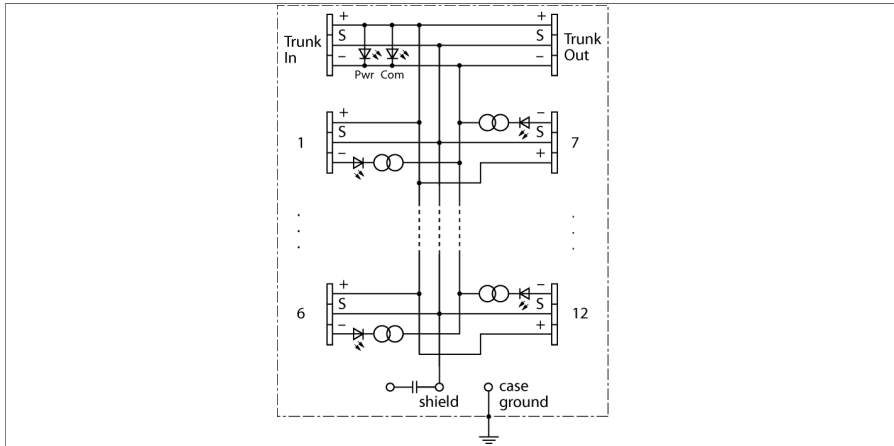


# IP20 Junction Box with Short-Circuit Protection, 12-Channel FOUNDATION Fieldbus and PROFIBUS-PA JRBS-40DC-12RV



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 ( $\leq 51\text{mA}$ ). No more than one field device should be connected to each drop line/spur.

The housing is made of anodized extruded aluminium 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 bolt.

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

|  |  |
|--|--|
| Type                                       | JRBS-40DC-12RV   |
| ID   | 6611836  |
| Fieldbus standard                          | IEC 61158-2  |
| Operating voltage $U_s$                    | 9...32 VDC   |
|  | min. 10.3 VDC acc. to FF-846   |
| Current self-consumption                   | $\leq 12$ mA   |
| Voltage drop                               | $\leq 1$ V, (trunk/spurs)  |
| Voltage drop                               | $\leq 0.005$ V, (trunk in/out)   |
| Trunk-to-trunk current                     | $\leq 2$ A   |
| Output circuits                            | Field  |
| Output current                             | $\leq 41$ mA   |
| Short-circuit protection                   | $\leq 51$ mA   |
| Displays/Operating elements                |  |
| Operational readiness                      | 1 x green  |
| Short-circuit message                      | 12 x 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                      | Removable terminal block, reverse polarity protected, screw connection |
| Terminal cross-section                     | 0.2...2.5 mm <sup>2</sup> (AWG: 24...14)                               |
| 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                                 | 223 x 75.5 x 49 mm   |
| Connection mode                            | snap-fit on DIN rail (DIN 60715)                                       |

