004/108/EC.
- BV BG.

Standard inclusion
- 1 x MPX PEM power output module.
- 1 x instruction manual.

Type E – Elementary
- Module for power distribution via respective outputs.

Type B – Branch-Monitored
- Module for power distribution via respective outputs with metering function on module level.
- The MPX BRMs have LED ID indicator which identifies every module with a number.
- Modules are administered in the software.
- Provides the following metered readings: voltage, current, power, apparent power, kWh and power factor.
- Power alarm functions and operating status are supported.

Type R – Receptacle Managed:
- Module for power distribution via respective outputs with metering function on module level and output level.
- The MPX BRMs have LED ID indicator which identifies every module with a number.
- Modules are administered in the software.
- Provides the following metered readings: voltage, current, power, apparent power, kWh, frequency, power factor and crest factor.
- Power alarm functions and operating status are supported.
- Individual outputs can be switched on and off remotely.

L	n	Outputs	Load rating per output	Phase tap	Type	Order No.	UP
266	7	IEC320 C 13	10 A	L1	E	**MPXBRM-EEBC7N1N**	1 unit
266	7	IEC320 C 13	10 A	L2	E	**MPXBRM-EEBC7N2N**	1 unit
266	7	IEC320 C 13	10 A	L3	E	**MPXBRM-EEBC7N3N**	1 unit
266	4	IEC320 C 19	16 A	L1	E	**MPXBRM-EEBC4O1N**	1 unit
266	4	IEC320 C 19	16 A	L2	E	**MPXBRM-EEBC4O2N**	1 unit
266	4	IEC320 C 19	16 A	L3	E	**MPXBRM-EEBC4O3N**	1 unit
266	3	Schuko CEE 7/4	16 A	L1	E	**MPXBRM-EEBC3P1N**	1 unit
266	3	Schuko CEE 7/4	16 A	L2	E	**MPXBRM-EEBC3P2N**	1 unit
266	3	Schuko CEE 7/4	16 A	L3	E	**MPXBRM-EEBC3P3N**	1 unit
266	4	Switzerland T23	16 A	L1	E	**MPXBRM-EEBC4S1N**	1 unit
266	4	Switzerland T23	16 A	L2	E	**MPXBRM-EEBC4S2N**	1 unit
266	4	Switzerland T23	16 A	L3	E	**MPXBRM-EEBC4S3N**	1 unit
266	9	GST18 3-pole	16 A	L1	E	**MPXBRM-EEBC9U1N**	1 unit
266	9	GST18 3-pole	16 A	L2	E	**MPXBRM-EEBC9U2N**	1 unit
266	9	GST18 3-pole	16 A	L3	E	**MPXBRM-EEBC9U3N**	1 unit
266	6	IEC320 C 13	10 A	L1	B	**MPXBRM-EBBC6N1N**	1 unit
266	6	IEC320 C 13	10 A	L2	B	**MPXBRM-EBBC6N2N**	1 unit
266	6	IEC320 C 13	10 A	L3	B	**MPXBRM-EBBC6N3N**	1 unit
266	4	IEC320 C 19	16 A	L1	B	**MPXBRM-EBBC4O1N**	1 unit
266	4	IEC320 C 19	16 A	L2	B	**MPXBRM-EBBC4O2N**	1 unit
266	4	IEC320 C 19	16 A	L3	B	**MPXBRM-EBBC4O3N**	1 unit
266	3	Schuko CEE 7/4	16 A	L1	B	**MPXBRM-EBBC3P1N**	1 unit
266	3	Schuko CEE 7/4	16 A	L2	B	**MPXBRM-EBBC3P2N**	1 unit
266	3	Schuko CEE 7/4	16 A	L3	B	**MPXBRM-EBBC3P3N**	1 unit
266	6	IEC320 C 13	10 A	L1	R	**MPXBRM-ERBC6N1N**	1 unit
266	6	IEC320 C 13	10 A	L2	R	**MPXBRM-ERBC6N2N**	1 unit
266	6	IEC320 C 13	10 A	L3	R	**MPXBRM-ERBC6N3N**	1 unit
266	4	IEC320 C 19	16 A	L1	R	**MPXBRM-ERBC4O1N**	1 unit
266	4	IEC320 C 19	16 A	L2	R	**MPXBRM-ERBC4O2N**	1 unit
266	4	IEC320 C 19	16 A	L3	R	**MPXBRM-ERBC4O3N**	1 unit
266	3	Schuko CEE 7/4	16 A	L1	R	**MPXBRM-ERBC3P1N**	1 unit
266	3	Schuko CEE 7/4	16 A	L2	R	**MPXBRM-ERBC3P2N**	1 unit
266	3	Schuko CEE 7/4	16 A	L3	R	**MPXBRM-ERBC3P3N**	1 unit

DOS20153

MPX™ PRC – Power Distribution Unit / Communication Bus

- The MPX PRC is the basic element of the MPX power distribution unit.
- Power and data transfer buses are integrated across the entire length of the MP PRC.
- The MPX BRMs (output modules) and the MPX PEM (power input module) are fixed on the MPX PRC and, depending on the type, facilitate the modules' power feed, output, monitoring and management.

Material / Finish
- Busbar housing: aluminum.
- Busbars: copper.
- Databus: gold-plated.

Dimensions
- Width: 68 mm.
- Height: 24 mm.

Color
- Enclosure: aluminum.

Approvals
- CE label in accordance with Low Voltage Directive 2006/95/EC.
- EMC Directive 2004/108/EC.
- BV BG.

Load rating
- Max. current: 3 x 63 A.
- Nominal voltage (L-N / L-L): 230 / 400 VAC.

Standard inclusion
- 1 x MPX PRC - power distribution unit / communication bus.
- 1 x mounting kit.

L	W	H	U	Model	Order No.	UP
1035	68	24	23	1 PEM (220 mm) + 3 BRM	**MPXPRC-V1035XXX**	1 unit
1880	68	24	42	1 PEM (220/266 mm) + 6 BRM	**MPXPRC-V1880XXX**	1 unit

DOS20153

MPX™/MPH™/MPH2™/IMS™ – Sensors

- These sensors are designed for tool-less installation in a Knürr Miracle / DCM rack, and is also compatible with all other rack types.
- "Fixed" type sensors are attached to a cable.
- "Modular" type sensors can be connected to the delivered cable.
- Plugged into the RPC-1000 or RPC2 communication card.
- Several sensors can be connected in rows.
- Automatically displayed in the MPX/MPH/ MPH2/IMS software.
- Temperature measurement range: 5 – 60° C.
- Accuracy: ± 0.5° C.
- Humidity measurement range: 10 – 95 %.
- Accuracy: ± 3.5 %.

Note
Sensors are not required for operating the MPX or MPH, MPH2, IMS. However, a communication card is needed.

Standard inclusion
- 1 x sensor with connection cable.
- 1 x instruction manual.

Cable length	Type	Model	Order No.	UP
3660	Fixed	Temperature sensor, single	**SN-Z01**	1 unit
5180	Fixed	Temperature sensor, triple	**SN-Z02**	1 unit
5180	Fixed	Temperature sensor, triple + humidity sensor, single	**SN-Z03**	1 unit
2000	Modular	Temperature sensor, single	**SN-T**	1 unit
2000	Modular	Temperature sensor, single + humidity sensor, single	**SN-TH**	1 unit
2000	Modular	2 x door contact - input module*	**SN-2D**	1 unit
2000	Modular	3 x digital input	**SN-3C**	1 unit

* Suitable door contact switch: Order no.: 06.108.115.9

DOS20153

RPC BDM - 1000 Display Module

- Provides the local display of the monitored data for all connected MPX/MPH/MPH2/IMS systems.
- Operated with a navigation switch.
- Connected via a cable with the RPC, enabling the user to place the displays where they can be easily read in the given local space conditions.
- An individual display can be used for up to four MPX/MPH/MPH2/IMS PDUs, which are all connected in a PDU array.

Note
The display module is not required when operating the MPX or MPH, MPH2, IMS. However, a communication card is needed.

Standard inclusion
- 1 x RPCBDM-1000 display module.
- 1 x connection cable 2 m.
- 1 x mounting kit.

L	W	H	U	Model	Order No.	UP
					RPCBDM-1000	1 unit

xxx

xxx

BRM Power-Distribution Cable-Holder Clip Set

- Cable clips provide strain relief for the feed lines of the network equipment.
- Cable clips are suitable for most IEC-C13 socket plugs with a raised edge. (Must be checked for suitability).
- Cable clips are sold in sets of 18 units.

Standard inclusion
- 1 x cable holder set (18 units).

Delivery
- In sets.

Note
- Optimal function only with cable connector 04.000.051.9.
- Can only be used with MPXBRM-EBBC6NxN and MPXBRM-ERBC6NxN (x = 1 ,2, 3).

L	W	H	U	Model	Order No.	UP
					03.910.216.9	1 unit

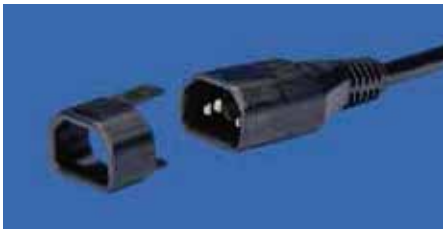
DOS20493

SafetySleeve™ Cable Protection IEC C19

- SafetySleeves protect the feed lines of the network equipment.
- They can be used on all C19 cables and fit onto all PDUs.

Material / Finish
- PVC, black.

L	W	H	U	Model	Order No.	UP
				C20 plug in C19 socket	**03.910.212.9 001**	20 unit



DOS20494

SafetySleeve™ Cable Protection IEC C13

- SafetySleeves protect the feed lines of the network equipment.
- They can be used on all C13 cables and fit onto all PDUs.

Material / Finish
- PVC, black.

L	W	H	U	Model	Order No.	UP
				C14 plug in C13 socket	**03.910.213.9 001**	50 unit

MPH2™ – Managed Rack PDU

Monitoring and Control

The newly developed MPH2™ Managed Rack PDU is a power supply system with monitoring and control functions. The MPH2™ offers outstanding features such as easy rack-integration and management architecture as well as optimum availability and energy efficiency.

Four MPH2™ versions are available:

- With input metering, output metering and output switching.
- With input metering and output metering.
- With input metering and output switching.
- With input metering.

Benefits of MPH2™

- **Monitors several parameters** with defined thresholds and alarm tools.
- **Monitors and controls individual outputs** and/or load and appliance groups.
- **A variety of measurements** allow you to predict failing conditions before they occur and proactively manage connected equipment for maximum uptime.
- **Energy and power metering** maximize the data center power and cooling infrastructure.
- **Lowest power consumption** of all switched-rack PDUs lowers power costs and thermal load.
- **Up to four rack MPH2™ PDUs** can be connected in a Rack PDU Array™ thereby consolidating user-specific IP connections and equipment monitoring.

Developed for critical environments

- **Industry-leading operating temperature** of up to 60° C suitable for high temperatures inside racks.
- **Bistable relays ensure basic power supply** even when shortfalls occur elsewhere.
- **Accurate voltage and current metering up to outlet level** with ±1 % tolerances deliver reliable results.
- **Extensive alarm functions including notification** when an overload occurs in individual groups.
- **Monitoring of environment conditions (temperature, humidity and input contacts)** with alerts and alarms.
- **Notification** upon failure or if loads are removed in individual racks.

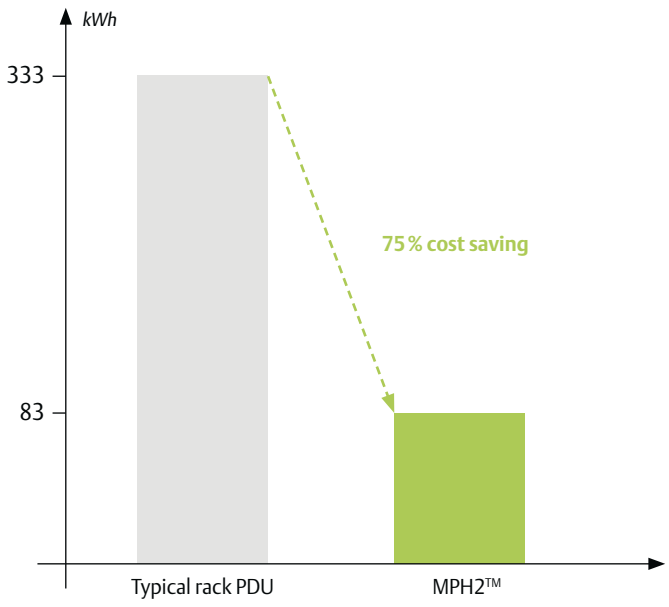
DEUTSCHER RECHENZENTRUMSPREIS 2014
2. PLATZ KATEGORIE 4: RZ-ENERGIETECHNIK

MPH2™ savings for a typical data center

	Typical rack PDU with 24 outputs	MPH2™
Power consumption of PDU (in Watt)	20	5
Annual energy consumption of PDU (kWh)	176	44
Total proportion of the data center's energy consumption (kWh)*	333	83
Energy saving	**75 %**	

Compared with a Switched Rack-PDU model for a typical data center with a 1.9 PUE.

* according to Energy Logic calculations



INPUT POWER
- 16 to 32 A (EU).
- Single-phase and three-phase.

OUTPUT DISTRIBUTOR
- IEC C13 and IEC C19.
- Combination systems.

MODULARITY
- Communication card.
- External display.
- External sensors.

