

# MM 5042

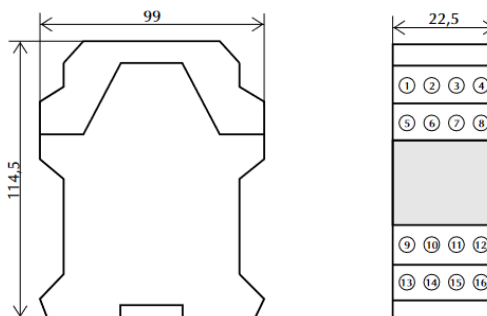
Intrinsically safe I/I insulator,  
bidirectional communication (HART)

Intrinsically safe  
SAFETY SYSTEMS



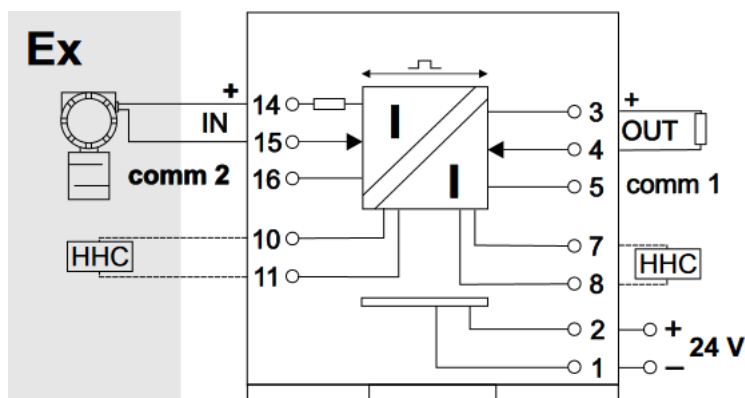
## DESCRIPTION:

The intrinsically safe isolation amplifier is designed for galvanic separation of the measurement signal from the devices used to process it. The MM 5042 is a fully isolated power source, designed to power and transmit analog signals of two-wire and three-wire converters with a 4-20 mA analog signal output. For SMART transducers, the unit is equipped with two-way communication, the communication signal is superimposed on the 4-20 mA current signal.



## PRODUCT FEATURES

- Intrinsically safe entrances
- Single-channel isolation amplifier
- galvanic separation of input and output circuits
- galvanic separation of the supply voltage from the input and output circuits
- Universal (active/passive) input and output
- HART communication



## CONNECT:

- 1 - -Ucc/N (24/12V DC power supply)/230 V AC
- 2 - +Ucc/L (24/12V DC power supply)/230 V AC
- 3 - output (+)
- 4 - output (-)
- 5 - Output (Comm 1)
- 7 - HHC - Handheld Communicator
- 8 - HHC
- 10 - HHC
- 11 - HHC
- 14 - input 1 (+)
- 15 - Input 1 (-)
- 16 - Input 1 (Comm 2)

# MM 5042

## Intrinsically Safe Current Loop Isolator

### Dual

Intrinsically safe  
SAFETY SYSTEMS



Technical parameters:

<b>Exemplary Marking</b>	MM 5042 AC (230V)	MM 5042 DC (24 V)
<b>Power Supply</b>		
Voltage	230 V <sub>AC</sub>	20-35 V <sub>SS</sub>
Frequency	50 Hz	N/A
Power	max 1,7 W for 24V/20mA	max 1,7 W for 24V/20mA
Galvanic separation	Input from output and power	Input from output and power
<b>Number of channels</b>	1	1
<b>Inputs and Outputs parameters</b>		
Hazardous Zone Output	0/4 - 20mA, 16,5 V przy 20 mA or chosen by user	0/4 - 20mA, 16,5 V przy 20 mA or chosen by user
Input From Hazardous Zone	0/4 - 20mA, 15 V 750 Ω or chosen by user	0/4 - 20mA, 15 V 750 Ω or chosen by user
Intrinsically safe Circuit	28V, 300 Ω, 93 mA	28V, 300 Ω, 93 mA
Input – Output Isolation	2,5kV (EN 60079-0/60079-11)	2,5kV (EN 60079-0/60079-11)
Accuracy (as required)	0,2 lub 0,05% from range	0,2 lub 0,05% from range
Temperature drift	0,8 μA/°C (0/4 - 20mA)	0,8 μA/°C (0/4 - 20mA)
<b>LED indication</b>		
Power Supply	Green	Green
<b>Environmental Class</b>	II 2 G /Ex ia Ga/ IIC, II 1 G /Ex ia Ga/ IIC, I M1 /Ex ia Ma/ I	II 2 G /Ex ia Ga/ IIC, II 1 G /Ex ia Ga/ IIC, I M1 /Ex ia Ma/ I
<b>Housing</b>		
Dimensions	99mm x 22,5mm x 114,5 mm (HxWxD)	99mm x 22,5mm x 114,5 mm (HxWxD)
Housing type	16-contacts	16-contacts
Material	polycarbonate/ABS	polycarbonate/ABS
Mount	DIN 35	DIN 35
Connect	Screws/ Contacts	Screws/ Contacts
IP Rating	IP20	IP20