Package leaflet robusto-slave RSC123 device

Please keep save

Important information:

Please observe all guidelines in the respective manual before startup!
Download under www.elrest.com > Support > Tools & Downloads

	The RSC123 is mounted on a 35 mm top hat rail acc. DIN EN 60715 **Bring the system into a safe, de-energized state before starting installation, disassembly or wiring of the device!** **THE TOP HAT RAIL MUST BE CONNECTED TO THE PROTECTIVE EARTH (PE)**
	The device must be installed vertically.
	The ground from the RSC123 has to be connected with the PE on the switch cabinet. The device will be connected via X1 (power supply). When connecting and disconnecting cables, which require a great effort, the device must be hold in the top hat rail, so that no tear out of it is possible. The device must be connected via X1 and the fitting in the housing cover, corresponding low- resistance, to the PE.
	The RSC123 must be included in the earth concept via its protective earth (PE) connection. Connect the top hat rail with PE power supply X1 and PIN3 with PE. The cable screens of the communications ports X27 /CAN IN, X28 /CAN OUT are connected with their mating connectors to the PE. The housing of the RSC123 must be connected via the screw connection (on the cover), corresponding low-resistance to the PE. The screws are tightened. The output current of 3 A must be protected. (max. 10 A for each terminal block)
	Do not connect the relays as a multi-phase use. Only 1 phase can be connected on a terminal block. Only connect low-voltage circuits **or** extra-low voltage circuits on a terminal block (never together). The stripping length of the cables according the terminal data must be strictly observed.

Assembly:

	Keep the RSE240 over the top hat rail, so that the top hat rail applies in a right angle to the rear side of the device. Put the device into the top hat rail and push against the spring force of the splay, till the upper part of the profile snaps over the upper part of the top hat rail.
	Release the device; it must fit free and robust on the top hat rail. Check the best fit by easy attempts at movement of the device.

Disassebly:

|	
	All connecting plugs must be removed before the disassembly. For the disassembly push up the device, till the device can be tipped forward for the release
	Push the device against the spring force of the splay till it can released from the upper part of the top hat rail. In this moment the device is no longer kept from the top hat rail, it must keep hold of you to avoid falling down. Lower the device and remove it from the top hat rail.
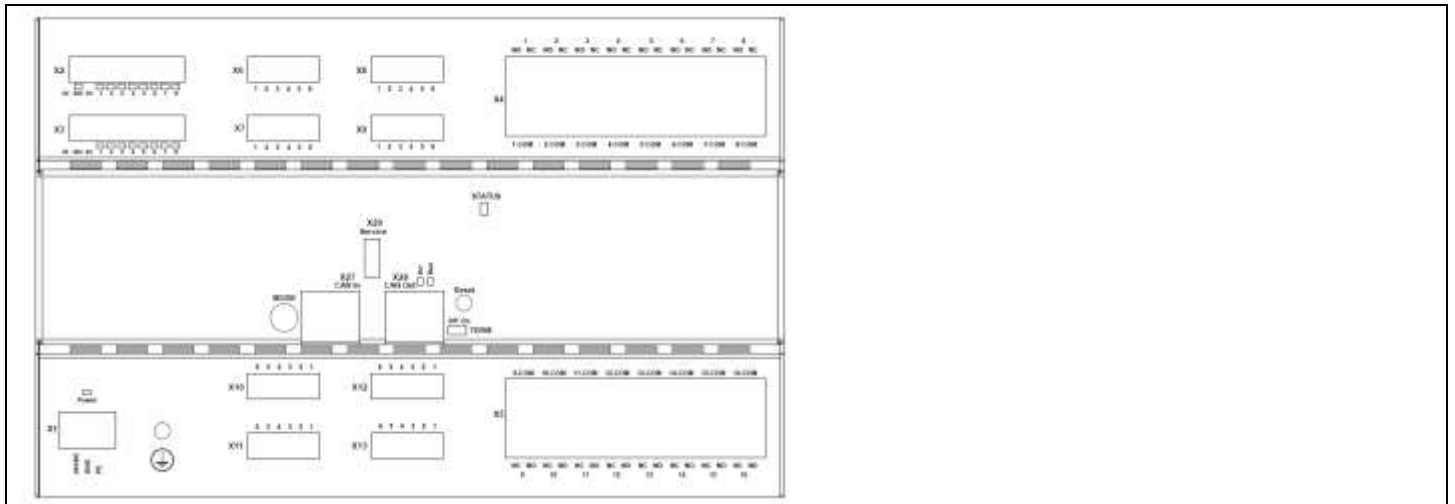
Terminal assignment of the communication interfaces