MONITORING
- Three various levels: Input level, group level, output level
- Temperature and humidity.
- Door contacts and potential-free input contacts.

REMOTE CONTROLLED SOCKETS
- Socket level.

MPH2™

Benefits

Highest availability levels

- Modular communications card; can be replaced during operation. This simplifies maintenance and increases the level of availability.
- Bistable relays in switchable designs; the server's power supply is ensured even during outages.
- Software-controlled overload protection – affected outputs are switched off before the advance fuse is activated.
- Additional metering of the neutral conductor and of the crest factor; possible faults that cause switch-off are detected in advance.

Leading technology in many areas

- Operating temperatures of up to 60 °C allow secure operation in the warm aisle.
- Metering accuracy of ± 1 % ensures reliable measurement results.
- Power losses of approx. 5 W, even in switchable models, reducing electricity costs and minimizing the thermal load.

Industry-leading management properties

- An integrated local display and an optional external display facilitates flexible local management.
- Onboard web interface and CLI/SSH interface; suitable for both Windows and Linux administration.
- A variety of authentication options and encrypted protocols ensure integration into Enterprise Security architectures.
- SNMPv3 and IPv6 support so that current requirements, particularly from the public sector, can be satisfied.

Simple integration into ENP solutions

- Can be delivered pre-installed in Knürr racks to save time and costs during installation in the data center.
- Serial integration into Avocent UMG, ACS and MPU guarantees redundant management access to the MPH2.
- Integration into ENP software solutions; the MPH2 is an integral part of a comprehensive DCIM solution with monitoring and control functions.

Special tool-less Knürr DCM rack fixture:
Lowers installation costs and extra space in rack for cables and other components.

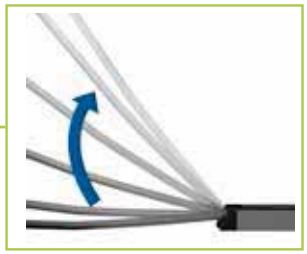
Communications module (RPC2™):
Offers extendable interfaces for network communication, sensors and local display.

Connection cable with locking mechanism
Prevents IT cables from being accidentally disconnected.

BDM™ local display module
Extended diagnostic functionality; user-friendly display. Features include detailed information about alerts and specific labeling for outputs.

SN sensors:
Consolidates environmental monitoring of temperature, humidity and potential-free input contacts with the power supply at rack level.

Integrated display:
Provides easy access to important information on the rack.



Flexible network cable input:
Simplifies installation in the rack PDU.

Ultra-flat circuit breakers:
Compact construction; minimizes space requirements in the rack.

Cable and fixed wiring options:
Flexible power distribution; input-cable can be connected locally.

Simple Integration into DCIM Systems

The MPH2™ and MPX™ rack PDUs can be administrated locally and remotely. Thanks to the metering of all electrical parameters right up to output, phase, bank or rack PDU levels and the integration of environment sensors, these rack PDUs are key to recording power consumption and environment information at rack level. Since they support all important industry standards and protocols for administration, authentication and encryption, these products can easily be integrated into any existing network or system architecture.

Flexible local and remote management

The integrated MPH2 standard display provides readings of all the important rack-related information. **The optional BDM local display** is available for MPH2 or MPX and can easily be mounted where necessary.

Remote communication at rack PDU level is delivered by the modular hot-swap-enabled **RPC2™ card**, which is user-friendly and provides seamless extendability. RPC2 features:

- **Support for up to four PDUs within one PDU Rack Array™:** Minimizes number of IP addresses.
- **Supports up to ten environment sensors:** Consolidates power and environment monitoring on rack level.
- **Supports Web UI, CLI, SSH and Telnet:** Windows, Linux and network administrators can use their preferred communication to the rack PDU.
- **Supports all standard remote authentication and encryption protocols:** Simple integration into existing security infrastructure.
- **Supports SNMP v1, v2 and v3:** For secure communication across network management systems.
- **Supports IPv4 and IPv6:** Future-proof IP support for rack PDUs.
- **Data protocols:** All data is automatically stored making trouble shooting easy without involving external management software.

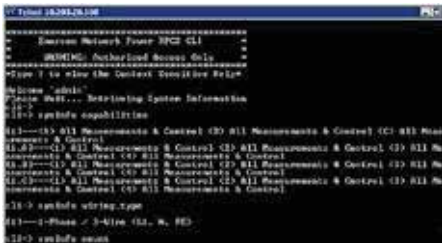
Remote monitoring interface featuring:

- Snapshot of all electrical parameters on output, group, phase and entire levels.
- Snapshot of environment-sensor metering values and status.
- Threshold value configuration, alert and notification.
- Control of individual outputs and groups.
- Status information and configuration of all outputs.
- Network management settings.

The **Avocent Rack Power Manager,** which includes access and control functions, enables central administration of all the rack PDUs in the data center simplifying the administration and monitoring of your PDUs.

The **Rack Power Manager** is equipped with state-of-the-art monitoring capabilities that enable intelligent server grouping across disparate racks. It also enables custom reporting, scheduled regular reports and the ability to set real-time threshold alerts to give you the highest quality information on your data center's power infrastructure and so you can truly leverage the investment in PDUs.

- Measure and Track Power Costs – The Rack Power Manager calculates and compares cost across multiple levels (rack, row, data centers or companies) to track cost over a period of time and also to measure the impact of any consolidation or expansion projects.
- Review Historical Capacity and Consumption Reports – Plan for future expansion or new facilities more accurately based on real historical data rather than manufacturer's data or estimates which result in overbuilding and lead to inefficiencies.
- Protect Against Downtime – Help get a total reading on power usage for the data center and set a maximum threshold of power usage. Set alerts to know when the threshold is reached or exceeded and allow time to make changes before there are actual problems.
- Precision planning – Help IT know what electrical infrastructure to build into a new location or disaster recovery site. The design can be based on actual historical data rather than maximum values or estimates which result in overbuilding and lead to hard-to-correct inefficiencies.



Command-line interface

User interface

Avocent® Rack Power Manager

Optimal Utilization of Your Rack PDU Investment

The MPX™ and MPH2™ rack PDUs can be integrated in industry-leading KVM systems, serial consoles and Emerson Network Power infrastructure management systems. Furthermore, the rack PDU monitoring and environment information can be integrated into comprehensive data-center management software provided by Emerson or a third party. The information provided by this intelligent, easy-to-use rack PDU offers Emerson Network Power's customers a comprehensive, user-friendly power distribution and administration solution.

Integration into the **Avocent® Advanced Console Server, MergePoint™ Unity KVM Switches** and **Universal Management Gateway-Appliances** offer the following benefits:

- Rack PDUs are integrated into the out-of-band-management solution.
- Rack PDUs are included in a consolidated access and control solution.
- The number of IP addresses required for rack PDU administration are minimized.

By consolidating all data-center management functionality into a single interface, **Avocent DSView™ 4** management software delivers the complete data-center control necessary for the data center.

The software enables secure, out-of-band, centralized management of all connected IT and network devices in complex and geographically dispersed data centers.

When used in conjunction with KVM appliances, serial console appliances, service processor gateways and PDUs, hardware and software combine to allow IT administrators to remotely access, monitor and control target devices on multiple platforms at numerous locations–anywhere, anytime.

Used in combination with rack PDUs, DSView4 management software ensures:

- That PDUs are part of a consolidated access and control solution.
- Simple assignment of IT equipment to the PDU outputs they are connected to.
- That PDUs are part of a consolidated authentication, authorization and audit solution.

Integration into **Liebert® Nform™** and **Liebert SiteScan®** delivers:

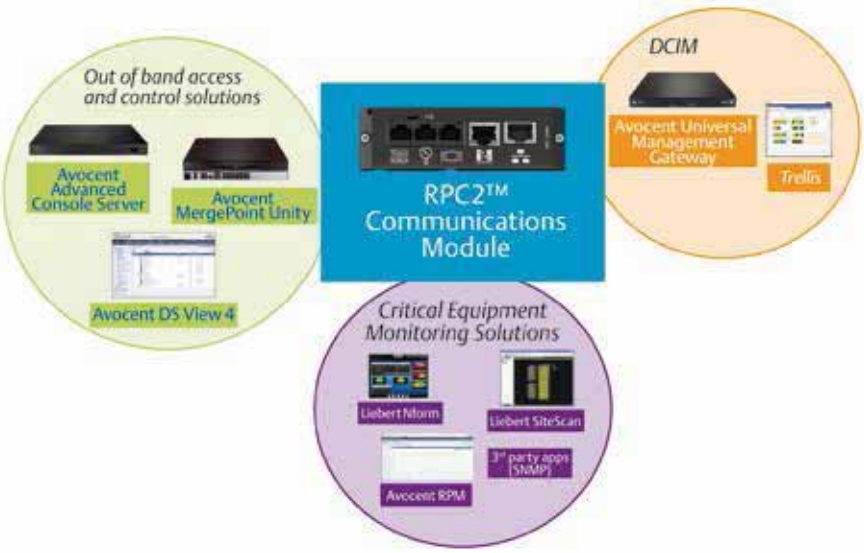
- Inclusion of rack PDUs in a consolidated monitoring solution for data centers at infrastructure level.
- Real-time monitoring and control of almost every component of the critical support equipment.
- Data analysis and trend reports.
- Event management.

The **Trellis™** platform is a trailblazing DCIM innovation from Emerson Network Power. It minimizes IT risks while increasing operating efficiency solving existing problems and preparing you for the future.

For both expansion and consolidation, as well as planning IT measures, constant monitoring, tracking and an overview of real-time infrastructure, metered values and data are necessary for precision planning and making informed decisions. The Trellis platform provides all the relevant information providing data center administration without having to resort to several tools.

With the time visualization, power-supply monitoring and mobile access offered by the Trellis platform, you can:

- Reduce inefficiencies without interrupting running processes.
- Postpone investments and increase the operating margin.
- Improve the Service Level Agreement with comprehensive transparency across the entire infrastructure.
- Reduce operating costs without compromising availability and adaptability.
- Manage remote resources more effectively.
- Increase overall efficiency by gaining better insight into the data center.



MPH2™

- The MPH2 is a power distribution unit for IT racks which provides metering of electrical values. Depending on the model, individual outputs can also be remote-controlled.
- The integrated RPC2k communications card allows you to connect up to 4 MPH2 / MPX™ units as well as monitor and maintain all connected units remotely. Up to 10 sensors (temperature, air humidity, door contacts as well as potential-free input contacts) can be connected.
- The MPH2™ unit has an integrated display. In addition, the optional external RPCBDM-1000 display module can easily be connected and mounted on the rack.
- Special cables with locking mechanisms can be connected to the outputs.
- Depending on the model, the connecting cable for the MPH2 is attached to the housing (cable length 3 m), also permitting a connecting cable can be connected on site (model with connection unit).
- Remote management: Onboard Web Interface, CLI, SNMPv1,2,3, SSH, Telnet, integratable into Avocent ACS, UMG & MPU, DSView, Rack Power Manager, Nform & Trellis as well as Nagios or other management software programs.
- Authentication: local, remote: active directory, LDAP, TACACS, Radius, Kerberos. Encryption: MD5, AES, DES.
- Measurement parameters: Current (A), voltage (V), real power (W), apparent power (VA), consumption (kWh), power factor, frequency and crest factor (only tapes M and R). Accuracy: ±1 % (V, A).

MPH2™ models
- **MPH2™ B** – Metering per phase and per group (only models with >16 A input power).
- **MPH2™ C** – Metering per phase and per group (only models with >16 A input power). Each output can also be individually switched remotely.
- **MPH2™ M** – Metering per phase and per group (only models with >16 A input power) and per output.
- **MPH2™ R** – Metering per phase and per group (only models with >16 A input power) and per output. Each output can also be individually switched remotely.

Material / finish / color
- Closed housing, aluminum profile, finely textured powder-coated top (RAL 7021), Vampamid 6 0024 V0 (UL94) recyclable plastic parts, finely textured and colored (RAL 9005).

Mechanical dimensions
- Width x depth x length (mm): 56 x 50 x (see table).

Certification
- CE label in accordance with Low Voltage Directive 2006/95/EC.
- EMC Directive 2004/108/EC.
- BV BG.

Standard inclusion
- MPH2™ rack PDU.
- Standard mounting bracket.
- Safety instructions.
- Quickstart guide.

