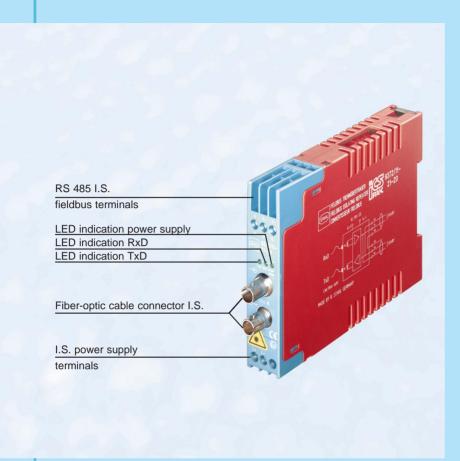
I.S. Isolators





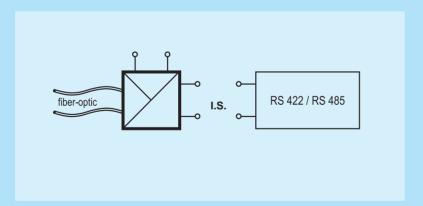
I.S. Isolators (DIN Rail Mounting) Fieldbus Isolating Repeater (Fiber-Optic) Type 9372/11

- Intrinsically safe electrical apparatus for installation in Zone 1
- Intrinsically safe optical interface EEx ia IIC/IIB
- Fieldbus RS 422, RS 485 intrinsically safe EEx ib IIC/IIB
- Transmission speed between 1.2 kBit/s and 1.5 MBit/s selectable
- Power supply 12...19 V DC intrinsically safe
- EMC tested, CE marking
- Available from 2nd quarter 1999



Basic function: fiber-optic isolating repeater for communication signals

I.S. isolator for converting an intrinsically safe RS 422 or RS 485 to an intrinsically safe fiber-optic interface.



Zone 1 and Zone 2



I.S. Isolators (DIN Rail Mounting) Fieldbus Isolating Repeater (Fiber-Optic) Type 9372/11

Selection table	
Version	Ordering code
Interface RS 422	9372 / 11-21-20
Interface RS 485	9372 / 11-31-20

Safety data for optical interface

Certifications	PTB (Europe) applied for, USA in preparation
Marking (ATEX)	II 2 (1) G EEx ib [ia] IIC/IIB T4
Classification	associated electrical apparatus

Technical data

Power supply	
Intrinsically save power supply with $U_0 \leq 21$ V, $P_0 \leq 1$ W	
Rated voltage U _N	15 V DC,
Voltage range	1219 V DC
Residual ripple within voltage range	0.5 V _{ss}
Indication	LED green
Polarity reversal protection	ves

Signal transmission

The communication signal at the intrinsically safe electrical interface is converted into an intrinsically safe optical signal. This optical signal is sent to the receiver via a fiber-optic cable. The receiver converts the optical signal back into an electrical communication signal.

The transmission speed is selectable between 1.2 Bit/s and 1.5 MBit/s.

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Electrical interf	ж:	е

RS 422 to EIA RS-422-A	
Connection	screwed terminals
Termination resistor RxD	can be switched
Transmission line length	depending on transmission speed and cable,
	see table
Transmission speed in kBit/s	1.2; 2.4; 4.8; 9.6; 19.2; 38.4; 57.6
	93.75; 187.5; 375; 500; 1000; 1500
RS 485 to EIA RS-485-A	
Connection	screwed terminals
Line termination network	can be switched
Transmission line length	depending on transmission speed and cabel, see table
Transmission speed in kBit/s	1.2; 2.4; 4.8; 9.6; 19.2; 38.4; 57.6
Transmission speed in Kbigs	93.75; 187.5; 375; 500; 1000; 1500
Turn of time transmitter RS 485	$T \le (11 \text{ x bit time})$

Transmission speed

Transmission speed in Bit/s	Twisted pair \emptyset 0,34 mm ² (EN 50 170) – RS 485
1.2 k - 93.75 k ≤ 187.5 k ≤ 500 k ≤ 1.5 M ≤ ≤	
Optical Interface Connection Transmission line length Wave length Recommended fiber-optic cables	ST® / BFOC (2,5) socket 2000 m 850 nm G 50/125 G 62.5/125 HCS

Dimensions (Casing type C), mechanical data, ambient conditions and accessories see page 3/58f.