X1: Power supply

The RSC will be powered via this connector. It's protected against polarity.

X1
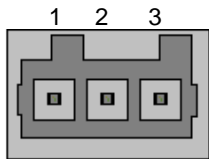
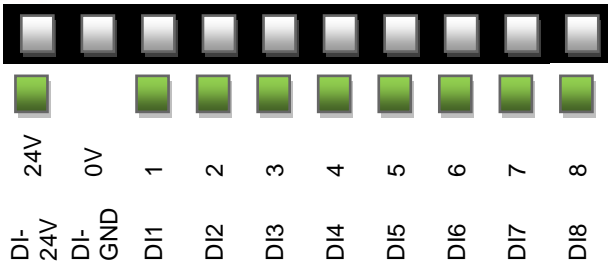| PIN	Belegung
1	PS-24V
2	PS-GND-IN
3	PE

The pins are additionally identified on the labelling of the lid.
The status LED „24 V"(power) lights, if the voltage systems functioning properly.

X2 – X3 Digital inputs

1 LED for the power supply of 24 V
16 green LEDs for the inputs
2 x 10-pole
WAGO-714-140

X2	24V	0V	1	2	3	4	5	6	7	8
	DI-24V	DI-GND	DI1	DI2	DI3	DI4	DI5	DI6	DI7	DI8

X3	24V	0V	1	2	3	4	5	6	7	8
	DI-24V	DI-GND	DI9	DI10	DI11	DI12	DI13	DI14	DI15	DI16
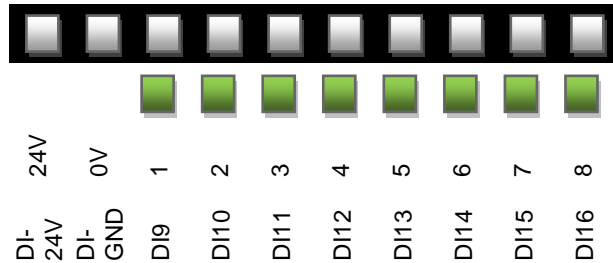
X4 – X5 Digital outputs (relays)

2 x 32-pole
WAGO-250-716

	REL1-NO	REL1-NC	REL2-NO	REL2-NC	REL3-NO	REL3-NC	REL4-NO	REL4-NC	REL5-NO	REL5-NC	REL6-NO	REL6-NC	REL7-NO	REL7-NC	REL8-NO	REL8-NC
	31	29	27	25	23	21	19	17	15	13	11	9	7	5	3	1
X4	32	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2
	REL1-COM	REL1-COM	REL2-COM	REL2-COM	REL3-COM	REL3-COM	REL4-COM	REL4-COM	REL5-COM	REL5-COM	REL6-COM	REL6-COM	REL7-COM	REL7-COM	REL8-COM	REL8-COM