MPH2™ Types for Europe

MPH2™ B – input metering
MPH2™ C – input metering and output switching
MPH2™ M – input metering and output metering
MPH2™ R – input metering, output metering and output switching

Type	Input Values		Input Connector	Outputs		Length	Order Number
	Voltage	Current		C13	C19	(mm)	
B	230V	16A	C20 inlet	17	2	916.5	MPHB3241
B	230V	16A	C20 inlet	21		916.5	MPHB3141
B	230V	16A	C20 inlet	30	6	1736.5	MPHB1241
B	230V	16A	IEC 60309 16A 1P+N+G	17	2	916.5	MPHB3242
B	230V	16A	IEC 60309 16A 1P+N+G	21		916.5	MPHB3142
B	230V	16A	IEC 60309 16A 1P+N+G	30	6	1736.5	MPHB1242
B	230V	32A	IEC 60309 32A 1P+N+G	30	6	1736.5	MPHB1243
B	230V	32A	Connection unit	30	6	1736.5	MPHB1260
B	230/400V	3 x 16A	IEC 60309 16A 3P+N+G	30	6	1736.5	MPHB1244
B	230/400V	3 x 32A	IEC 60309 32A 3P+N+G	42		1826.5	MPHB1545
B	230/400V	3 x 32A	IEC 60309 32A 3P+N+G	18	12	1826.5	MPHB1345
B	230/400V	3 x 32A	IEC 60309 32A 3P+N+G	30	6	1826.5	MPHB1245
B	230/400V	3 x 32A	Connection unit	42		1826.5	MPHB1562
B	230/400V	3 x 32A	Connection unit	18	12	1826.5	MPHB1362
B	230/400V	3 x 32A	Connection unit	30	6	1826.5	MPHB1262
C	230V	16A	C20 inlet	8		916.5	MPHC3341
C	230V	16A	C20 inlet	16		1004	MPHC3141
C	230V	16A	C20 inlet	18	6	1736.5	MPHC1141
C	230V	16A	C20 inlet	24		1736.5	MPHC1241
C	230V	16A	IEC 60309 16A 1P+N+G	18	6	1736.5	MPHC1142
C	230V	16A	IEC 60309 16A 1P+N+G	24		1736.5	MPHC1242
C	230V	16A	IEC 60309 16A 1P+N+G	16		1004	MPHC3142
C	230V	32A	IEC 60309 32A 1P+N+G	18	6	1736.5	MPHC1143

Type	Input Values		Input Connector	Outputs		Length	Order Number
	Voltage	Current		C13	C19	(mm)	
C	230V	32 A	IEC 60309 32 A 1P+N+G	24		1736.5	MPHC1243
C	230V	32 A	Connection unit	18	6	1736.5	MPHC1160
C	230V	32 A	Connection unit	24		1736.5	MPHC1260
C	230/400V	3 x 16 A	IEC 60309 16 A 3P+N+G	18	6	1736.5	MPHC1144
C	230/400V	3 x 16 A	IEC 60309 16 A 3P+N+G	24		1736.5	MPHC1244
C	230/400V	3 x 16 A	Connection unit	18	6	1736.5	MPHC1161
C	230/400V	3 x 16 A	Connection unit	24		1736.5	MPHC1261
C	230/400V	3 x 32 A	IEC 60309 32 A 3P+N+G	18	6	1736.5	MPHC1145
C	230/400V	3 x 32 A	IEC 60309 32 A 3P+N+G	24		1736.5	MPHC1245
C	230/400V	3 x 32 A	IEC 60309 32 A 3P+N+G	6	12	1736.5	MPHC1345
C	230/400V	3 x 32 A	Connection unit	18	6	1736.5	MPHC1162
C	230/400V	3 x 32 A	Connection unit	24		1736.5	MPHC1262
C	230/400V	3 x 32 A	Connection unit	6	12	1736.5	MPHC1362
M	230V	16 A	C20 inlet	8		916.5	MPHM3341
M	230V	16 A	IEC 60309 16 A 1P+N+G	8		916.5	MPHM3342
M	230V	16 A	C20 inlet	16		1004	MPHM3141
M	230V	16 A	C20 inlet	18	6	1736.5	MPHM1141
M	230V	16 A	C20 inlet	24		1736.5	MPHM1241
M	230V	16 A	IEC 60309 16 A 1P+N+G	18	6	1736.5	MPHM1142
M	230V	16 A	IEC 60309 16 A 1P+N+G	24		1736.5	MPHM1242
M	230V	16 A	IEC 60309 16 A 1P+N+G	16		1004	MPHM3142
M	230V	32 A	IEC 60309 32 A 1P+N+G	18	6	1736.5	MPHM1143
M	230V	32 A	IEC 60309 32 A 1P+N+G	24		1736.5	MPHM1243
M	230V	32 A	Connection unit	18	6	1736.5	MPHM1160
M	230V	32 A	Connection unit	24		1736.5	MPHM1260
M	230/400V	3 x 16 A	IEC 60309 16 A 3P+N+G	18	6	1736.5	MPHM1144
M	230/400V	3 x 16 A	IEC 60309 16 A 3P+N+G	24		1736.5	MPHM1244
M	230/400V	3 x 16 A	Connection unit	18	6	1736.5	MPHM1161
M	230/400V	3 x 16 A	Connection unit	24		1736.5	MPHM1261
M	230/400V	3 x 32 A	IEC 60309 32 A 3P+N+G	18	6	1736.5	MPHM1145
M	230/400V	3 x 32 A	IEC 60309 32 A 3P+N+G	24		1736.5	MPHM1245
M	230/400V	3 x 32 A	IEC 60309 32 A 3P+N+G	6	12	1736.5	MPHM1345
M	230/400V	3 x 32 A	Connection unit	18	6	1736.5	MPHM1162
M	230/400V	3 x 32 A	Connection unit	24		1736.5	MPHM1262
M	230/400V	3 x 32 A	Connection unit	6	12	1736.5	MPHM1362
R	230V	16 A	C20 inlet	8		916.5	MPHR3341
R	230V	16 A	IEC 60309 16 A 1P+N+G	8		916.5	MPHR3342
R	230V	16 A	C20 inlet	16		1004	MPHR3141
R	230V	16 A	C20 inlet	18	6	1736.5	MPHR1141
R	230V	16 A	C20 inlet	24		1736.5	MPHR1241
R	230V	16 A	IEC 60309 16 A 1P+N+G	18	6	1736.5	MPHR1142
R	230V	16 A	IEC 60309 16 A 1P+N+G	24		1736.5	MPHR1242
R	230V	16 A	IEC 60309 16 A 1P+N+G	16		1004	MPHR3142
R	230V	32 A	IEC 60309 32 A 1P+N+G	18	6	1736.5	MPHR1143
R	230V	32 A	IEC 60309 32 A 1P+N+G	24		1736.5	MPHR1243
R	230V	32 A	Connection unit	18	6	1736.5	MPHR1160
R	230V	32 A	Connection unit	24		1736.5	MPHR1260
R	230/400V	3 x 16 A	IEC 60309 16 A 3P+N+G	18	6	1736.5	MPHR1144
R	230/400V	3 x 16 A	IEC 60309 16 A 3P+N+G	24		1736.5	MPHR1244
R	230/400V	3 x 16 A	Connection unit	18	6	1736.5	MPHR1161
R	230/400V	3 x 16 A	Connection unit	24		1736.5	MPHR1261
R	230/400V	3 x 32 A	IEC 60309 32 A 3P+N+G	18	6	1736.5	MPHR1145
R	230/400V	3 x 32 A	IEC 60309 32 A 3P+N+G	24		1736.5	MPHR1245
R	230/400V	3 x 32 A	IEC 60309 32 A 3P+N+G	6	12	1736.5	MPHR1345
R	230/400V	3 x 32 A	Connection unit	18	6	1736.5	MPHR1162
R	230/400V	3 x 32 A	Connection unit	24		1736.5	MPHR1262
R	230/400V	3 x 32 A	Connection unit	6	12	1736.5	MPHR1362

DOS20153

MPX™/MPH™/MPH2™/IMS™ – Sensors

- These sensors are designed for tool-less installation in a Knürr Miracle / DCM rack, but is also compatible with all other rack types.
- "Fixed" type sensors are attached to a cable.
- "Modular" type sensors can be connected to the delivered cable.
- Plugged into the RPC-1000 or RPC2 communication card.
- Several sensors can be connected in rows.
- Automatically displayed in the MPX/MPH/MPH2/IMS software.
- Temperature measurement range: 5 – 55° C.
- Accuracy: ± 0.5° C.
- Humidity measurement range: 10 – 95 %.
- Accuracy: ± 3.5 %.

Note
The sensors are not required for operating the MPX or MPH, MPH2, IMS. However, a communication card is needed.

Standard inclusion
– 1 x sensor with connection cable.
– 1 x instruction manual.

Cable length	Type	Model	Order No.	UP
3660	Fixed	Temperature sensor, single	**SN-Z01**	1 unit
5180	Fixed	Temperature sensor, triple	**SN-Z02**	1 unit
5180	Fixed	Temperature sensor, triple + humidity sensor, single	**SN-Z03**	1 unit
2000	Modular	Temperature sensor, single	**SN-T**	1 unit
2000	Modular	Temperature sensor, single + humidity sensor, single	**SN-TH**	1 unit
2000	Modular	2 x door contact - input module*	**SN-2D**	1 unit
2000	Modular	3 x digital input	**SN-3C**	1 unit

* Suitable door contact switch: Order no.: 06.108.115.9

DOS20153

Liebert RPC BDM - 1000 Display Module

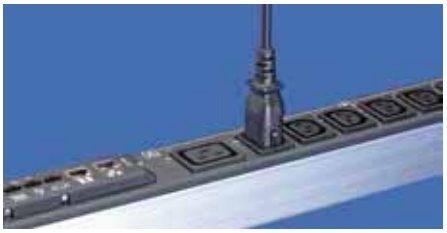
- Provides the local display of the monitored data for all connected MPX/MPH/MPH2/IMS systems.
- Operated with a navigation switch.
- Connected via a cable with the RPC, enabling the user to place the displays where needed in the given local space conditions.
- An individual display can be used for up to four MPX/MPH/MPH2/IMS PDUs, which are all connected in a PDU array.

Note
The display module is not required for operating the MPX or MPH, MPH2, IMS. However, a communication card is needed.

Standard inclusion
– 1 x RPCBDM-1000 display module.
– 1 x connection cable 2 m.
– 1 x mounting kit.

L	W	H	U	Model	Order No.	UP
					RPCBDM-1000	1 unit

DOS20495



DOS20496

DOS20497

SafetyLock™ Connection Cable IEC C13 EU

- Connection cables have integrated protection against accidental disconnection.
- For straight locking from C14 to C13.
- Locking cables are sold in sets of 9 units.

Technical data
- Standard: IEC 60320.
- Load rating: 250 Vac/10 A.
- Operating temperature: -25° C ~ +70° C.
- Extraction force with locking function: up to 120 N.
- Electric power cable: H05VV-F 3G 1.0 mm².
- Flame retardance: Plug: UL 94V-2 or better; cable: UL VW-1, IEC60332-1. Cat F2.

Certification
- ENEC.
- VDE.
- CB scheme.
- RoHS compliant.

Color
- Black/white.
- Other colors available upon request.

Standard inclusion
- 9 x locking cables.

Delivery
- In sets.

L	Model	Order No.	UP
0.5 m	Black	**03.951.450.0,001**	9 unit
1.0 m	Black	**03.951.450.0,002**	9 unit
1.5 m	Black	**03.951.450.0,003**	9 unit
0.5 m	White	**03.951.451.0,001**	9 unit
1.0 m	White	**03.951.451.0,002**	9 unit
1.5 m	White	**03.951.451.0,003**	9 unit

DOS20498

DOS20499

DOS20500

SafetyLock™ Connection Cable IEC C19 EU

- Connection cables have integrated protection against accidental disconnection.
- For straight locking from C20 to C19.
- Locking cables are sold in sets of 6 units.

Technical data
- Standard: IEC 60320.
- Load rating: 250 Vac/16 A.
- Operating temperature: -25° C ~ +70° C.
- Extraction force with locking function: up to 120 N.
- Electric power cable: H05VV-F 3G 1.5 mm².
- Flame retardance: Plug: UL 94V-2 or better; cable: UL VW-1, IEC60332-1. Cat F2.

Approvals
- ENEC.
- VDE.
- CB scheme.
- RoHS compliant.

Color
- Black/white.
- Other colors available upon request.

Standard inclusion
- 6 x locking cables.

Delivery
- In sets.

L	Model	Order No.	UP
0.5 m	Black	**03.951.455.0,001**	6 unit
1.0 m	Black	**03.951.455.0,002**	6 unit
1.5 m	Black	**03.951.455.0,003**	6 unit
0.5 m	White	**03.951.456.0,001**	6 unit
1.0 m	White	**03.951.456.0,002**	6 unit
1.5 m	White	**03.951.456.0,003**	6 unit

DI-STRIP® – Basic Rack-PDU

Robust PDUs with useful equipment features

Features

- Closed sheet-steel extrusions and ideal integration into Knürr rack systems deliver high stability and torsional strength.
- Best possible conductivity: Full-length brass busbar provided with many models.
- Double spring contacts for reliable and low contact resistance.

Emerson Network Power's Basic Rack PDUs are the solution for every data center looking for robust, economical and flexible rack concepts.

The DI-STRIP product family meets a broad range of data center power distribution requirements for IT and other applications.

Specially configured for the growing number of electronic components in network switching racks or server racks. Available with different accessories, such as circuit breakers, overvoltage protection, mains filter, master-slave function, emergency stop switch, fault-current circuit-breaker, local and remote power metering.

INPUT POWER
- Single-phase or three-phase.
- Up to 22 kVA.
- Simple input supply.

OUTPUT DISTRIBUTOR
- NEMA 5-20R single-phase, IEC C13 and C19, combination systems.
- Schuko, France, Switzerland.

MODULARITY
- More connectivity with expansion unit for Basic Rack PDU GST18.

FORM FACTOR
- Vertical mounting (0 U).
- Rack installation.
- Workstation mounting.

LOCAL MONITORING
- Fixed display.

REMOTE MONITORING
- Secure Web and SNMP interfaces with Liebert Nform.

OVERLOAD PROTECTION
- Circuit breakers/fuses per branching cable/output as required.

