INTELLIGENT POWER DISTRIBUTION SYSTEMS
RSI10

RSI10

The **RSI10** Remote Signalling Interface ensures reliable and early detection of critical system conditions. It can communicate with all circuit protectors installed in the ***ControlPlex***® **Rack** via internal BUS connection. When one of the circuit protectors is disconnected from the related load due to an overcurrent etc., the RSI10 will externally indicate this status via a potential-free group signal, e.g. to a monitoring system. It is the perfect way to minimise downtimes and reduce operational and maintenance costs.

TYPICAL FEATURES

- Rated voltage DC 20...75 V
- Integrated BUS interface
- External terminals, two plug-in type 3-pole screw terminals with mating connector

YOUR BENEFITS

- Early failure detection through external alarming
- Extended potential-free fault signalling (overvoltage, low voltage, short circuit, overcurrent, excess temperature etc.)
- Enhanced alarm indication on site by means of integral LED
- Easy retrofitting without system downtimes
- Conveniently accessible contact terminals on the front side
- Technologically fit for the future: Designed to be compatible for future system extensions through the RCI11 remote control and monitoring module

TYPICAL APPLICATIONS

Telecommunications and datacom, energy providers, industrial switching and control systems, rail engineering, infrastructure

COMPLIANCE

CE

WEB LINKS

Further information, Installation Instruction, International approvals, Technical basics, REACH, RoHS, Contact

GENERAL INFORMATION

FURTHER INFORMATION

Installation Instruction
https://www.e-t-a.com/datei/13849

TECHNICAL DATA (T_u = +25 °C, U_b = DC 48 V)

ELECTRICAL DATA

Rated voltage range	DC 20...75 V (***Power-D-Box*® CP** - input voltage)
Dielectric strength	DC 100 V for 1 ms
Power consumption I	Typ. 25 mA at DC 48 V operating voltage
Power consumption	Typ. 1.2 W
External connection	Two plug-in type 3-pole screw terminals with mating connector
LED for operating condition signalling	**Multicoloured (red, green, blue)** • Status LEDs

MECHANICAL DATA

Mounting position	Vertical, cooling Convection cooling
Mass	Approx. 60 g

AUXILIARY CIRCUIT (ALARM CONTACTS)

Contact	Potential-free change-over contact
Max. switching voltage	DC 72 V
Interrupting capacity	60 W / 62.5 VA

AMBIENT CONDITIONS

Ambient temperature	-20...+60 °C (without condensation, cf. EN 60204-1)
Storage temperature	-20...+70 °C
Damp heat	**Test according to IEC 60068-2-78, 3K6 climate class according to EN 60721** 96 hours at 95 % relative humidity, 40 °C
Vibration	**Test according to IEC 60068-2-6, test Fc** 3 g
Actuating area IP code (standard)	IP20 (when rack is fully populated and SUB-D connectors are plugged in)
Terminal area IP code (standard)	IP00
ESD	4 kV / air 8 kV
EMC requirements (EMC directive, CE logo) emitted interference	EN 61000-6-3
EMC requirements (EMC directive, CE logo) resistance to disturbances	EN 61000-6-2

FURTHER INFORMATION

OPERATING CONDITIONS: LED STATUS INDICATION

ESX300-S-3xx circuit protector operating status	Load output ESX300-S-3xx circuit protector	LED status RSI10 module	Auxiliary contact RSI10 module Group signal "break contact"	Operating condition RSI10 module
No fault -> Device OFF	Locked	Green	Open	Normal operation
Normal operation	Connected	Green	Open	Normal operation

Undervoltage fault with device in OFF condition (15 V < U < 37 V)	Locked	Green	Closed	Normal operation
Undervoltage fault with device in OFF condition (U > 72V)	Locked	Green	Closed	Normal operation
Overcurrent fault detected (I > I_n < 1.2 x I_n). The overcurrent must be detected for approx. 30 s before tripping is effected.	Connected	Green	Open	Normal operation
Overcurrent fault or short circuit disconnection	Locked	Green	Closed	Normal operation
Error undervoltage (U > 15 V < 37 V)	Connected	Green	Closed	Normal operation
Error overvoltage (72 V < U < 75 V)	Connected	Green	Closed	Normal operation
Error: no voltage	Locked	OFF (green)[1]	Closed	Normal operation[1]
Error excess temperature	Locked	Green	Closed	Normal operation
-	-	Green	Closed	No ESX300-S circuit protector available Check if ESX300-S bus version is plugged in
-	-	Red	Closed	Internal RSI10 error or internal bus error
-	-	5 sec blue	Open	One new circuit protector ESX300-S was identified

[1] In a redundant system with two supply voltage sources, the LED lights up green if only one voltage source fails, otherwise the RSI10 module is de-energised.

