

MM 5046

Intrinsically Safe Current Loop Isolator

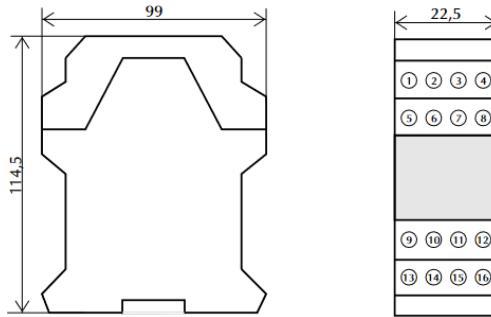
HART Communication

Intrinsically safe
SAFETY SYSTEMS



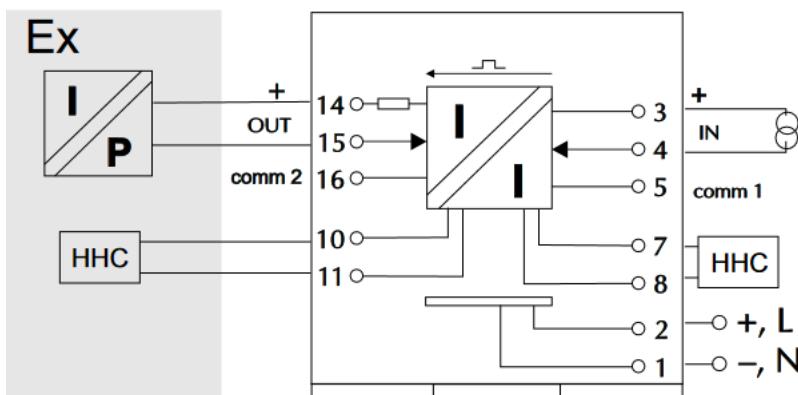
DESCRIPTION:

The intrinsically safe isolation amplifier is designed for the galvanic isolation of the control signal (e.g. solenoid valves). The MM 5046 includes a fully floating power source designed to power and transmit analog signals from two-wire and three-wire transmitters with a 4-20 mA analog input signal to an explosive environment. For SMART transducers, the unit is equipped with two-way communication, the communication signal is transmitted on a current signal of 4-20 mA



PRODUCT FEATURES

- Intrinsically safe exits
- Single-channel isolation amplifier (controller)
- galvanic isolation of input and output circuit
- galvanic isolation 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 - input (+)
4 - input (-)
5 - input (comm 1)
7 - HHC - Handheld communicator
8 - HHC
10 - HHC
11 - HHC
14 - output 1 (+)
15 - output 1 (-)
16 - output 1 (comm 2)



Technical parameters:

Exemplary Marking	MM 5046 AC (230V)	MM 5046 DC (24 V)
Power Supply		
Voltage	230 V _{AC}	20-35 V _{ss}
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
Number of channels	1	1
Inputs and Outputs parameters		
Hazardous Zone Output	0/4 - 20mA, 16 V przy 20 mA or chosen by user	0/4 - 20mA, 16 V przy 20 mA or chosen by user
Input From Hazardous Zone	0/4 - 20mA, 24 V or chosen by user	0/4 - 20mA, 24 V 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)
LED indication		
Power Supply	Green	Green
Environmental Class	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
Housing		
Dimensions	99mm x 22,5mm x 114,5 mm (HxDxW)	99mm x 22,5mm x 114,5 mm (HxDxW)
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