Benefits

- Optimal phase distribution across the entire rack with color-coded identification of the individual phases.
- Up to 48 different plug options per PDU: shortens the cable distance between the PDU and the consumer.
- One of the most compact PDUs on the market: measures only 44.4 x 45.5 mm, which saves space even on a 600 mm-wide rack.
- Simple and quick installation on the rack extrusion: reduces installation and wiring costs.

Highest possible security and availability with:

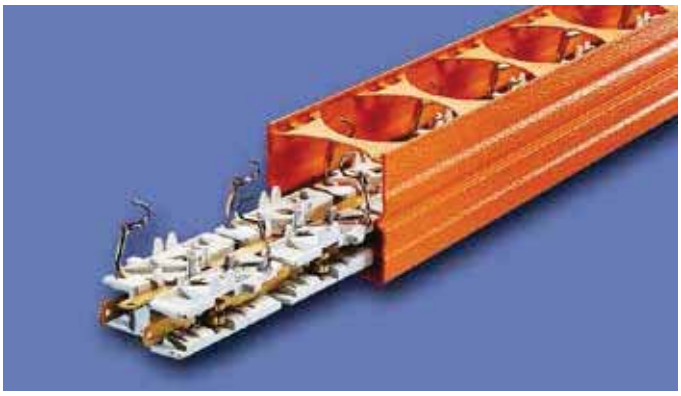
- Closed sheet-steel extrusions that deliver high stability and torsional flexibility.
- Extensive certification compliant with the international Standard.
- Double spring contacts for reliable and low contact resistance.
- Unbalanced load monitoring prevents feed-cable overload of 3-phase feed (only DI-STRIP versions M and RM).
- Optimal load monitoring for server installation (only DI-STRIP versions M and RM).
- Individual output-backup with DI-STRIP BladePower and Pizza Power.

Maximum flexibility attained due to:

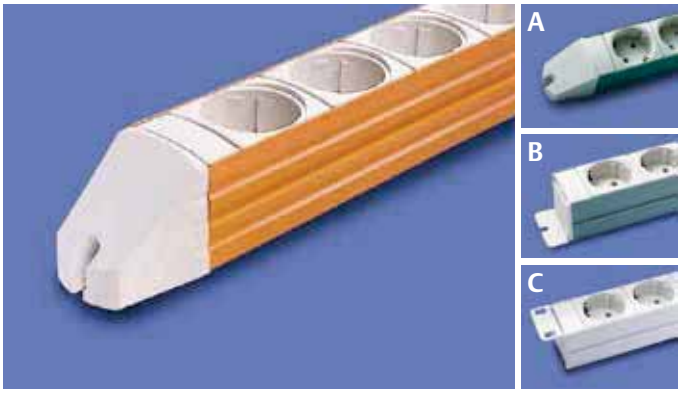
- Internationally compatible configurations and options.
- Power cable lengths of 2.5 m or 4 m for more spatial flexibility.
- Rotating current indicator in 90° steps (only M and RM DI-STRIP versions).
- Tool-less installation, which means quick and easy extension in the rack (only with DI-STRIP HighPower).

Extremely low operating costs:

- Installation in the rack is rapid and easy requiring minimal space and reduced installation time.
- Automatic background-light reduction reduces the rack PDU power loss (only with M and RM DI-STRIP versions).
- Especially flat housing extrusion, providing full accessibility to the 19" level on 600 mm wide server racks.

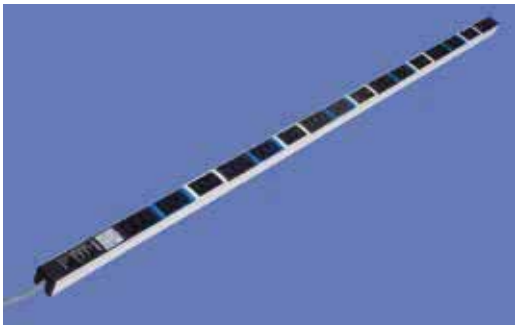


Reliable power distribution at full power delivered by full-length brass busbars.



Can be fitted to a rack or workstation.

Highly compact construction; minimizes space requirements in the rack.



Color-coded phase allocation (L1, L2, L3).

DI-STRIP®

European Equipment Models

DI-STRIP models	Functions	Input power	Outputs	Technical description
Euro socket system IEC 320	Basic power distribution	1 x 16 A 3.68 kVA	IEC60320 C13 & C19	Page 253
TriplePower	Basic power distribution	3 x 16 A 11 kVA	IEC60320 C13 & C19 & Schuko	Page 253
PizzaPower	Basic power distribution	1 x 32 A, 3 x 32 A 7.36 kVA, 22 kVA	IEC60320 C13 & C19 & Schuko	Page 254
BladePower	Basic power distribution	1 x 32 A, 3 x 32 A 7.36 kVA, 22 kVA	IEC60320 C13 & C19	Page 254
HighPower	Basic power distribution	1 x 32 A, 3 x 32 A 7.36 kVA, 22 kVA	IEC60320 C13 & C19	Page 255
Classic	Basicpower distribution/extra large distance between the sockets	1 x 16 A 3.68 kVA	Schuko, France, Switzerland	Page 255
Compact	Basic power distribution	1 x 16 A 3.68 kVA	Schuko, France, Switzerland	Page 256
Protector FI	Fault-current circuit-breaker FI	1 x 16 A 3.68 kVA	Schuko, France, Switzerland	Page 256
Protector LS	Circuit breaker (LS) FI	1 x 16 A 3.68 kVA	Schuko, France, Switzerland	Page 257
Protector FI/LS	Combination FI + LS	1 x 16 A 3.68 kVA	Schuko, France, Switzerland	Page 257
Protector Emergency Stop	Emergency stop switch	1 x 16 A 3.68 kVA	Schuko, France, Switzerland	Page 258
Protector Emergency Stop FI/LS	Combination emergency stop + FI + LS	1 x 16 A 3.68 kVA	Schuko, France, Switzerland	Page 258
Power Cleaner	Mains filter	1 x 16 A 3.68 kVA	Schuko, France	Page 259
Safety Basic	Overvoltage protection	1 x 16 A 3.68 kVA	Schuko, France, Switzerland	Page 259
Safety Standard	Mains filter + overvoltage protection	1 x 16 A 3.68 kVA	Schuko, France, Switzerland	Page 260
Master Slave	Master Slave	1 x 16 A 3.68 kVA	Schuko, France	Page 261
Combi	Combination Master Slave + overvoltage protection + mains filter	1 x 16 A 3.68 kVA	Schuko, France	Page 261
M (metered)	Phase current metered reading, local	1 x 16 A, 1 x 32 A, 3 x 16 A 3.32 A to 22 kVA	IEC60320 C13 & C19 & Schuko	Page 262
RM (remote metered)	Phase current metered reading local + remote	1 x 16 A, 1 x 32 A, 3 x 16 A 3.32 A to 22 kVA	IEC60320 C13 & C19 & Schuko	Page 262

DOS20062

DOS00458

DOS00460

DOS20102

DI-STRIP® Euro Socket System, IEC 320

- Optionally with illuminated switch; 2-pole switching.
- 19" installation option.
- Euro socket combinations of IEC 320 C13 and C19 sockets.
- Feed cable: H05VV-F 3G 1.5/2.5 mm².
- Feed cable: 2.5 m / 5 m.

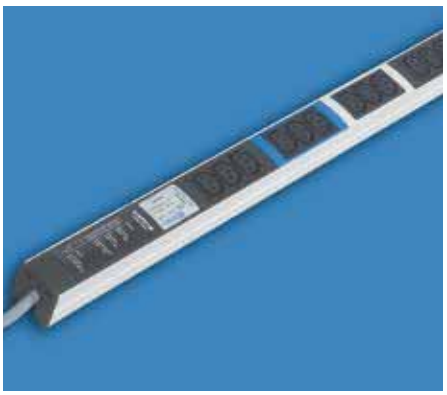
Material / Finish
- Housing: closed sheet steel extrusion, zinc-passivated, powder-coated texture.
- Plastic parts: Vampamid 6 0024 VO (UL94), recyclable.

Dimensions
- Height: 45.5 mm.
- Width of housing: 44.4 mm (= 1 U).

Approvals/certificates
- CE label in accordance with Low Voltage Directive 2006/95/EC.
- EMC Directive 2004/108/EC.
- BV BG.
- CB scheme.
- CSA (only models with IEC60320 input).

Color
- Enclosure: RAL 7035, light-gray.
- Plastic parts: RAL 7021 dark-gray.

Standard inclusion
- 1 x socket strip.
- 2 x mounting brackets.



DOS20126

DI-STRIP® TriplePower® Euro Socket System

- Feed cable: H05VV-F 5 G 2.5 mm².
- Feed cable: 2.5 m (optional with IEC60309 plug, 3Ph/N/PE 6h).
- Easy mounting on the rack extrusion.
- Standard feed 3 x 16 A.
- Ideal for implementing redundancy (e.g. 96 A with redundant feed).
- Color-coded phase allocation.
- Optimum distribution across the entire rack height (23 U and 41 U).
- Alternative to 3-phase GST18 system.

Material/ Finish
- Housing: closed sheet steel extrusion, zinc-passivated, powder-coated texture.
- Plastic parts: Vampamid 6 0024 VO (UL94), recyclable.

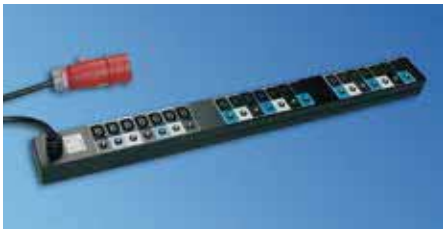
Dimensions
- Height: 45.5 mm.
- Width of housing: 44.4 mm (= 1 U).

Approvals/certificates
- CE label in accordance with Low Voltage Directive 2006/95/EC.
- EMC Directive 2004/108/EC.
- BV BG.
- CB scheme.
- IEC 320.

Color
- Enclosure: RAL 7035, light-gray.
- Plastic parts: RAL 7021 dark-gray.

Load rating
- 100-240/173-415 Vac.
- Input: 3 x 16 A.
- Output: 10 A (C13).
- Output: 16 A (C19 / Schuko).

Standard inclusion
- 1 x socket strip.
- 2 x mounting brackets.



DOS20158

DOS20159

Knürr DI-STRIP® PizzaPower®

- Individually fused thermal circuit breaker that can be reset in accorandance with IEC60934.
- Feed cable: H05VV-F 5 G 4 mm².
- Feed cable: 4 m.

Material / Finish
- Enclosure: sheet steel, zinc passivated, powder-coated.

Dimensions
- Height: approx. 60 mm.
- Width of housing: 84 mm.
- Height with cable: approx. 176 mm.

Color
- Enclosure: RAL 9005, black.

Certification
- CE label in accordance with Low Voltage Directive 2006/95/EC.
- EMC Directive 2004/108/EC.
- BV BG (only without plug).

Load rating
- 100-240 / 173-415 Vac.
- Input: 1 x 32 A or 3 x 32 A.
- Output: 10 A (C13).
- Output: 16 A (C19).

Standard inclusion
- 1 x socket strip (PDU).
- 2 x mounting brackets.
- 1 x 19" mounting bracket (additionally with 19" installation option).
- 1 x instruction manual.

DOS20153

DOS20155

Knürr DI-STRIP® BladePower®

- IEC 320 sockets (10 A and 16 A).
- Individually fused via thermal circuit breaker that can be reset in accorandance with IEC 60934.
- Feed cable: H05VV-F 5 G 4 mm².
- Feed cable: 4 m.
- With IEC60309 plug, 1Ph/N/PE 6h blue, 3Ph/N/PE 6h red.

Material / Finish
- Housing: sheet steel, zinc passivated, powder-coated.

Dimensions
- Height: approx. 60 mm.
- Width of housing: 84 mm.

Color
- Enclosure: RAL 9005, black.

Approvals
- CE label in accordance with Low Voltage Directive 2006/95/EC.
- EMC Directive 2004/108/EC.
- BV GS.
- CSA NRTL/C (only without plug).

Load rating
- 100-240 / 173-415 Vac.
- Input: 1 x 32 A or 3 x 32 A.
- Output: 10 A / 16 A.

Standard inclusion
- 1 x socket strip (PDU).
- 2 x mounting brackets.
- 1 x 19" mounting bracket (additionally with 19" installation option).
- 1 x instruction manual.

DOS20153

Knürr DI-STRIP® HighPower

– Flat design provides easy access to the 19" level, even with 600 mm-wide racks.
– Individual backup for outputs (10 A groups).
– Outputs divided into groups with max. 20 A per group.
– Modular expansion in the rack with tool-less PDU installation.

Additional functions for HighPower RM type (remote metering).
– Large LCD display with ample overview.
– Displays real energy reading of alternating current input.
-- LCD display rotation in 90° steps.
– Display contrast can be adjusted.
– Signals indicate load changes.
– Automatic reduction of background light.
– Technical description of data interface (see DI-STRIP RM).

Material / Finish
– Enclosure: sheet steel, zinc passivated, powder-coated.

Dimensions
– Width: 134 mm.
– Height: 47 mm.
– Feed cable: 3 m.

Color
– Housing: RAL 9005 black.

Certification
– CE label in accordance with Low Voltage Directive 2006/95/EC.
– EMC Directive 2004/108/EC.

Standard inclusion
– 1 x socket strip (PDU).
– 1 x 1 integrated remote ampere meter (only HighPower RM).
– 2 x mounting brackets.
– 1 x instruction manual.

