

Control Plex® RACK

Intelligent Power distribution and overcurrent protection



YOUR POWERFUL PARTNER

in communication technology

We offer a wide range of conventional or intelligent power distribution systems for server and network cabinets, including flexible power distribution units as standard products and customised solutions. Many customers from the telecommunications, data center, industrial, energy and railroad infrastructure sectors place their trust in us.

Those who choose us also choose:



MAXIMUM SYSTEM AVAILABILITY

Our products for the network cabinet guarantee selective load disconnection. In the event of a short circuit, the faulty load is selectively disconnected while the other loads continue to operate undisturbed. This avoids downtimes and increases the availability of your systems.



BEST ECONOMIC EFFICIENCY

Our power distribution systems are flexibly expandable thanks to their modular design. They guarantee best economic efficiency due to short installation times and a maintenance-friendly design. Thanks to plug-in type circuit breakers, the system can be expanded during operation. This prevents a breakdown of the entire system.



MAXIMUM FLEXIBILITY

We offer individual power distribution systems perfectly matched to your application. Our well-designed modular system guarantees short development times. From customer-specific small quantities to projects running several years - we guarantee the highest quality and permanently uniform standards.







Control Plex® RACK SYSTEM

Customised power distribution and overcurrent protection

The *ControlPlex®* Rack system is our complete solution for DC power distribution and overcurrent protection in communication technology. The modular concept allows configurations to be tailored exactly to individual requirements. From purely electronic overcurrent protection to a fully integrated complete system with remote access: thanks to its flexibility, the system covers all needs and guarantees maximum system availability.

By system flexibility we mean:

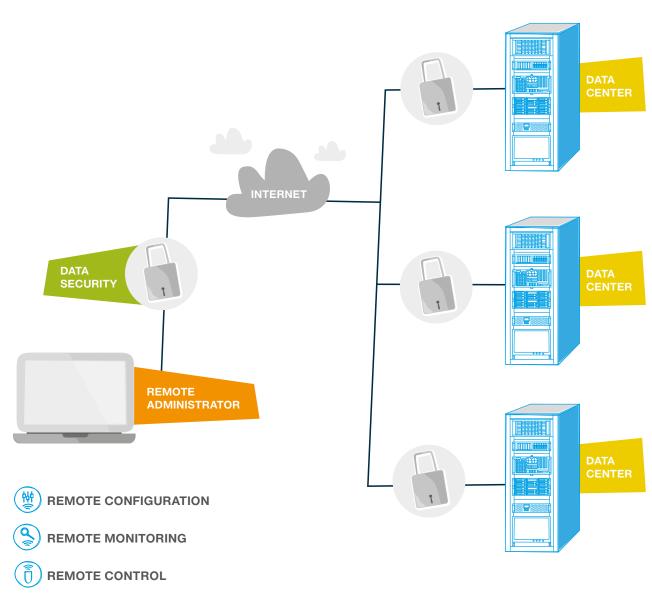
- · Short installation times and easy handling
- Overcurrent protection pluggable under voltage enables simple load channel expansion
- Selective disconnection of loads
- Minimal space requirement in the network cabinet

Using our unique circuit breaker technology ensures precise overcurrent protection and enables remote control, current monitoring and remote alarming if required.









SENSOR INTEGRATION

Control Plex® RACK SYSTEM

Upgrade and configuration options



BASIS

ELECTRONIC OVERCURRENT PROTECTION

- Protection of connected loads against overcurrent and short-circuit currents
- Protection against voltage dips thanks to integrated electronic current limitation
- The selective disconnection ensures continued operation and supply of fault-free devices
- Precise tripping behaviour even with long cable lengths and small cross-sections



UPGRADE 1

TRANSPARENT GROUP SIGNALLING

- Entry into transparent monitoring of the connected loads
- Bus communication with all installed circuit breakers
- Trip signalling of the circuit breakers to an external monitoring system
- Option to initiate immediate measures to remedy the malfunction, both for stand-alone solutions and centrally monitored systems



UPGRADE 2

CONVENIENT REMOTE CONTROL

- Extended range of functions with smart control and monitoring functions through simple integration into the network environment
- ON-/OFF-switching or restarting connected loads by accessing all installed circuit breakers via a web interface
- Querying, caching and forwarding of individual measurement data, status conditions and error messages to the central management system or the master computer.



UPGRADE 3

EXTERNAL SENSOR DATA INTEGRATION

- Connection of external sensors including system protection, network integration, remote control and monitoring
- All functions in a compact 19" system: from power distribution and overcurrent protection in the system cabinet to door contact control
- Automatic initiation of actions thanks to programmable logical links between operating states of the electronic circuit breakers and sensor signals





Power-D-Box® CP Compact power distribution system



ESX300-S

Electronic circuit breakers for positive or negative voltage range

UPGRADE 1



RSI10

Signalling interface

UPGRADE 2



RCI11

Communication module



Control & monitoring

UPGRADE 3



RCI11

Communication module



EAI300

I/O module



Control & monitoring

Learn more about the individual components on our website.





