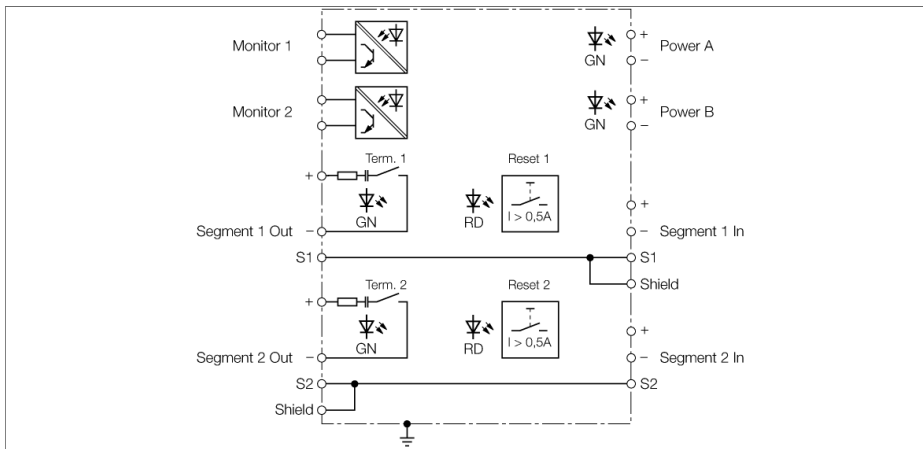


FOUNDATION™ fieldbus power conditioner, dual channel RPC49-205

TURCK

Industrial
Automation



The RPC49-205 provides two segments for the installation of a FOUNDATION™ fieldbus network. In combination with the PSU-3214, each segment provides up to 500 mA with an output voltage of at least 27.5 V. The output voltage depends on the output current.

The conditioner can be supplied redundantly by two supply devices, whereby "POWER A" is the primary input. As long as no redundant voltage supply is available, the voltage supply should be connected to "POWER B". Should the voltage at "POWER A" drop below 20 V, input "POWER B" is energized.

The two green LEDs indicate power ON. The green active LEDs also indicate power ON. The two short-circuit protected outputs of the power conditioner switch off the output in case of overload ($I > 500 \text{ mA}$). The switch-off state is indicated by a red LED for each segment. The overload protection for the correspondent segment can be reset with two reset buttons.

Hardware diagnostics is provided via the monitor terminals. The power conditioner is equipped with an optional terminating resistor for the bus.

Application note: A power conditioner limits the current flow between an external power source and the fieldbus segments. It is not galvanically isolated. Therefore, a power conditioner should only be applied in technically sophisticated installations being adequately powered by the TURCK power supply unit PSU-3214 for example.

- supply of 2 H1-segments, connection via removable screw terminals
- monitor function
- LEDs for indication of the operating status
- 2 x 500 mA output current
- redundant power supply
- short-circuit protected outputs
- aluminium rail housing
- degree of protection IP20
- connection of the housing potential via an M5 x 1 bolt

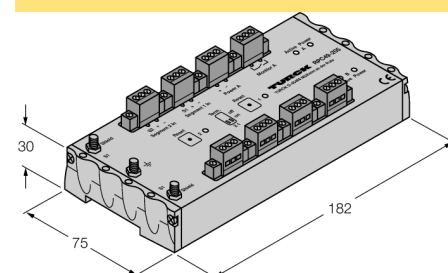
FOUNDATION™ fieldbus power conditioner, dual channel RPC49-205

TURCK

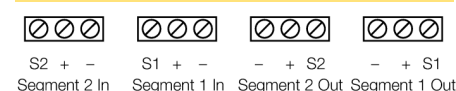
Industrial
Automation

Type code	RPC49-205
Ident no.	6603801
Operating voltage range	21...32 VDC
Surge protection	> 36 VDC
Current consumption	535 mA (1 x 500 mA I_{out}) 1043 mA (2 x 500 mA I_{out})
Voltage drop	≤ 4.4 V
Output circuits	
Output current	≤ 500 mA
Output voltage	$U_{out} = Pwr - [2 V + (I_{out} \times 4.4 \text{ Ohm})]$
Short-circuit protection	≤ 500mA
Diagnostics	2 x solid state relay
Switching current	≤ 700 mA
Switching voltage	≤ 400 VDC
	Galvanically separated against other electronic parts
Indication	
Operational readiness	2 x green
Output active	2 x green
Short-circuit message	2 x red
Electrical connection	8 x 3-pole removable terminal blocks, screw connection
Terminal cross-section	2.5 mm ²
Earthing bolt	M5 x 1
Protection class	IP20
Ambient temperature	-20...+70 °C
Relative humidity	≤ 95 %, non condensing
Housing material	Aluminium
Housing color	black/yellow
Dimensions	182x 75x 30 mm
Connection mode	snap-fit on DIN rail (DIN 60715)

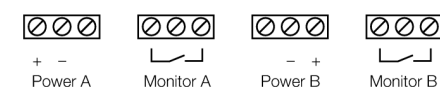
Dimensions



Segment (in/out):



power/monitor



Voltage dip/ load current