DOS00403

Knürr DI-STRIP® Classic

– Optionally with illuminated switch; 2-pole switching.
– Socket rotation: 45°.
– Feed cable: H05VV-F 3G 1.5 mm².
– Optionally with Euro plug, IEC320 for UPS application.

Material / Finish
– Housing: closed sheet steel extrusion, zinc-passivated, powder-coated texture.
– Plastic parts: Vampamid 6 0024 VO (UL94).
– Internal conductor: full-length busbars, brass.

Dimensions
– Distance between sockets: 100 mm.
– Height: 45.5 mm.
– Width of housing: 44.4 mm (= 1 U).
– Feed cable: 2.5 m.

Approvals/certificates
– CE label in accordance with Low Voltage Directive 2006/95/EC.
– EMC Directive 2004/108/EC.
– BV BG.
– CB scheme.
– VDE GS.

Color
– RAL 7035, light-gray.

Load rating
– 100-240 Vac/16 A (output Schuko and UTE).
– 100-240 Vac/10A (outputs Switzerland).

Standard inclusion
– 1 x socket strip.
– 2 x mounting brackets.

DOS00401 with switch.

Knürr DI-STRIP® Compact

- Optionally with illuminated switch; 2-pole switching.
- 19" installation option (for length 483 mm).
- 2 versions: standard side panel or design side panel.
- Socket rotation: 45°.
- Feed cable: H05VV-F 3G 1.5 mm².
- Molded right angle plug.
- Optionally with Euro plug, IEC320 for UPS applications.

Material / Finish
- Housing: closed sheet steel extrusion, zinc-passivated, powder-coated texture.
- Plastic parts: Vampamid 6 0024 VO (UL94), recyclable.
- Internal conductor: full-length busbars, brass.

Dimensions
- Distance between sockets: 50 mm.
- Height: 45.5 mm.
- Width of housing: 44.4 mm (= 1 U).
- Feed cable: 2.5 m.

Approvals/certificates
- CE label in accordance with Low Voltage Directive 2006/95/EC.
- EMC Directive 2004/108/EC.
- BV BG.
- CB scheme.
- VDE GS.

Color combination
- Final digit of order number .1: RAL 7035, light-gray.
- Final digit of order number .6: housing RAL 2003 pastel orange.
- Plastic parts: RAL 7035, light-gray.

Load rating
- 100-240 Vac/16 A (output Schuko and UTE).
- 100-240 Vac/10 A (outputs Switzerland).

Standard inclusion
- 1 x socket strip.
- 2 x mounting brackets.

DOS20065 with FI circuit breaker

Knürr DI-STRIP® Protector FI

Protector FI
- Fault-current circuit breaker for user protection.
- Protection against indirect contact by disconnection of the circuit when inadmissibly high contact voltage occurs through bodily contact with electrical equipment.
- Additional protection against direct contact.
- Residual operating current Ig = 10 mA for alternating and pulsating direct fault currents.
- 19" installation option (for length 483 mm).
- Socket rotation: 45°.
- Feed cable: H05VV-F 3G 1.5 mm².
- Molded right angle plug.

Material/ Finish
- Housing: closed sheet steel extrusion, zinc-passivated, powder-coated texture.
- Plastic parts: Vampamid 6 0024 VO (UL94), recyclable.
- Internal conductor: full-length busbars, brass.

Dimensions
- Distance between sockets: 50 mm.
- Height: 78 mm.
- Width of housing: 44.4 mm (= 1 U).
- Feed cable: 2.5 m.

Approvals/certificates
- CE label in accordance with Low Voltage Directive 2006/95/EC.
- EMC Directive 2004/108/EC.
- BV BG.
- CB scheme.

Color combination
- Final digit of order number .1: RAL 7035, light-gray.
- Plastic parts: RAL 7035, light gray.

Load rating
- 100–240 Vac/16 A.

Standard inclusion
- 1 x socket strip.
- 2 x mounting brackets.

DOS00692 with circuit breaker.

Knürr DI-STRIP® Protector LS

- **Protector LS**
  - Circuit breaker for overload and short circuit.
  - Protects cables and lines by switching off rapidly in the event of a short circuit and defined delayed switch-off when overloads occur.
  - Circuit breaker: 16 A.
  - Trip characteristics: type B, 2-pole.
  - 19" installation option (for length 483 mm).
  - Socket rotation: 45°.
  - Feed cable: H05VV-F 3G 1.5 mm².
  - Molded right angle plug.
- **Material/ Finish**
  - Housing: closed sheet steel extrusion, zinc-passivated, powder-coated texture.
  - Plastic parts: Vampamid 6 0024 VO (UL94), recyclable.
  - Internal conductor: full-length busbars, brass.
- **Dimensions**
  - Distance between sockets: 50 mm.
  - Height: 78 mm.
  - Width of housing: 44.4 mm (= 1 U).
  - Feed cable: 2.5 m.
- **Approvals/certificates**
  - CE label in accordance with Low Voltage Directive 2006/95/EC.
  - EMC Directive 2004/108/EC.
  - BV BG.
  - CB scheme.
  - VDE GS.
- **Color combination**
  - Final digit of order number .1: RAL 7035, light-gray.
  - Plastic parts: RAL 7035, light gray.
- **Load rating**
  - 100–240 Vac/16 A.
- **Standard inclusion**
  - 1 x socket strip.
  - 2 x mounting brackets.

DOS00693

Knürr DI-STRIP® Protector FI / LS

- **Protector FI / LS**
  - Fault current switch and circuit breaker.
  - Provides a combination of user, overload and short circuit protection.
  - Residual operating current Ig = 30 mA for alternating and pulsating direct fault currents.
  - Circuit breaker 16 A (Schuko and France) / 10A (Switzerland).
  - Trip characteristics, type B, 2-pole.
  - 19" installation option (for length 483 mm).
  - Socket rotation: 45°.
  - Feed cable: H05VV-F 3G 1.5 mm².
  - Molded right angle plug.
- **Material / Finish**
  - Housing: closed sheet steel extrusion, zinc-passivated, powder-coated texture.
  - Plastic parts: Vampamid 6 0024 VO (UL94), recyclable.
  - Internal conductor: full-length busbars, brass.
- **Dimensions**
  - Distance between sockets: 50 mm.
  - Height: 78 mm.
  - Width of housing: 44.4 mm (= 1 U).
  - Feed cable: 2.5 m.
- **Approvals/certificates**
  - CE label in accordance with Low Voltage Directive 2006/95/EC.
  - EMC Directive 2004/108/EC.
  - BV BG.
  - CB scheme.
- **Color combination**
  - Final digit of order number .1: RAL 7035, light-gray.
  - Plastic parts: RAL 7035, light-gray.
- **Load rating**
  - 100–240 Vac/16 A (Schuko and France).
  - 100–240 Vac/10 A (Switzerland).
- **Standard inclusion**
  - 1 x socket strip.
  - 2 x mounting brackets.

DOS20059

Knürr DI-STRIP® Protector Emergency Stop

- With 2-pole emergency stop switch for user protection.
- For manually disconnecting consumers in an emergency.
- Phase and neutral conductors are separated safely.
- Switch must be intentionally unlocked to restart.
- 19" installation option (for length 483 mm).
- Socket rotation: 45°.
- Feed cable: H05VV-F 3G 1.5 mm².
- Molded right angle plug.

Material / Finish
- Housing: closed sheet steel extrusion, zinc-passivated, powder-coated texture.
- Plastic parts: Vampamid 6 0024 VO (UL94), recyclable.
- Internal conductor: full-length busbars, brass.

Dimensions
- Distance between sockets: Classic: 100 mm, Compact: 50 mm.
- Height: 101 mm.
- Width of housing: 44.4 mm (= 1 U).
- Feed cable: 2.5 m.

Approvals/certificates
- CE label in accordance with Low Voltage Directive 2006/95/EC.
- EMC Directive 2004/108/EC.
- BV BG.
- CB scheme.

Color combinations
- Final digit of order number .1: RAL 7035, light gray.
- Plastic parts: RAL 7035, light gray.

Load rating
- 100–240 Vac/16 A.

Standard inclusion
- 1 x socket strip.
- 2 x mounting brackets.

DOS00456

Knürr DI-STRIP® Protector Emergency Stop FI /LS

- With 2-pole emergency stop switch for user protection.
- For protecting operating personnel.
- For manually disconnecting consumers in an emergency.
- Phase and neutral conductors are separated safely.
- Switch must be intentionally unlocked to restart.
- Socket rotation: 45°.
- Feed cable: H05VV-F 3G 1.5 mm².
- Molded right angle plug.

Material/ Finish
- Housing: closed sheet steel extrusion, zinc-passivated, powder-coated texture.
- plastic parts: Vampamid 6 0024 VO (UL94), recyclable.
- Internal conductor: full-length busbars, brass.

Dimensions
- Distance between sockets: Compact: 50 mm.
- Height: 101 mm.
- Width of housing: 44.4 mm (= 1 U)
- Feed cable: 2.5 m.

Approvals/certificates
- CE label in accordance with Low Voltage Directive 2006/95/EC.
- EMC Directive 2004/108/EC.
- BV BG.
- CB scheme.

Color combinations
- Final digit of order number .1: RAL 7035, light-gray.
- Plastic parts: RAL 7035, light-gray.

Additionally:
- With 2-pole fault-current switch and circuit breaker
- Provides a combination of user, overload and short circuit protection.

Load rating
- 100–240 Vac/16 A.

Standard inclusion
- 1 x socket strip.
- 2 x mounting brackets.

DOS20061

Knürr DI-STRIP® Power Cleaner

- High-frequency glitches generally occur in switching processes ranging from 100 kHz to 5 MHz. This high-frequency rate overloads the mains frequency and affects adjacent electronic equipment. The mains filter attenuates this high-frequency rate.
- The attenuation behavior is harmonized with the typical interference spectrum.
- The mains filter works in both directions: where glitches from the equipment to the socket strip are also filtered from the mains.
- 19" installation option (for length 483 mm).
- Socket rotation: 45°.
- Feed cable: H05VV-F 3G 1.5 mm².
- Molded right angle plug.

Material / Finish
- Housing: closed sheet steel extrusion, zinc-passivated, powder-coated texture.
- Plastic parts: Vampamid 6 0024 VO (UL94), recyclable.
- Internal conductor: full-length busbars, brass.

Dimensions
- Distance between sockets: 50 mm.
- Height: 45.5 mm.
- Width of housing: 44.4 mm (= 1 U).
- Feed cable: 2.5 m.

Approvals/certificates
- CE label in accordance with Low Voltage Directive 2006/95/EC.
- EMC Directive 2004/108/EC.
- BV BG.
- CB scheme.

Color combination
- Final digit of order number .1: RAL 7035, light-gray.
- Final digit of order number .6: housing RAL 2003 pastel orange.
- Plastic parts: RAL 7035, light-gray.

Technical data
- Nominal voltage: max. 250 Vac, 50 Hz.
- Nominal current, max. 16 A.
- Filter compliant with VDE 0565-3 (EN 60939-1).

Standard inclusion
- 1 x socket strip.
- 2 x mounting brackets.
- 2 x 19" mounting brackets (additionally with 19" installation option).

DOS20068 with overvoltage protection

Knürr DI-STRIP® Safety Basic

- For protection against transient overvoltage from the mains, which, for example, are caused by switching machines on and off.
- When critical overvoltages occur, the connection to the mains is cut off.
- Once the protective conductor has been triggered, the green function display light is not illuminated. Thus, the socket strip can no longer be used.*
- Basic equipment protection is classified as class 3 (category D).
- For optimal protection, class 1 and 2 (categories B and C) protective equipment must be installed in the building.
- 19" installation option (for length 483 mm).
- Socket rotation: 45°.
- Feed cable: H05VV-F 3G 1.5 mm².
- Molded right angle plug.

Material / Finish
- Housing: closed sheet steel extrusion, zinc-passivated, powder-coated texture.
- plastic parts: Vampamid 6 0024 VO (UL94), recyclable.
- Internal conductor: full-length busbars, brass.

Dimensions
- Distance between sockets: 50 mm.
- Height: 45.5 mm.
- Width of housing: 44.4 mm (= 1 U).

Approvals/certificates
- CE label in accordance with Low Voltage Directive 2006/95/EC.
- EMC Directive 2004/108/EC.
- BV BG.
- CB scheme.

Color combination
- Final digit of order number .1: RAL 7035, light-gray.
- Final digit of order number .6: housing RAL 2003 pastel orange.
- Plastic parts: RAL 7035, light-gray.

Technical data
- Appliance class: Type 3 as per DIN EN 61643-11.
- Requirement class: category D as per VDE 0675-6.
- Mains voltage: 230 VAC.
- Nominal current, max. 16 A.
- Discharge surge current (8/20 µs): 10 kA.
- Reaction time: ‹ 25 ns.
- Safety level (at 100 A varistor peak current): L with respect to N: ‹ 800 V, L / N with respect to PE: ‹ 1500 V.

Standard inclusion
- 1 x socket strip.
- 2 x mounting brackets.

* Send the socket strip to the manufacturer for the protective conductor to be replaced!