ORDERING NUMBER CODE

R	S	I	-	1	0	-	0	0	0	-	A
1				2			3	4	5		6

1 TYPE NUMBER

RSI	Remote Signalling Interface

2 VERSION

10	Standard, pluggable (front plate, without enclosure)

3 INTERNAL INTERFACES

0	With EL-BUS interface (standard)

4 VOLTAGE RANGE (SUPPLY)

0	DC 20...75 V

5 EXTERNAL INTERFACES

0	Potential-free group signal connection

6 EXTERNAL CONNECTION

A	2 x 3-pole, screw terminals, pluggable

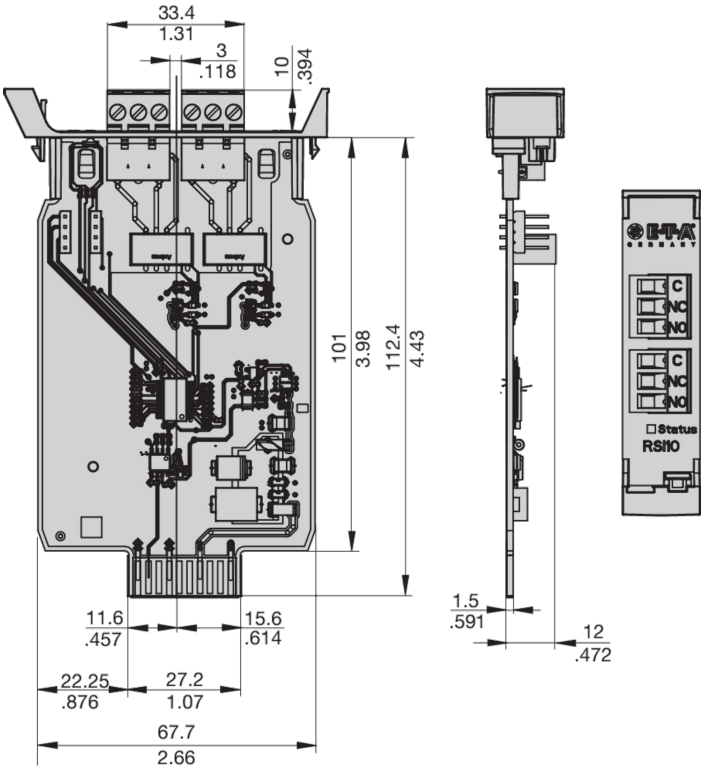
COMPLIANCE

CE according to EMC directive (EN 61000-6-3 & EN 61000-3-2)

Compliance according to	EN60950-1 / UL60950-1

DIMENSIONS

DIMENSIONS



ACCESSORIES

OPTIONAL ACCESSORIES FROM

CP Power-D-Box® for ControlPlex® Rack	The ***Power-D-Box®* CP** is a modular power distribution system. Depending on the respective application, the compact 2 HU enclosure can accommodate these system components: ESX300-S, RSI10, RCI11 oder EAI300. User friendliness is of top priority in the event of a system extension with the system live without causing downtimes. All sub-assemblies are hot-swappable without affecting neighbouring components. Depending on the application, termination can be placed both on the front or on the rear. Major application areas of the ***ControlPlex®* Rack** system are communication technology equipment both in the negative (DC -48 V or DC -60 V) and in the positive voltage range (DC 24 V, 48 V, 60 V).	

FURTHER PRODUCTS

RELATED PRODUCTS

ESX300-S minus	The hot pluggable **ESX300-S minus** electronic circuit protector ensures reliable overcurrent protection by means of electronic current limitation and load disconnection. It reliably prevents the destruction of electronic sub-assemblies or load lines in power supply systems in a voltage range of DC -48 V and DC -60 V. Thanks to a selective load disconnection, a voltage dip is prevented in the event of a failure and other faultless devices in the circuit remain working. The integral bus interface can transmit the recorded measuring values and status messages to the RCI11 control interface, where they can be used to automatically trigger actions or for data collection and monitoring.	

ESX300-S plus	The hot pluggable **ESX300-S plus** electronic circuit protector ensures reliable overcurrent protection by means of electronic current limitation and load disconnection. It reliably prevents the destruction of electronic sub-assemblies or load lines in power supply systems in DC +24 V, DC +48 V and DC +60 V voltage ranges. Thanks to its selective load disconnection, a voltage dip is prevented in the event of a failure and fault-free devices can be further operated. The integral bus interface can transmit the recorded measuring values and status messages to the RCI11 control interface, where they can be used to automatically trigger actions or for data collection and monitoring.	
RCI11	The **RCI11** Remote Control Interface allows remote control and monitoring of the system and its connected loads, reducing maintenance costs and providing maximum transparency. It helps integrate the ***ControlPlex***® **Rack** system into the network surroundings and into the centralised corporate management system. The RCI11 provides access to all installed ESX300-S circuit protectors via the internal bus system and can enquire or store individual measuring data, status conditions and fault indications and forward them to the superordinate control unit or execute commands from the control unit for controlling purposes. The RCI11 Remote Control Interface can be extended during operation “Hot Plug & Play“.	
EAI300	Combined with the RCI11, the **EAI300** External Alarm Interface allows recording of external sensor data and alarm signalling in the management system. It includes e.g. additional monitoring and indication of door contacts or temperature sensors in the technical room. This provides high system transparency and fast intervention in the event of alarms. Thanks to programmable logical links, operating conditions of the ESX300-S can be linked to external encoder signals that enable automatic switching operations. Instead of the ESX300-S electronic circuit protector, the EAI300 can be easily plugged into an empty slot of the ***ControlPlex***® **Rack** system without shutting down the connected loads. This allows connection of external signalling devices in the control cabinets without requiring additional space.	

All information and data given on our products are accurate and reliable to the best of our knowledge, but E-T-A does not accept any responsibility for the use in applications which are not in accordance with the present specification. E-T-A reserves the right to change specifications at any time in the interest of technical improvement. Dimensions are subject to change without notice. Please enquire for the latest dimensional drawing with tolerances if required. All dimensions, data, pictures and descriptions are for information only and are not binding. Amendments, errors and omissions excepted. Ordering part numbers may differ from the device marking.