



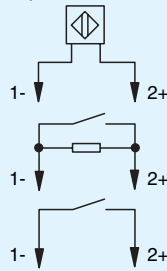
- 2-channel
- Control circuit EEx ia IIC
- 115 V AC mains nominal voltage
- Reversible mode of operation
- Lead breakage (LB) monitoring
- 1 relay output with 1 changeover contact per channel

For new installations use standard type KFA5-SR2-Ex2.W.

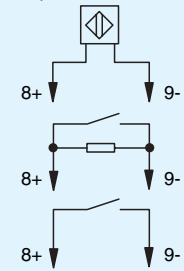
Function

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).

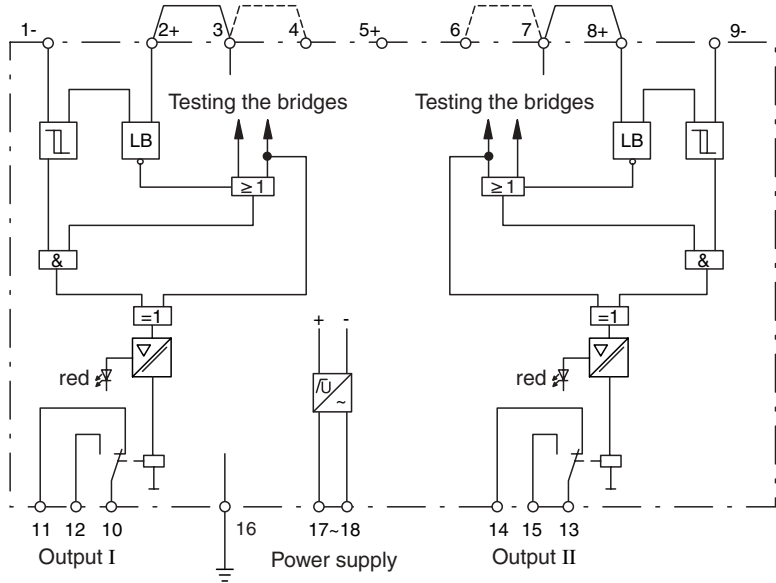
Input I EEx ia IIC



Input II EEx ia IIC



Hazardous area

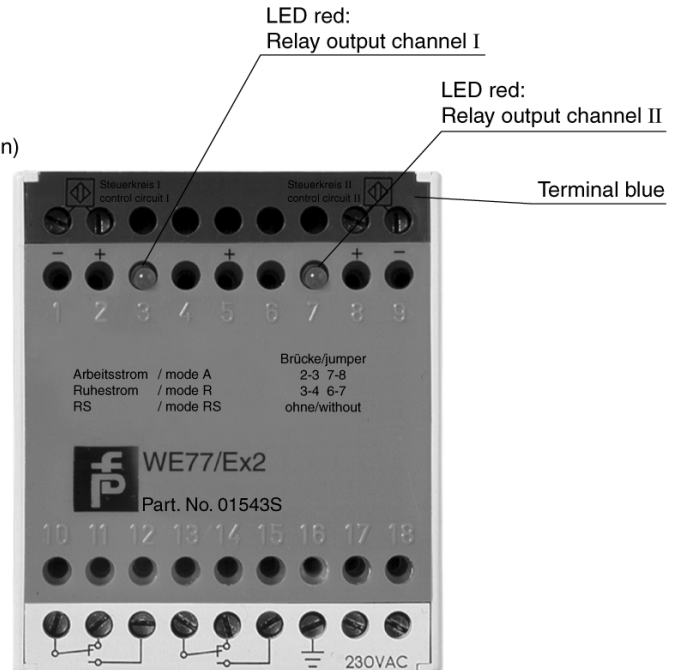


Safe area

Composition

Front View

Housing type W2
(see system description)



Supply	
Rated voltage	103,5 ... 126 V AC , 45 ... 65 Hz
Power loss	2,5 W
Power consumption	approx. 3,2 VA
Input	
Connection	terminals 1-, 2+; 8+, 9-
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	$\geq 0,5$ ms / $\geq 0,5$ ms
Lead monitoring	breakage $I \leq 0,1$ mA
Output	
Connection	terminals 10, 11, 12; 13, 14, 15
Output	signal ; relay
Contact loading	253 V AC / 2 A / 500 VA / $\cos \varphi$ min. 0,7; 125 V AC / 4 A / 500 VA $\cos \varphi$ 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. 410 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	
Directive 94/9 EC	standards EN 50014, EN 50020

Notes

Table:

Operating mode see introduction WE-system.