DOS20069

Knürr DI-STRIP® Safety Standard

- Standard safety models consist of a combined overvoltage protection/mains filter element.
- Protects against transient overvoltages from the mains, which, for example, are caused by switching machines on and off.
- When critical overvoltages occur, connection to the mains is cut off.
- Once the protective conductor has been triggered, the green function display light is not illuminated. The socket strip can thus no longer be used.*
- Basic equipment protection is classified as class 3 (category D).
- For optimal protection, class 1 and 2 (categories B and C) protective equipment must be installed in the building.
- High-frequency glitches are generally caused by switching processes in an operation from 100 kHz to 5MHz.
- This high-frequency rate overloads the mains frequency and affects adjacent electronic equipment. The mains filter attenuates this high-frequency rate.
- The attenuation behavior is harmonized with the typical interference spectrum.
- 19" installation option (for length 483 mm).
- Socket rotation: 45°.
- Feed cable: HO5VV-F 3G 1.5 mm^2.
- Molded right angle plug.

Material/ Finish
- Housing: closed sheet steel extrusion, zinc-passivated, powder-coated texture.
- Plastic parts: Vampamid 6 0024 VO (UL94), recyclable.
- Internal conductor: full-length busbars, brass.

Dimensions
- Distance between sockets: 50 mm.
- Height: 45.5 mm.
- Width of housing: 44.4 mm (= 1 U).
- Feed cable: 2.5 m.

Approvals/certificates
- CE label in accordance with Low Voltage Directive 2006/95/EC.
- EMC Directive 2004/108/EC.
- BV BG.
- CB scheme.

Color combination
- Final digit of order number .1: RAL 7035, light-gray.
- Final digit of order number .6: housing RAL 2003 pastel orange.
- Plastic parts: RAL 7035, light-gray.

Technical data
- Mains voltage: 230 VAC.
- Nominal current: max. 16 A / 10 A.
- Discharge surge current (8/20 µs): 10 kA.
- Reaction time: ‹ 25 ns.
- Safety level (at100 A varistor peak current): L with respect to N: ‹ 800 V, L / N with respect to PE: ‹ 1500 V.
- Overvoltage protection
- Appliance class: Class 3 – as per DIN EN 61643-11.
- Requirement class: Category D as per VDE 0675-6.
- Mains filter: as per VDE 0565 (EN 60939).

Standard inclusion
- 1 x socket strip.
- 2 x mounting brackets.

* Send the socket strip to the manufacturer for the safety arrester to be replaced!

DOS20070

Knürr DI-STRIP® Master-Slave

– Slave plugs will switch on if master switches on.
– Note:
  – The master consumer's power intake must always exceed the switch-on threshold. When switching off the master consumer, the power intake must fall below the switch-off threshold.
  – 19" installation option (for length 483 mm).
  – Socket rotation: 45°.
  – Feed cable: H05VV-F 3G 1.5 mm².
  – Molded right angle plug.

Material / Finish
– Housing: closed sheet steel extrusion, zinc-passivated, powder-coated texture.
– Plastic parts: Vampamid 6 0024 VO (UL94), recyclable.
– Internal conductor: full-length busbars, brass.

Dimensions
– Distance between sockets: 50 mm.
– Height: 45.5 mm.
– Width of housing: 44.4 mm (= 1 U).
– Feed cable: 2.5 m.

Approvals/certificates
– CE label in accordance with Low Voltage Directive 2006/95/EC.
– EMC Directive 2004/108/EC.
– BV BG.
– CB scheme.
– VDE GS.

Color combination
– Final digit of order number .1: RAL 7035, light-gray.
– Plastic parts: RAL 7035, light-gray.

Load rating
– Max. 250 Vac/16 A.

Technical data
– Switching-threshold setting range
– On: 20 - 200 mA (approx. 55 mA on delivery).
– Off: 16 - 160 mA (approx. 44 mA on delivery).
– Switching delay: 550 ms, ± 20 %.
– Electronic module: 2-pole switching.

Standard inclusion
– 1 x socket strip.
– 2 x mounting brackets.

DOS00325 with master-slave overvoltage protection and mains filter.

Knürr DI-STRIP® Combi

– Master-slave with overvoltage protection and mains filter.
– Automatic consumer switching.
– Combines Master-Slave (page 261) and Safety Standard (page 260) functions.
– Socket rotation: 45°.
– Feed cable: H05VV-F 3G 1.5 mm².
– Molded right angle plug.

Material / Finish
– Housing: closed sheet steel extrusion, zinc-passivated, powder-coated texture.
– Plastic parts: Vampamid 6 0024 VO (UL94), recyclable.
– Internal conductor: full-length busbars, brass.

Dimensions
– Distance between sockets: 50 mm.
– Height: 45.5 mm.
– Width of housing: 44.4 mm (= 1 U).
– Feed cable: 2.5 m.

Approvals/certificates
– CE label in accordance with Low Voltage Directive 2006/95/EC.
– EMC Directive 2004/108/EC.
– BV BG.
– CB scheme.

Color combination
– Final digit of order number .1: RAL 7035, light-gray.
– Plastic parts: RAL 7035, light-gray.

Technical data
– With overvoltage protection and mains filter.
– Mains voltage: max. 250 Vac.
– Nominal current: 16 A.
– Requirement class: D (protection as per VDE 0675).
– Surge current resistance (8/20 µs wave): Max. 10 kA.
– Protection level (1.5/50 µs wave): ‹ 1500 V (L + N against PE).
– Master-slave function:
– Switching-threshold setting range
  – On: 20 - 200 mA (approx. 55 mA on delivery).
  – Off: 16 - 160 mA (approx. 44 mA on delivery).
– Switching delay: 550 ms ± 20 %.
– Electronic module: 2-pole switching.

Standard inclusion
– 1 x socket strip.
– 2 x mounting brackets.

DOS80002

Knürr DI-STRIP® M

- Large LCD display for clear view.
- Effective metering of alternating current displayed per phase (single-phase or 3-phase, depending on model).
- LCD display rotation in 90° steps.
- Display contrast can be adjusted.
- Unbalanced-load warning display with 3-phase model.
- Signals indicate load changes.
- Automatic reduction of background light.
- Feed cable: 4 m H05VV—F 5 G 4 mm^2 (PizzaPower M).
- Feed cable: 2.5 m H05VV-F 5 G 2.5 mm^2 (TriplePower M).
- Feed cable: 2.5 m H05VV-F 3G 1.5 mm^2 (DI-STRIP Compact M, DI-STRIP IEC320 M).

Material/ Finish
- PizzaPower® model; Housing: sheet steel, zinc-passivated, powder-coated.
- Other models: Housing: closed sheet steel extrusion, zinc-passivated, powder-coated texture.
- Plastic parts: Vampamid 6 0024 VO (UL94), recyclable.

Approvals/certificates
- CE label in accordance with Low Voltage Directive 2006/95/EC.
- EMC Directive 2004/108/EC. EN61326-1, EN61000-3-2, EN61000-3-3.
- FCC Class B.
- CB scheme (TriplePower M, DI-STRIP compact M, IEC320M, ampere meter GST18i).

Color
- PizzaPower M model; Housing: RAL 9005 black.
- Other models; Housing: RAL 7035 light-gray.
- Plastic parts: RAL 7021 dark-gray.

Standard inclusion
- 1 x socket strip with ampere meter.
- 2 x mounting brackets.
- 2 x 19" mounting brackets (with 19" installation option).

Note
Other models (e.g C 19 outputs) available on request.

DOS80002

Knürr DI-STRIP® RM

- Displays real RMS value for the alternating current per phase.
- LCD display rotation in 90° steps.
- Display bright/dark switchover.
- Warning display for unbalanced load.
- Signals indicate load changes.
- Automatic darkening of background light for energy saving.

Data interface:
- The plug strip can be integrated into the network via an RJ45 plug.
- Access is possible without special software via a remote browser.
- Three variable limit values and a warning for unbalanced loads can be specified.
- The module enables access for up to 5 users or administrators; access is password-protected.
- The software displays the name and location of the PDU; this information can be entered by an administrator.
- The user can specify a static IP address or access using DHCP.
- Firmware updates can be made via a web browser.
- Supported protocols: HTTP, SNMP (Traps, SET, GET), Syslog.

Material / Finish
- PizzaPower model; Housing: sheet steel, zinc-passivated, powder-coated.
- Other models; Housing: closed sheet steel extrusion, zinc-passivated, powder-coated texture.
- Plastic parts: Vampamid 6 0024 VO (UL94), recyclable.

Dimensions
- Width: 84 mm (PizzaPower), 44.4 mm (others).
- Height: 60 mm (PizzaPower), 44.4 mm (others).

Color
- PizzaPower model; Housing: RAL 9005 black.
- Other models; Housing: RAL 7035 light-gray.
- Plastic parts: RAL 7021 dark-gray.

Approvals
- CE label in accordance with Low Voltage Directive 2006/95/EC.
- EMC Directive 2004/108/EC.
- BV BG.

Standard inclusion
- 1 x socket strip (PDU) with remote ampere meter.
- 1 x mounting bracket.
- 1 x instruction manual.

DI-STRIP Model	Input Values		Input Connector	Outputs					L	S	F1	F2	19"	Safe	Order No.
	Voltage	Current		C13	C19	Schuko	UTE	Type 13							
Euro plug IEC320 system (technical description on page 231)															
With feed cable	230V	16 A	Schuko CEE7/7	6					333		■				03.600.006.1
	230V	16 A	Schuko CEE7/7	9					483	■	■		■		03.602.009.1
	230V	10 A	IEC60320 C13	12					483		■		■		03.600.312.1
	230V	16 A	IEC60320 C19	15	3				783		■				03.600.418.1
	230V	16 A	IEC60309 1ph/N/PE 6h	15	3				783		■				03.600.518.1
Euro input in plug panel	230V	10 A	IEC60320 C14 inlet	6					383		■				03.622.006.1
	230V	10 A	IEC60320 C14 inlet	9					483		■		■		03.622.009.1
	230V	10 A	IEC60320 C14 inlet	6					433	■	■				03.624.006.1
Euro input on side panel	230V	10 A	IEC60320 C14 inlet	6					333		■				03.622.706.1
	230V	10 A	IEC60320 C14 inlet	9					433		■				03.622.709.1
	230V	10 A	IEC60320 C14 inlet	6					383	■	■				03.624.706.1
	230V	10 A	IEC60320 C14 inlet	9					483	■	■				03.624.709.1
With overload protection 10 A	230V	10 A	Schuko CEE7/7	10					483	■	■		■		03.632.010.1
GST18 input in side panel	230V	16 A	GST18	6					383		■				03.600.206.1
TriplePower (technical description on page 231)															
	230/400V	3 x 16 A	none	24					1033		■				03.600.024.1
	230/400V	3 x 16 A	none	48					1833		■				03.600.048.1
	230/400V	3 x 16 A	IEC60309 3ph/N/PE 6h	24					1033		■				03.600.824.1
	230/400V	3 x 16 A	IEC60309 3ph/N/PE 6h	48					1833		■				03.600.848.1
	230/400V	3 x 16 A	IEC60309 3ph/N/PE 6h	18	6				1133		■				03.600.524.1
	230/400V	3 x 16 A	IEC60309 3ph/N/PE 6h	36	6				1733		■				03.600.542.1
	230/400V	3 x 16 A	IEC60309 3ph/N/PE 6h		6				483		■		■		03.600.506.1
	230/400V	3 x 16 A	IEC60309 3ph/N/PE 6h			12			833		■				03.300.812.1
	230/400V	3 x 16 A	IEC60309 3ph/N/PE 6h	18	3				833		■				03.600.521.1
	230/400V	3 x 16 A	IEC60309 3ph/N/PE 6h	18		3			833		■				03.300.521.1
	230/400V	3 x 16 A	IEC60309 3ph/N/PE 6h	21					833		■				03.600.821.1
	230/400V	3 x 16 A	IEC60309 3ph/N/PE 6h	45					1733		■				03.600.845.1
	230/400V	3 x 16 A	IEC60309 3ph/N/PE 6h	36		6			1733		■				03.300.542.1
PizzaPower (technical description on page 232)															
	230V	32 A	IEC60309 1ph/N/PE 6h	7					400		■		■		03.631.007.1
	230V	32 A	none	7					400		■		■		03.631.807.1
	230V	32 A	IEC60309 1ph/N/PE 6h	12	4				720		■				03.631.124.1
	230V	32 A	IEC60309 1ph/N/PE 6h	24					960		■				03.631.240.1
	230V	32 A	IEC60309 1ph/N/PE 6h	21	4				1017		■				03.631.214.1
	230/400V	3 x 32 A	IEC60309 3ph/N/PE 6h	21					933		■				03.631.021.1
	230/400V	3 x 32 A	none	21					933		■				03.631.821.1
	230/400V	3 x 32 A	IEC60309 3ph/N/PE 6h		6				408		■				03.631.006.1
	230/400V	3 x 32 A	IEC60309 3ph/N/PE 6h	9	12				939		■				03.631.912.1
	230/400V	3 x 32 A	IEC60309 3ph/N/PE 6h	36					1362		■				03.631.360.1
	230/400V	3 x 32 A	IEC60309 3ph/N/PE 6h	18	6				1002		■				03.631.186.1
BladePower (technical description on page 232)															
	230V	32 A	IEC60309 1ph/N/PE 6h	2	3				375		■		■		03.630.005.1
	230/400V	3 x 32 A	IEC60309 3ph/N/PE 6h	6	9				740		■				03.630.015.1
	230V	32 A	none	2	3				375		■		■		03.630.805.1
	230/400V	3 x 32 A	none	6	9				740		■				03.630.815.1
HighPower (technical description on page 233)															
	230V	32 A	IEC60309 1ph/N/PE 6h	20	4				540						03.632.100.8
	230/400V	3 x 32 A	IEC60309 3ph/N/PE 6h	6	12				850						03.632.102.8
	230/400V	3 x 32 A	IEC60309 3ph/N/PE 6h	18	6				850						03.632.103.8
With RM metering module	230V	32 A	IEC60309 1ph/N/PE 6h	20	4				540						03.632.200.8
	230/400V	3 x 32 A	IEC60309 3ph/N/PE 6h	6	12				850						03.632.202.8
	230/400V	3 x 32 A	IEC60309 3ph/N/PE 6h	18	6				850						03.632.203.8

