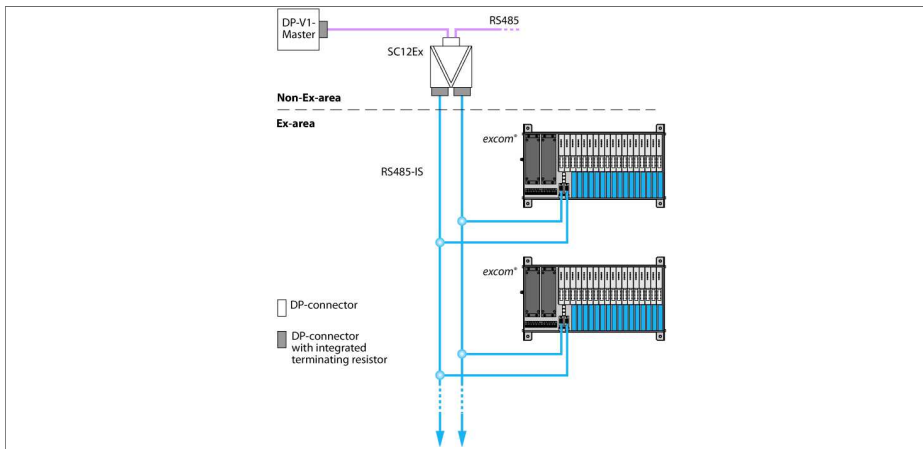




The PROFIBUS-DP segment coupler SC12Ex from TURCK has been developed for intrinsically safe PROFIBUS connection.

Equipped with one RS485 and two RS485-IS interfaces, this coupler is suited for many Ex-area applications. The RS485-IS interface is entirely realized according to the PNO PROFIBUS guideline. The coupler can thus supply both lines of the TURCK Ex-Remote I/O system **excom®** simultaneously (line redundancy). Just one device is required for Ex-separation and line redundancy.

The segment coupler SC12Ex is IP20 rated, not suited for mounting in the Ex-area and can be supplied redundantly. Both power supply inputs are decoupled by diodes. The load distribution depends on the level of operating voltage. Operating voltage 18...32 VDC.

In switch position 0, the coupler identifies the baud rate automatically. Additionally, the start-delimiter occurrences of the PROFIBUS telegrams are evaluated. Three consecutive and valid start-delimiter occurrences have to be received before identification locks in.

All received telegrams are checked for plausibility by means of start-delimiter sequences. Baud rate detection is started after reset. If telegrams are not received within 1.7 seconds, baud rate search is activated. Alternatively, the baud rate can be adjusted via rotary switch.

In order not to limit the number of subscribers and cable length of a PROFIBUS-DP segment, amplitude and phase are reproduced in the coupler. The user can choose between capacitive and direct earthing.

- **Device for intrinsically safe separation of RS485 and RS485-IS**
- **Connection of max. 62 bus nodes (31 in redundant mode)**
- **Redundant power supply**
- **Automatic baud rate detection**

**Remote I/O system excom®
PROFIBUS-DP segment coupler
(RS485-IS)
SC12EX**

Type code	SC12EX
Ident no.	6884047
Nominal voltage	24 VDC
Operating voltage range	18...32 VDC
Current consumption	≤ 200 mA
Galvanic separation	all-round galvanic separation acc. to EN 60079-11
Number of channels	2-channel
Transmission rate	9.6 kbps up to 1.5 Mbps
Ex approval acc. to conformity certificate	PTB 03 ATEX 2115
Device designation	Ⓔ II (2) GD [Ex ib] IIC
Max. values:	RS485-IS Sub-D connection
Max. output voltage U_o	≤ 3.71 V
Max. output current I_o	≤ 129 mA
Max. output power P_o	≤ 120 mW
Characteristic	linear
Max. input voltage U_i	≤ 4.2 V
Indication	
Operational readiness	2 x green
State/ Fault	3 x yellow / red
Baude rate detection	1 x yellow
Housing material	Anodized aluminium
Front plate	FR4, grey / blue
Connection mode	snap-fit on DIN rail (DIN 60715)
Protection class	IP20
Relative humidity	≤ 95% at 55 °C acc. to EN 60068-2
Vibration test	acc. to IEC 60068-2-6
Shock test	acc. to IEC 60068-2-27
EMC	acc. to EN 61326-1 (2006) acc. to Namur NE21 (2007)
MTTF	106 years acc. to SN 29500 (Ed. 99) 40 °C
Dimensions	142x 105.5x 31 mm
Weight	488 g

Dimensions