X5

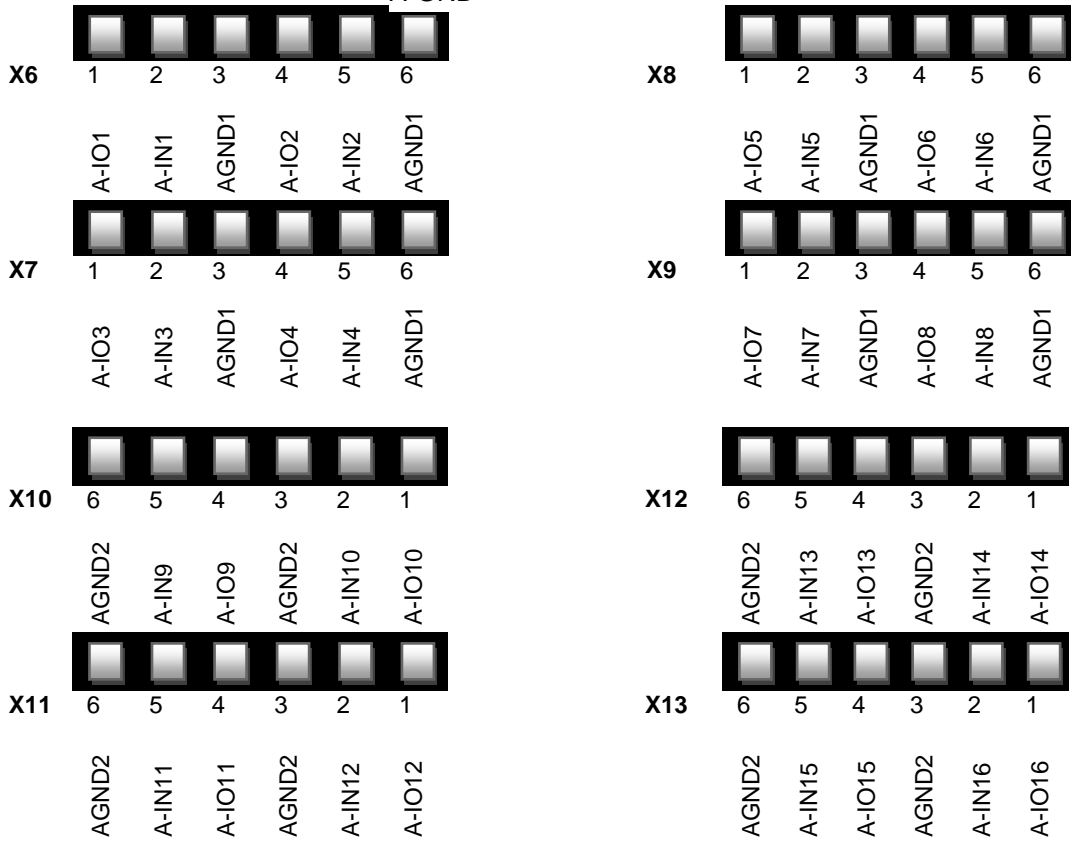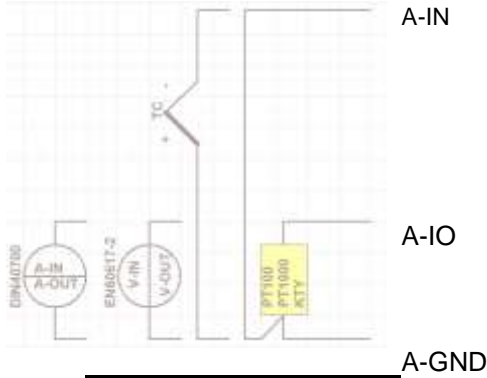|															
REL9-COM	REL9-COM	REL10-COM	REL10-COM	REL11-COM	REL11-COM	REL12-COM	REL12-COM	REL13-COM	REL13-COM	REL14-COM	REL14-COM	REL15-COM	REL15-COM	REL16-COM	REL16-COM
2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32
1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31
REL9-NC	REL9-NO	REL10-NC	REL10-NO	REL11-NC	REL11-NO	REL12-NC	REL12-NO	REL13-NC	REL13-NO	REL14-NC	REL14-NO	REL15-NC	REL15-NO	REL16-NC	REL16-NO