DI-STRIP Model	Input Values		Input Connector	Outputs					L	S	F1	F2	19"	Safe	Order No.
	Voltage	Current		C13	C19	Schuko	UTE	Type 13							
Classic (technical description on page 233)															
	230V	16 A	Schuko CEE7/7			17			1783		■				03.300.067.X
	230V	16 A	Schuko CEE7/7			13			1383		■				03.300.063.X
	230V	16 A	Schuko CEE7/7			9			983		■				03.300.059.X
	230V	16 A	Schuko CEE7/7			5			583		■				03.300.055.X
	230V	16 A	Schuko CEE7/7			16			1733	■	■				03.302.066.X
	230V	16 A	Schuko CEE7/7			12			1333	■	■				03.302.062.X
	230V	16 A	Schuko CEE7/7			8			933	■	■				03.302.058.X
	230V	16 A	Schuko CEE7/7			4			533	■	■				03.302.054.X
	230V	16 A	Schuko CEE7/7				17		1783		■			■	03.400.067.X
	230V	16 A	Schuko CEE7/7				13		1383		■			■	03.400.063.X
	230V	16 A	Schuko CEE7/7				9		983		■			■	03.400.059.X
	230V	16 A	Schuko CEE7/7				5		583		■			■	03.400.055.X
	230V	16 A	Schuko CEE7/7				16		1733	■	■			■	03.402.066.X
	230V	16 A	Schuko CEE7/7				12		1333	■	■			■	03.402.062.X
	230V	16 A	Schuko CEE7/7				8		933	■	■			■	03.402.058.X
	230V	16 A	Schuko CEE7/7				4		533	■	■			■	03.402.054.X
	230V	10 A	SEV 1011 T12					17	1783		■				03.700.067.X
	230V	10 A	SEV 1011 T12					13	1383		■				03.700.063.X
	230V	10 A	SEV 1011 T12					9	983		■				03.700.059.X
	230V	10 A	SEV 1011 T12					5	583		■				03.700.055.X
	230V	10 A	SEV 1011 T12					16	1733	■	■				03.702.066.X
	230V	10 A	SEV 1011 T12					12	1333	■	■				03.702.062.X
	230V	10 A	SEV 1011 T12					8	933	■	■				03.702.058.X
	230V	10 A	SEV 1011 T12					4	533	■	■				03.702.054.X
Compact (technical description on page 234)															
	230V	16 A	Schuko CEE7/7			15			883		■				03.300.015.X
	230V	16 A	Schuko CEE7/7			11			732			■			03.300.111.X
	230V	16 A	Schuko CEE7/7			11			683		■				03.300.011.X
	230V	16 A	Schuko CEE7/7			7			532			■		■	03.301.107.X
	230V	16 A	Schuko CEE7/7			7			532			■			03.300.107.X
	230V	16 A	Schuko CEE7/7			7			483		■		■		03.300.007.X
	230V	16 A	Schuko CEE7/7			8			483		■		■		03.300.008.1
	230V	16 A	Schuko CEE7/7			4			382			■		■	03.301.104.X
	230V	16 A	Schuko CEE7/7			4			382			■			03.300.104.X
	230V	16 A	Schuko CEE7/7			4			333		■				03.300.004.X
	230V	16 A	Schuko CEE7/7			14			883	■	■				03.302.014.X
	230V	16 A	Schuko CEE7/7			10			732	■		■			03.302.110.X
	230V	16 A	Schuko CEE7/7			10			683	■	■				03.302.010.X
	230V	16 A	Schuko CEE7/7			6			532	■		■		■	03.303.106.X
	230V	16 A	Schuko CEE7/7			6			532	■		■			03.302.106.X
	230V	16 A	Schuko CEE7/7			6			483	■	■		■		03.302.006.X
	230V	16 A	Schuko CEE7/7			7			483	■	■		■		03.302.007.1
	230V	16 A	Schuko CEE7/7			3			382	■		■		■	03.303.103.X
	230V	16 A	Schuko CEE7/7			3			382	■		■			03.302.103.X
	230V	16 A	Schuko CEE7/7			3			333	■	■				03.302.003.X
UPS application	230V	10 A	IEC60320 C14			8			483		■		■		03.300.308.1
	230V	16 A	IEC60320 C20			8			483		■		■		03.300.408.1
	230V	16 A	GST18			6			583	■	■				03.302.206.1
	230V	16 A	GST18			3			433	■	■				03.302.203.1
	230V	16 A	GST18			7			533		■				03.300.207.1
	230V	16 A	GST18			4			383		■				03.300.204.1
	230V	16 A	Schuko CEE7/7				15		883		■			■	03.400.015.X
	230V	16 A	Schuko CEE7/7				11		732			■		■	03.400.111.X
	230V	16 A	Schuko CEE7/7				11		683		■			■	03.400.011.X
	230V	16 A	Schuko CEE7/7				7		532			■		■	03.400.107.X

DI-STRIP Model	Input Values		Input Connector	Outputs					L	S	F1	F2	19"	Safe	Order No.
	Voltage	Current		C13	C19	Schuko	UTE	Type 13							
Compact (technical description on page 234)															
	230V	16 A	Schuko CEE7/7				7		483		■		■	■	03.400.007.X
	230V	16 A	Schuko CEE7/7				4		382			■		■	03.400.104.X
	230V	16 A	Schuko CEE7/7				4		333		■			■	03.400.004.X
	230V	16 A	Schuko CEE7/7				14		883	■	■			■	03.402.014.X
	230V	16 A	Schuko CEE7/7				10		732	■		■		■	03.402.110.X
	230V	16 A	Schuko CEE7/7				10		683	■	■			■	03.402.010.X
	230V	16 A	Schuko CEE7/7				6		532	■		■		■	03.402.106.X
	230V	16 A	Schuko CEE7/7				6		483	■	■		■	■	03.402.006.X
	230V	16 A	Schuko CEE7/7				3		382	■		■		■	03.402.103.X
	230V	16 A	Schuko CEE7/7				3		333	■	■			■	03.402.003.X
	230V	16 A	GST18				6		583	■	■			■	03.402.206.1
	230V	16 A	GST18				3		433	■	■			■	03.402.203.1
	230V	16 A	GST18				7		533		■			■	03.400.207.1
	230V	16 A	GST18				4		383		■			■	03.400.204.1
	230V	10 A	SEV 1011 T12					15	883		■				03.700.015.X
	230V	10 A	SEV 1011 T12					11	732			■			03.700.111.X
	230V	10 A	SEV 1011 T12					11	683		■				03.700.011.X
	230V	10 A	SEV 1011 T12					7	532			■			03.700.107.X
	230V	10 A	SEV 1011 T12					7	483		■		■		03.700.007.X
	230V	10 A	SEV 1011 T12					4	382			■			03.700.104.X
	230V	10 A	SEV 1011 T12					4	333		■				03.700.004.X
	230V	10 A	SEV 1011 T12					10	732	■		■			03.702.110.X
	230V	10 A	SEV 1011 T12					10	683	■	■				03.702.010.X
	230V	10 A	SEV 1011 T12					6	532	■		■			03.702.106.X
	230V	10 A	SEV 1011 T12					6	483	■	■		■		03.702.006.X
	230V	10 A	SEV 1011 T12					3	382	■		■			03.702.103.X
	230V	10 A	SEV 1011 T12					3	333	■	■				03.702.003.X
Protector FI (technical description on page 234)															
	230V	16 A	Schuko CEE7/7			13			883		■				03.304.013.1
	230V	16 A	Schuko CEE7/7			9			683		■				03.304.009.1
	230V	16 A	Schuko CEE7/7			5			483		■		■		03.304.005.1
	230V	16 A	Schuko CEE7/7				13		883		■			■	03.404.013.1
	230V	16 A	Schuko CEE7/7				9		683		■			■	03.404.009.1
	230V	16 A	Schuko CEE7/7				5		483		■		■	■	03.404.005.1
Protector LS (technical description on page 235)															
	230V	16 A	Schuko CEE7/7			13			883		■				03.308.013.1
	230V	16 A	Schuko CEE7/7			9			683		■				03.308.009.1
	230V	16 A	Schuko CEE7/7			5			483		■		■		03.308.005.1
	230V	16 A	Schuko CEE7/7				13		883		■			■	03.408.013.1
	230V	16 A	Schuko CEE7/7				9		683		■			■	03.408.009.1
	230V	16 A	Schuko CEE7/7				5		483		■		■	■	03.408.005.1
Protector FI/LS (technical description on page 235)															
	230V	16 A	Schuko CEE7/7			13			883		■				03.310.013.1
	230V	16 A	Schuko CEE7/7			9			683		■				03.310.009.1
	230V	16 A	Schuko CEE7/7			5			483		■		■		03.310.005.1
	230V	16 A	Schuko CEE7/7				13		883		■			■	03.410.013.1
	230V	16 A	Schuko CEE7/7				9		683		■			■	03.410.009.1
	230V	16 A	Schuko CEE7/7				5		483		■		■	■	03.410.005.1
	230V	10 A	SEV 1011 T12					9	683		■				03.710.009.1
	230V	10 A	SEV 1011 T12					5	483		■		■		03.710.005.1
Protector emergency stop switch (technical description on page 236)															
	230V	16 A	Schuko CEE7/7			10			683		■				03.326.010.1
	230V	16 A	Schuko CEE7/7			6			483		■		■		03.326.006.1
Compact	230V	16 A	Schuko CEE7/7				10		683		■			■	03.426.010.1
	230V	16 A	Schuko CEE7/7				6		483		■		■	■	03.426.006.1

DI-STRIP Model	Input Values		Input Connector	Outputs					L	S	F1	F2	19"	Safe	Order No.
	Voltage	Current		C13	C19	Schuko	UTE	Type 13							
Protector emergency stop switch (technical description on page 236)															
Classic	230V	16 A	Schuko CEE7/7			12			1333		■				03.326.062.1
	230V	16 A	Schuko CEE7/7			8			933		■				03.326.058.1
	230V	16 A	Schuko CEE7/7				12		1333		■			■	03.426.062.1
	230V	16 A	Schuko CEE7/7				8		933		■			■	03.426.058.1
Protector emergency stop switch FI/LS (technical description on page 236)															
	230V	16 A	Schuko CEE7/7			8			683		■				03.328.008.1
	230V	16 A	Schuko CEE7/7				8		683		■			■	03.428.008.1
Power Cleaner (technical description on page 237)															
	230V	16 A	Schuko CEE7/7			13			883		■				03.312.013.X
	230V	16 A	Schuko CEE7/7			9			683		■				03.312.009.X
	230V	16 A	Schuko CEE7/7			5			483		■		■		03.312.005.X
	230V	16 A	GST18	6					483		■		■		03.612.206.1
	230V	16 A	Schuko CEE7/7				13		883		■			■	03.412.013.X
	230V	16 A	Schuko CEE7/7				9		683		■			■	03.412.009.X
	230V	16 A	Schuko CEE7/7				5		483		■		■	■	03.412.005.X
Safety Basic (technical description on page 237)															
	230V	16 A	Schuko CEE7/7			10			732			■			03.316.110.1
	230V	16 A	Schuko CEE7/7			10			683		■				03.316.010.X
	230V	16 A	Schuko CEE7/7			6			532			■		■	03.317.106.1
	230V	16 A	Schuko CEE7/7			6			532			■			03.316.106.1
	230V	16 A	Schuko CEE7/7			6			483		■		■		03.316.006.X
	230V	16 A	Schuko CEE7/7			4			432			■		■	03.317.104.1
	230V	16 A	Schuko CEE7/7			4			432			■			03.316.104.1
	230V	16 A	Schuko CEE7/7			4			383		■				03.316.004.1
	230V	16 A	GST18			4			433		■				03.316.204.1
	230V	16 A	GST18	6					483		■		■		03.616.206.1
	230V	16 A	Schuko CEE7/7				10		732			■		■	03.416.110.1
	230V	16 A	Schuko CEE7/7				10		683		■			■	03.416.010.1
	230V	16 A	Schuko CEE7/7				6		532			■		■	03.416.106.1
	230V	16 A	Schuko CEE7/7				6		483		■		■	■	03.416.006.1
	230V	16 A	Schuko CEE7/7				4		432			■		■	03.416.104.1
	230V	16 A	Schuko CEE7/7				4		383		■			■	03.416.004.1
	230V	16 A	GST18				4		433		■			■	03.416.204.1
Safety Standard (technical description on page 238)															
	230V	16 A	Schuko CEE7/7			13			883	■	■				03.318.013.X
	230V	16 A	Schuko CEE7/7			9			732	■		■		■	03.319.109.X
	230V	16 A	Schuko CEE7/7			9			732	■		■			03.318.109.X
	230V	16 A	Schuko CEE7/7			9			683	■	■				03.318.009.X
	230V	16 A	Schuko CEE7/7			5			532	■		■		■	03.319.105.X
	230V	16 A	Schuko CEE7/7			5			532	■		■			03.318.105.X
	230V	16 A	Schuko CEE7/7			5			483	■	■		■		03.318.005.X
	230V	16 A	GST18			5			583		■				03.318.205.1
	230V	16 A	GST18	6					483		■		■		03.618.206.1
	230V	16 A	Schuko CEE7/7				13		883	■	■			■	03.418.013.X
	230V	16 A	Schuko CEE7/7				9		732	■		■		■	03.418.109.X
	230V	16 A	Schuko CEE7/7				9		683	■	■			■	03.418.009.X
	230V	16 A	Schuko CEE7/7				5		532	■		■		■	03.418.105.X
	230V	16 A	Schuko CEE7/7				5		483	■	■		■	■	03.418.005.X
	230V	16 A	GST18				5		583		■			■	03.418.205.1
	230V	10 A	SEV 1011 T12					9	683	■	■				03.718.009.X
	230V	10 A	SEV 1011 T12					5	483	■	■		■		03.718.005.X

