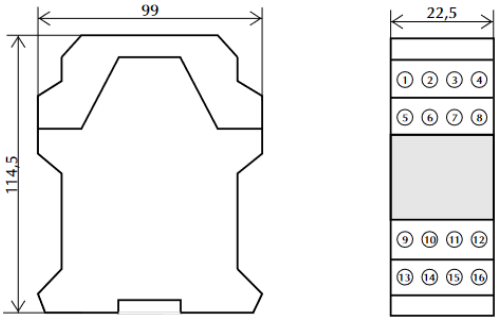
MM 5017

Intrinsically safe
SAFETY SYSTEMS

Intrinsically safe relay (switching amplifier)

Dual-channel, output 2x relay contact

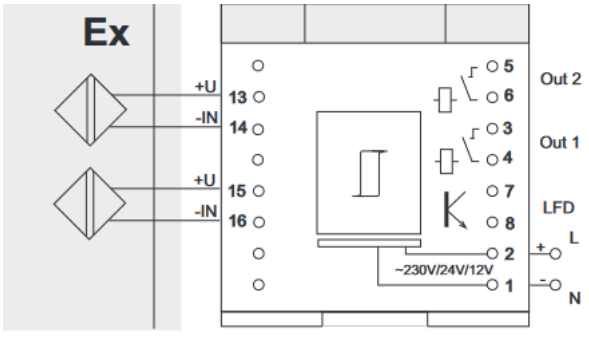


DESCRIPTION:

The MM5017 amplifiers are two-channel switching amplifiers with relational output. The input circuits comply with DIN 19234 (NAMUR) for the connection of magnetic, inductive, capacitive, variable resistor or voltage-free mechanical contacts. The amplifier output is equipped with two output relays and a transistor to indicate a fault in the guidance (interrupt, short circuit). Connecting the sensor according to the diagram on the side of the product switches the output relay to the operating current sensor mode. If the output relay is requested to be switched on in the sensor's quiescent current mode, it is necessary to provide the corresponding code when ordering (see technical data). The presence of the supply voltage is indicated by a green LED, the activation of the output relay is signaled by a yellow LED. An emergency status is indicated by a red LED

PRODUCT FEATURES

- Two-channel switching amplifier
- intrinsically safe entrance
- input circuit according to DIN 19234 (NAMUR)
- galvanic separation of input and output circuits
- galvanic separation of the supply voltage from the input and output circuits
- Line fault indication
- forward fault detection with LED indicator, output relay deactivation possible
- Output - 2 x relay contact



CONNECT:
1 - –UCC/N
2 - +UCC/L
3 - Relay Contact 1
4 - Relay Center 1
5 - Relay Contact 2
6 - Relay Center 2
7 - LFD Output - Collector
8 - LFD Output - Emitter
13 - + Input 1 (input)
14 - - Input 1 (input)
15 - + Input 2 (input)
16 - - Input 2 (input)

ISKROBEZPIECZNIE
Paweł Piasecki
biuro@iskrobezpiecznie.pl
tel. +48 693 345 823

MM GROUP s.r.o. CZECH REPUBLIC

MM 5017

Intrinsically safe
SAFETY SYSTEMS

Intrinsically safe relay (switching amplifier)

Dual-channel, output 2x relay contact

Technical parameters:

Exemplary marking	MM 5017 AC (230 V)	MM 5017 DC (24 V)	MM 5017 DC (12 V)
Identification code			
Relay in operation mode	5017 230 01 00	5017 024 01 00	5017 012 01 00
Relay in the idle mode	5017 230 00 00	5017 024 00 00	5017 012 00 00
Power			
Supply voltage	196 - 253 V AC	19 - 28 V DC	11 - 15 V DC
Frequency	48 - 52 Hz	N/A	N/A
Power	1.3 VA	1,3 W	1,3 W
Galvanic separation	Input from output and power	Input from output and power	Input from output and power
Contacts			
Safe zone output	2x relay switching contact	2x relay switching contact	2x relay switching contact
Rated voltage	250 V AC/120V DC	250 V AC/120V DC	250 V AC/120V DC
Rated current	10 A	10 A	10 A
Rated power	100 VA/60 W	100 VA/60 W	100 VA/60 W
Contact frequency	10 Hz	10 Hz	10 Hz
Contact material	Ag + 3 um Au	Ag + 3 um Au	Ag + 3 um Au
Input From Hazardous Zone	NAMUR 19234	NAMUR 19234	NAMUR 19234
Operating parameters			
Voltage	8 V	8 V	8 V
Current	8 mA	8 mA	8 mA
Relay thresholds			
Pull-in Current/Resistance	Iin > 2.1 mA or R_{in} < 2 kΩ	Iin > 2.1 mA or R_{in} < 2 kΩ	Iin > 2.1 mA or R_{in} < 2 kΩ
Pull-out Current/Resistance	Iin < 1.2 mA or R_{in} > 10 kΩ	Iin < 1.2 mA or R_{in} > 10 kΩ	Iin < 1.2 mA or R_{in} > 10 kΩ
Hysteresis	250 ± 100 µA	250 ± 100 µA	250 ± 100 µA
Control Failure Detection (LFD):	YES	YES	YES
LFD Control Input Impedance:	Series: 500 to 1000Ω, Parallel: 20 to 25kΩ	Series: 500 to 1000Ω, Parallel: 20 to 25kΩ	Series: 500 to 1000Ω, Parallel: 20 to 25kΩ
LED indication			
Power Supply	Green	Green	Green
Output Status	Yellow	Yellow	Yellow
Fault	Red	Red	Red
Environmental Class	II 2 G /EEx ia/ IIC, II 1 G /EEx ia/ IIC,I M1 /EEx ia/ I	II 2 G /EEx ia/ IIC, II 1 G /EEx ia/ IIC,I M1 /EEx ia/ I	II 2 G /EEx ia/ IIC, II 1 G /EEx ia/ IIC,I M1 /EEx ia/ I
Housing			
Dimensions	99 mm x 22.5 mm x 114.5 mm (HxWxD)	99 mm x 22.5 mm x 114.5 mm (HxWxD)	99 mm x 22.5 mm x 114.5 mm (HxWxD)
Housing type	16-Contacts	16-Contacts	16-Contacts
Material	polycarbonate/ABS	polycarbonate/ABS	polycarbonate/ABS
Flammability standard	V-0 according to UL94	V-0 according to UL94	V-0 according to UL94
Mount	DIN 35	DIN 35	DIN 35
Connect	Screws/ Contacts	Screws/ Contacts	Screws/ Contacts
Max. Cable diameter	2 x 2.5 mm2	2 x 2.5 mm2	2 x 2.5 mm2
IP Rating	IP20	IP20	IP20

ISKROBEZPIECZNIE
Paweł Piasecki
biuro@iskrobezpiecznie.pl
tel. +48 693 345 823

MM GROUP s.r.o. CZECH REPUBLIC 1992