TECHNICAL DATA

Power-D-Box® CP (intelligent power distribution system)		
Rated voltage range	Minus: DC -3872 V Plus: DC 18 72 V	
Protected pole	1pole minus or 1pole plus	
Total current	2x 150 A for redundant design 200 A for non-redundant design	
Number of loads	2 x 9 for redundant design 1 x 19 for non-redundant design	
Load and supply terminal	Available at the front or back	
Mounting dimensions (WxHxD)	Width: 482.6 mm (19") x Height: 89 mm (2 HU) x Mounting depth: max. 205 mm (depending on version)	



ESX300-S minus and ESX300-S plus (electronic circuit protector)		
Rated voltage range	Minus: DC -3872 V Plus: DC 18 72 V	
Rated current	2 A, 5 A, 8 A, 12 A, 16 A *, 20 A*, 24 A*	
Failsafe element	Integral	
voltage monitoring	Integral	
temperature monitoring	Integral	
active current limitation	at typically 1.2 times rated current	
Short circuit disconnection	typically after 10 ms	
Overcurrent disconnection	typically after 30 s	



 $^{^{\}star}16$ A/20 A/24 A can be connected in parallel via an optionally available set. This allows load protection up to 60 A.

RSI10 (interface sub-assembly, signalling)	
Power supply	DC 20 V to 72 V
External terminals	2 plug-in type 3-pole screw terminals with mating connector
Alarm contacts	potential-free change-over contact
Signalling	Supply group A and/or B



RCI11 (Communication module)		
Power supply	DC 20 V to 72 V	
Interface	10/100 Mbit/s 10 Base-T Ethernet	
Supported protocols	SNMP v1, v2c, v3; Modbus TCP; http/https; NTP, IPv4 / IPv6; SSHv2, DHCP	
Web server	Integral	



EAI300 (I/O module)	
Power supply	DC 20 V to 72 V
Internal supply voltage for I/O connection	Typical DC 24 V
Number of digital inputs:	8 physically isolated inputs
Number of analogue inputs:	1 physically isolated input
Number of digital outputs (relay outputs)	2 physically isolated relay outputs (break contacts)
Alarm contacts	Potential-free group signalling with connection to the management system





Control Plex® RACK

Graphical user interface for control and data logging

The *ControlPlex®* Rack system offers an intuitive, graphical user interface that reflects the system structure and offers the following options, for example:

- Monitoring and manual switching of circuit breakers
- Configuration of threshold values for automatic circuit breaker ON/OFF switching
- Checking and saving log and measurement data files
- Programming logical links between the electronic circuit breakers and sensor signals

YOUR BENEFITS

The Graphical User Interface provides extensive data logging functions. This includes querying and displaying the following measurement data:

- System-relevant processes, e.g. plugging in a new module (System Log).
- Internal messages of the RCl11 control module, e.g. error messages (Error Log)
- Measured values of each individual installed electronic circuit breaker, e.g. voltage, load current and temperature values (Fuse Log)
- Additional download of all log files for further external processing

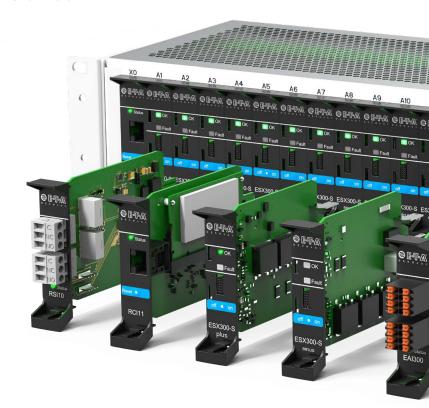
Control Plex® RACK

At a glance



HIGHEST SYSTEM AVAILABILITY

- Selective overcurrent protection with integrated current limitation
- Early error detection and active prevention of failures through remote monitoring and diagnosis of the connected loads
- Remote control of the circuit breakers for flexible troubleshooting - no matter when and where





HIGH ECONOMIC EFFICIENCY

- Shorter maintenance times thanks to remote maintenance and less on-site visits
- Energy saving thanks to time-controlled ON/ OFF-switching of the connected loads



UNLIMITED TRANSPARENCY

- Easy integration into a management system via SNMP or Modbus TCP
- Monitoring of ambient and environmental parameters through sensor integration





MAXIMUM FLEXIBILITY

- Simple adaptation to the respective application due to a modular system design
- System expansion possible under voltage "hot swappable"
- Simple system expansion without downtimes due to pluggable circuit breakers (Plug & Play)

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