DI-STRIP Model	Input Values		Input Connector	Outputs					L	S	F1	F2	19"	Safe	Order No.
	Voltage	Current		C13	C19	Schuko	UTE	Type 13							
Master-Slave (technical description on page 239)															
	230V	16 A	Schuko CEE7/7			9			683		■				03.314.009.1
	230V	16 A	Schuko CEE7/7			5			483		■		■		03.314.005.1
	230V	16 A	GST18			5			533		■				03.314.205.1
	230V	16 A	Schuko CEE7/7				9		683		■			■	03.414.009.1
	230V	16 A	Schuko CEE7/7				5		483		■		■	■	03.414.005.1
	230V	16 A	GST18				5		533		■			■	03.414.205.1
Combi (technical description on page 239)															
	230V	16 A	Schuko CEE7/7			9			782			■			03.320.109.1
	230V	16 A	Schuko CEE7/7			9			733		■				03.320.009.1
	230V	16 A	Schuko CEE7/7			5			582			■		■	03.321.105.1
	230V	16 A	Schuko CEE7/7			5			582			■			03.320.105.1
	230V	16 A	Schuko CEE7/7			5			533		■				03.320.005.1
	230V	16 A	Schuko CEE7/7				9		782			■		■	03.420.109.1
	230V	16 A	Schuko CEE7/7				9		733		■			■	03.420.009.1
	230V	16 A	Schuko CEE7/7				5		582			■		■	03.420.105.1
	230V	16 A	Schuko CEE7/7				5		533		■			■	03.420.005.1
M (technical description on page 240)															
	230V	32 A	IEC60309 1ph/N/PE 6h	7					483		■		■		03.636.007.1
	230/400V	3 x 32 A	IEC60309 3ph/N/PE 6h	21					933		■				03.636.021.1
	230/400V	3 x 16 A	IEC60309 3ph/N/PE 6h	21					1033		■				03.606.821.1
	230/400V	3 x 16 A	IEC60309 3ph/N/PE 6h	45					1833		■				03.606.845.1
	230/400V	3 x 16 A	IEC60309 3ph/N/PE 6h	18	6				1133		■				03.606.824.1
	230/400V	3 x 16 A	IEC60309 3ph/N/PE 6h	36	6				1733		■				03.606.842.1
	230V	16 A	Schuko CEE7/7			6			483		■		■		03.306.006.1
	230V	16 A	Schuko CEE7/7	9					483		■		■		03.606.009.1
	230V	16 A	GST18						233		■				03.606.200.1
RM (technical description on page 240)															
	230V	16 A	Schuko CEE7/7			8			733		■				03.307.008.1
	230V	16 A	Schuko CEE7/7			17			1183		■				03.307.017.1
	230V	16 A	Schuko CEE7/7	9					633		■				03.607.009.1
	230V	16 A	Schuko CEE7/7	18					933		■				03.607.018.1
	230/400V	3 x 16 A	IEC60309 3ph/N/PE 6h	24					1133		■				03.607.825.1
	230/400V	3 x 16 A	IEC60309 3ph/N/PE 6h	45					1833		■				03.607.845.1
	230/400V	3 x 16 A	IEC60309 3ph/N/PE 6h	18	6				1233		■				03.607.824.1
	230/400V	3 x 16 A	IEC60309 3ph/N/PE 6h	36	6				1833		■				03.607.842.1
	230V	32 A	IEC60309 1ph/N/PE 6h	24					1111		■				03.637.023.1
	230V	32 A	IEC60309 1ph/N/PE 6h	12	4				871		■				03.637.016.1
	230V	32 A	IEC60309 1ph/N/PE 6h	21	4				1168		■				03.637.025.1
	230/400V	3 x 32 A	IEC60309 3ph/N/PE 6h		6				563		■				03.637.006.1
	230/400V	3 x 32 A	IEC60309 3ph/N/PE 6h	6	12				995		■				03.637.018.1
	230/400V	3 x 32 A	IEC60309 3ph/N/PE 6h	21					1022		■				03.637.021.1
	230/400V	3 x 32 A	IEC60309 3ph/N/PE 6h	18	6				1157		■				03.637.024.1
	230/400V	3 x 32 A	IEC60309 3ph/N/PE 6h	36	6				1751		■				03.637.042.1

Outputs:

C13 = IEC60320 C13
C19 = IEC60320 C19
Schuko = Protective contact plug DIN 49440
UTE = France Standard CEE 7-V
Type 13 = Switzerland, type 13
L = Length in mm
S = Switch
F1 = Standard side pane (for rack mounting)
F2 = Design side panel (for installing at workstation)
19" = Suitable for 19" installation
safe = Child-proof

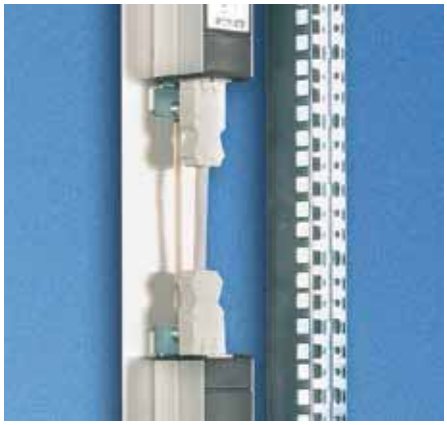
1. DOS20147

3-Phase in Rack with GST18
Features

2. DOS20132

- **Requirement**
  Constant energy increase requirements in the rack caused by high packing densities (e.g. 1 U Pizza servers, blade servers, etc.) (1)
- **Solution**
  3-phase distributor with GST18 plug system, e.g. 96 A with redundant feed. (2)
- **Benefits** (3, 4)
  – Modularity.
  – Plug-in capability (no wiring required).
  – Can be expanded.
  – Cascadable.
  – Easy implementation of redundancies/UPS-secured circuits.
  – Combination of DIN Schuko / IEC320 Euro systems.
  – Any installation position can be selected.
  – Good alternative to 3-phase DI-STRIP Triple Power.

3. DOS20142



4. DOS20135

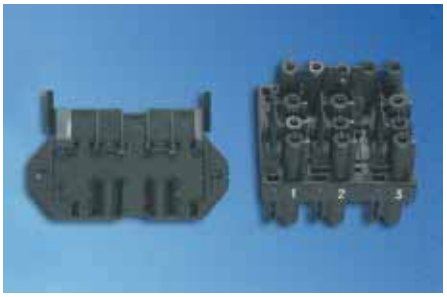
DOS20104

Power Supply Cable, 3-Phase
Accessories for GST 18 Plug System

– GST 18 socket for connecting GST18i5 distributor block with 3 phases.
– 5-pole (L1, L2, L3, N, PE) 250/400 V ~.
– Cable: H05VV-F 5G 2.5 mm².

- **Color**
  – Black.

L	S	n	F1	F2	19"	Safe	Model	Order No.	UP
2000								**04.000.048.0**	1 unit



DOS20103

GST18i5 Distributor Block, 3-Phase

– For individual connection at the customer.
– Modular plug-in connection.
– 3-phase distribution on various socket strips.
– Including mounting panel.

- **Color**
  – Black.

L	S	n	F1	F2	19"	Safe	Model	Order No.	UP
								04.000.038.9	1 unit

DOS00467

Power Supply Cable, Single Phase
Accessories for GST 18 Plug System

– Mains plug CEE/VII: GST18 socket (Wieland).
– Cable: H05VV-F3G 1.5 mm².

Color
– White.

L	S	n	F1	F2	19"	Safe	Model	Order No.	UP
2000								**04.000.040.0**	1 unit
5000								**04.000.041.0**	1 unit

DOS00469

DOS20105

Connection Cable
Accessories for GST 18 Plug System

– GST 18 plug.
– GST 18 socket.
– Cable: H05VV-F3G 1.5 mm².

Color
– For color coding circuits (e.g. UPS).

L	S	n	F1	F2	19"	Safe	Model	Order No.	UP
200							White	**04.000.042.0**	1 unit
200							Black	**04.000.042.9**	1 unit
500							White	**04.000.037.0**	1 unit
500							Black	**04.000.037.9**	1 unit
1000							White	**04.000.044.0**	1 unit
1000							Black	**04.000.044.9**	1 unit
5000							White	**04.000.045.0**	1 unit

DOS00471

GST18 Socket

– With threaded connection for cross-section 1.5 – 2.5 mm² with cable strain relief.
– For individual connection.

Color
– White.

L	S	n	F1	F2	19"	Safe	Model	Order No.	UP
								04.000.046.0	1 unit

DOS00470

GST18 Plug

– With threaded connection for cross-section 1.5 – 2.5 mm² with cable strain relief.
– For individual, further cabling.

Color
– White.

L	S	n	F1	F2	19"	Safe	Model	Order No.	UP
								04.000.047.0	1 unit

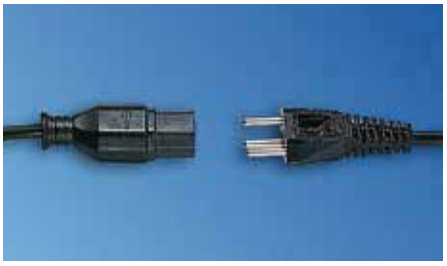
DOS00076

Mains Cable for Euro Socket Strip
For DIN 49 440 and French/Belgian Standard

- Mains plug CEE/VII: Euro socket IEC 320.
- Cable: H05VV-F 3G 1 mm².

- **Mains voltage**
  – 250 VAC.
- **Nominal current**
  – 10 A.

L	S	n	F1	F2	19"	Safe	Model	Order No.	UP
2000								**04.000.054.9**	1 unit
6000								**04.000.053.9**	1 unit



DOS00077

Mains Cable for Euro Socket Strip
For Swiss Standard

- Mains plug: Type 12 - Euro socket IEC 320.
- Cable: H05VV-F 3G 1 mm².

- **Mains voltage**
  – 250 VAC.
- **Nominal current**
  – 10 A.

L	S	n	F1	F2	19"	Safe	Model	Order No.	UP
2000								**04.000.055.9**	1 unit

DOS00078

Mains Cable for Euro Socket Strip
For British Standard

- Mains plug: Type BS 1363 - IEC320 Euro socket.
- Cable: H05VV-F 3G 1 mm².

- **Mains voltage**
  – 250 VAC.
- **Nominal current**
  – 10 A.

L	S	n	F1	F2	19"	Safe	Model	Order No.	UP
2000								**04.000.056.9**	1 unit

DOS00519

Euro Connection Cable

- Mains plug: IEC 320.
- Euro socket IEC 320.
- Cable: H05VV-F 3G 1 mm².
- USA: SJT AWG18 with USA approval.

- **Mains voltage**
  – 250 VAC.
- **Nominal current**
  – 10 A.

L	S	n	F1	F2	19"	Safe	Model	Order No.	UP
900							EU	**04.000.051.9**	1 unit
900							USA	**04.000.052.9**	1 unit

Dimensions in mm:

L = Length
S = Switch
n = Number of sockets
F1 = Standard side panel
F2 = Design side panel
19" = ideal for 19" components
U = Standard rack unit
UP = Packaging unit
Safe = child-proof

Conversion:

1 mm = 0.03937 inch
1 kg = 2.2046 pounds

Replace **.x** with the number of your color combination: **.1** = RAL 7035, **.6** = RAL 7035/RAL 2003

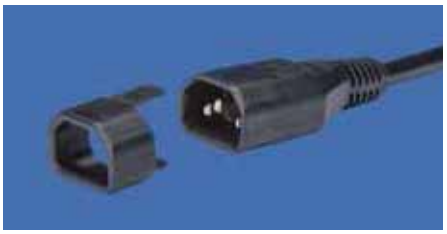
DOS20493

SafetySleeve™ Cable Protection IEC C19

- SafetySleeves protect the feed lines of the network equipment.
- Compatible with all C19 cables and fit onto all PDUs.

Material / Finish
– PVC, black.

L	W	H	U	Model	Order No.	UP
				C20 plug in C19 socket	**03.910.212.9 001**	20 unit



DOS20494

SafetySleeve™ Cable Protection IEC C13

- SafetySleeves protect the feed lines of the network equipment.
- Compatible with all C13 cables and fit onto all PDUs.

Material / Finish
– PVC, black.

L	W	H	U	Model	Order No.	UP
				C14 plug in C13 socket	**03.910.213.9 001**	50 unit