NO = **N**ormal **O**pen
NC = **N**ormal **C**onnected

X6– X13 analog in- or outputs

16 analog in- or outputs
Every 2 channels need a 6-pole connector.
WAGO-714-136

External

A-IN

A-IO

A-GND

X6

1	2	3	4	5	6

X7

A-IO1	A-IN1	AGND1	A-IO2	A-IN2	AGND1
1	2	3	4	5	6
A-IO3	A-IN3	AGND1	A-IO4	A-IN4	AGND1

X8

1	2	3	4	5	6

X9

A-IO5	A-IN5	AGND1	A-IO6	A-IN6	AGND1
1	2	3	4	5	6
A-IO7	A-IN7	AGND1	A-IO8	A-IN8	AGND1

X10

6	5	4	3	2	1
AGND2	A-IN9	A-IO9	AGND2	A-IN10	A-IO10

X11

6	5	4	3	2	1
AGND2	A-IN11	A-IO11	AGND2	A-IN12	A-IO12

X12

6	5	4	3	2	1
AGND2	A-IN13	A-IO13	AGND2	A-IN14	A-IO14

X13

6	5	4	3	2	1
AGND2	A-IN15	A-IO15	AGND2	A-IN16	A-IO16

X27 CAN IN - X28 CAN OUT

This interface is lead out via an 8-pole plug. It is galvanically isolated from the supply of the device voltage.

PIN	assignment
1	CAN-L
2	CAN-H
3	GND (signal ground for CAN)
4	NC
5	NC
6	NC
7	NC
8	NC

ON   **OFF**

TERM

The CAN interface will be internal connected with supply voltage and is electrically isolated. The RJ45 metal body is on the potential PE (screen connection). The device has an optional terminating resistor for the bus. (Switch „TERM" = ON / OFF)

Modi hex-switches

Bootloader

Baud rate

Default
Extended
Service
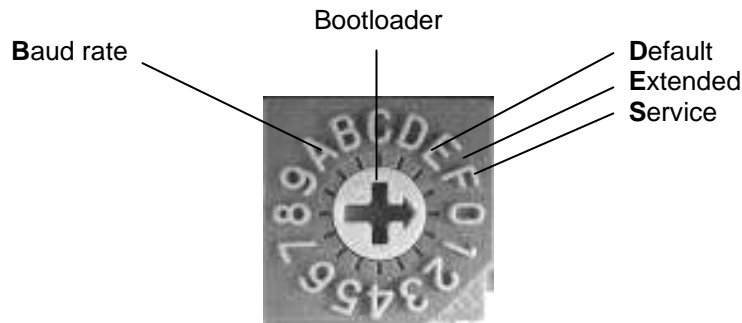
Mode 0...9:	Run-Mode: CANopen Stack runs The unit position of the NodeID corresponds to the switch setting.
Mode A:	Stop
Mode B:	Advanced service-mode(CAN baud rate): CANopen Stack is stopped Run-LED flashes (ca. 1,2 Hz) By changing the switch settings 0…5 and remaining for 3 s, the baud rate of the CAN interfaces will be set, after the expiration (3s) the device performs a reset.

Switch setting	Baud rate
0	1 MBd
1	500 kBd
2	250 kBd
3	125 kBd
4	100 kBd
5	50 kBd

Mode C	Bootloader The device changes in the bootloader modus. The firmware can changed via the serial interface.
Mode D	Default After 3 s all settings will be reset to factory defaults. • baud rate is set to 125 kBd • nodeID is zeroised
Mode E:	Expanded service-mode (CAN NodeID): CANopen Stack is stopped Run-LED flashes (approx.. 1,25 Hz) By changing the switch settings 0…9 and remaining for 3 s, the tens digit of the CAN NodeID will be set. After 3 sec the device is performed a reset.
Mode F:	Service-mode: CANopen Stack is stopped Run-LED flashes (approx. 1,2 Hz)

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