

IP20 Junction Box with Short-Circuit Protection, 10-Channel FOUNDATION Fieldbus and PROFIBUS-PA JRBS-40DC-10RV



The junction box is designed for fieldbus systems acc. to IEC 61158-2, i.e. it is suited for both FOUNDATION™ fieldbus and PROFIBUS-PA. When connected to a suitable power supply unit, it can also be used in Ex applications.

The junction box features a short-circuit limiter at each drop line/spur (\leq 51mA). No more than one field device should be connected to each drop line/spur.

The housing is made of anodized extruded aluminum in IP20.

Note: It must be ensured that there is sufficient equipotential bonding in the system. The device is connected to the equipotential bonding via the housing's M5 x 1 grounding bold.

The shielding is established via the 3-pin screw terminals and is internally connected with the M5 threaded bolt for equipotential bonding. A second M5 threaded bolt is available for capacitive shielding. Both bolts are not connected to the housing.

Accessories: For a higher protection rating, we offer different aluminium and stainless housings in IP6x with various cable glands.



- Junction box for DIN rail mounting
 - Short-circuit protection per drop line/spur
- Pre-assembled terminating resistor: JRBS-40TR (included in delivery)
- Cable shielding: Capacitive or direct connection established via two M5 threaded bolts
- Aluminium housing
- Entity and FISCO compliant according to IEC 60079-11



Dimensions

Туре	JRBS-40DC-10RV
ID	6611835
Fieldbus standard	IEC 61158-2
Operating voltage $U_{\scriptscriptstyle B}$	932 VDC
	min. 10.3 VDC acc. to FF-846
Current self-consumption	≤ 12 mA
Voltage drop	≤ 1V, (trunk/spurs)
Voltage drop	≤ 0.005 V, (trunk in/out)
Trunk-to-trunk current	≤ 2 A
Output circuits	Field
Output current	≤ 41 mA
Short-circuit protection	≤ 51 mA
Displays/Operating elements	
Operational readiness	1 × green
Short-circuit message	10 × red
Bus communication	1 x yellow
Ex approval acc. to conformity certificate	IECEx FMG 15.0020X
Ex approval acc. to conformity certificate	FM 15 ATEX 0036 X
Ex approval acc. to conformity certificate	FM 16 ATEX 0025 X
FM approval	FM 16 US 0073 X
Electrical connection	Demovable terminal block, reverse polarity protect
	Removable terminal block, reverse polarity protect- ed, screw connection
Terminal cross-section	0.22.5 mm² (AWG: 2414)
Earthing bolt	M5 x 1
Protection class	IP20
MTTF	117 years acc. to SN 29500 (Ed. 99) 40 °C
Ambient temperature	-50+70 °C
Storage temperature	-60+85 °C
Housing material	Aluminium, Black/yellow
Dimensions	195.6 x 75.5 x 49 mm
Connection mode	snap-fit on DIN rail (DIN 60715)

