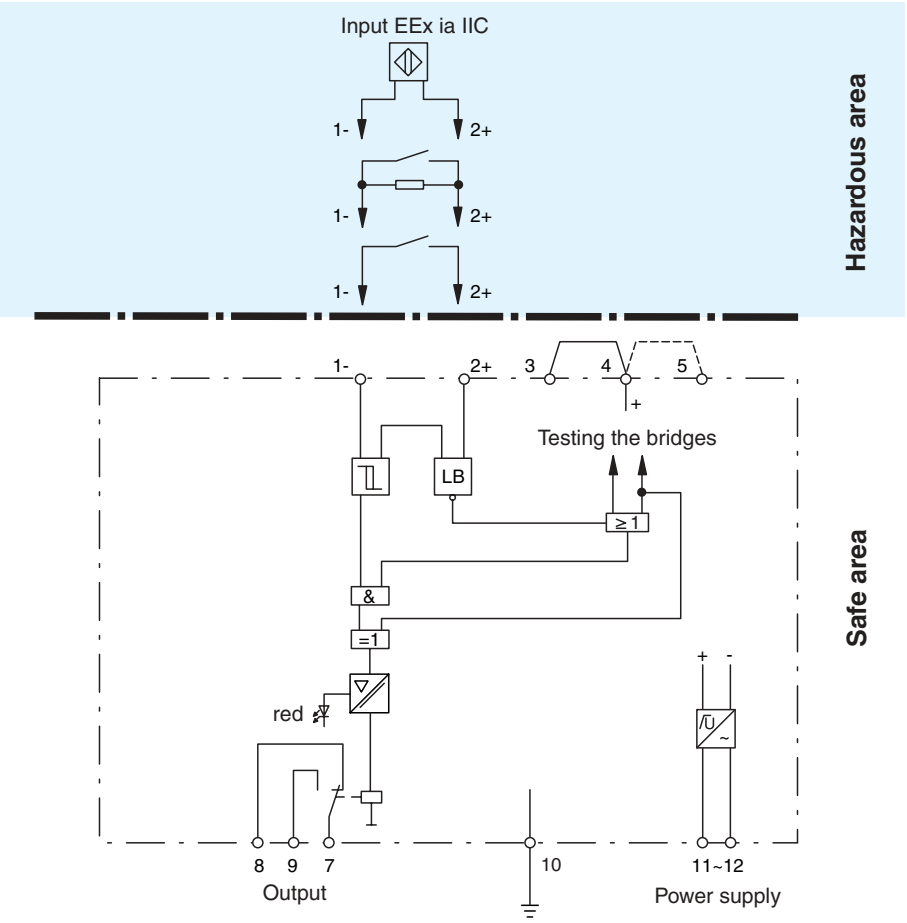
- 1-channel
- Control circuit EEx ia IIC
- 115 V AC mains nominal voltage
- Reversible mode of operation
- Lead breakage (LB) monitoring
- 1 relay output with 1 changeover contact

For new installations use standard type KFA5-SR2-Ex1.W.

Function

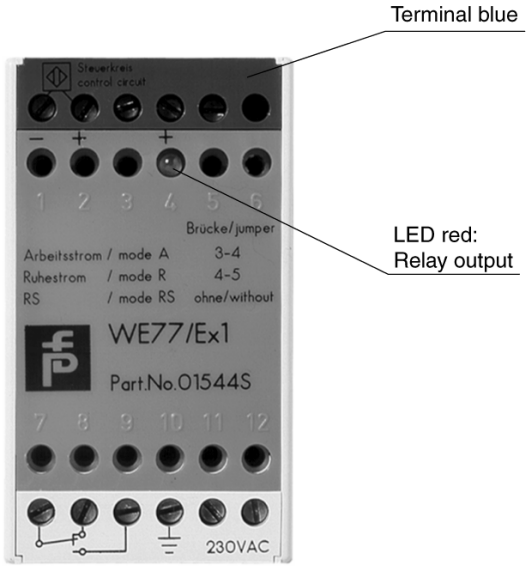
The transformer isolated barrier transfers digital signals into hazardous areas. Sensors per DIN EN 60947-5-6 (NAMUR) or mechanical contacts may be used as transmitters. The control circuit is monitored for lead breakage (LB).



Composition

Front View

Housing type W1
(see system description)



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Supply		
Rated voltage		103,5 ... 126 V AC , 45 ... 65 Hz
Power loss		1,6 W
Power consumption		approx. 2,3 VA
Input		
Connection		terminals 1-, 2+
Rated values		acc. to IEC 60947-5-6 (NAMUR, DIN 19234), see system description for electrical data
Open circuit voltage/Short-circuit current		approx. 8 V DC / approx. 8 mA
Switching point/Switching hysteresis		1,2 ... 2,1 mA / approx. 0,2 mA
Pulse/Pause ratio		≥ 0,5 ms / ≥ 0,5 ms
Lead monitoring		breakage I ≤ 0,1 mA
Output		
Connection		terminals 7, 8, 9
Output		signal ; relay
Contact loading		253 V AC / 2 A / 500 VA / cos φ min. 0,7; 125 V AC / 4 A / 500 VA cos φ min. 0,7; 40 V DC / 2 A / 80 W ohmic load
Energised/De-energised delay		approx. 10 ms / approx. 20 ms
Mechanical life		10^7 switching cycles
Transfer characteristics		
Switching frequency		< 10 Hz
Electrical isolation		
Output/Power supply		basic insulation according to IEC 61140, rated insulation voltage 300 V_{eff}
Output/Output		function insulation acc. to DIN EN 50178, rated insulation voltage 300 V_{eff}
Directive conformity		
Electromagnetic compatibility		standards
Directive 89/336/EEC		EN 61326, EN 50081-2, NE 21
Standard conformity		
Climatic conditions		acc. to DIN IEC 721
Ambient conditions		
Ambient temperature		-25 ... 60 °C (248 ... 333 K)
Mechanical specifications		
Protection degree		IP20
Mass		approx. 390 g
Data for application in conjunction with hazardous areas		
EC-Type Examination Certificate		PTB 02 ATEX 2065 ; for additional certificates see www.pepperl-fuchs.com
Group, category, type of protection		⟨Ex⟩ II (1) G D [EEx ia] IIC [circuit(s) in zone 0/1/2]
Voltage	U_0	13,4 V DC
Current	I_0	31 mA
Power	P_0	145 mW (characteristic curve trapezoid)
Supply		
Safety maximum voltage	U_m	126,5 V AC (Attention! The rated voltage can be lower)
Output		
Safety maximum voltage	U_m	253 V AC (Attention! The rated voltage can be lower)
Electrical isolation		
Input/Output		safe electrical isolation acc. to EN 50020, voltage peak value 375 V
Input/Power supply		safe electrical isolation acc. to EN 50020, voltage peak value 375 V
Directive conformity		standards
Directive 94/9 EC		EN 50014, EN 50020

Notes

Table:
Operating mode see introduction WE-system.

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