

MEASURING TRANSDUCERS

MI 45x



USE

Measuring transducer of family MI 45x are designed for use in industrial process for conversion of DC current in to appropriate DC current or DC voltage signals.

Versions

- MI 458 - DC current
- MI 456 - DC voltage
- MI 454 - TAP position
- MI 452 - Resistance
- MI 450 - Temperature with Pt 100

DESCRIPTION

- **MI 458** - Accuracy class 0.5
 - Inputs: $I = 1 \dots 10 \text{ mA DC}$; $I = 10 \dots 100 \text{ mA DC}$
 - Housing width (a): 45 mm
- **MI 456** - Accuracy class 0.5
 - Inputs: $U = 50 \text{ mV} \dots 1 \text{ V DC}$; $U = 1 \text{ V} \dots 50 \text{ V DC}$; $U = 50 \text{ V} \dots 400 \text{ V DC}$
 - Housing width (a): 45 mm
- **MI 454** - Accuracy class 0.5
 - Inputs: $100 \Omega \dots 50 \text{ k}\Omega$; $1000 \Omega \dots 500 \text{ k}\Omega$
 - Housing width (a): 45 mm
- **MI 452** - Accuracy class 0.5
 - Inputs: $R = 0 \dots 10 \Omega \dots 50 \text{ k}\Omega$; $R = 0 \dots 100 \Omega \dots 500 \text{ k}\Omega$
 - Housing width (a): 45 mm
- **MI 450** - Accuracy class 0.5
 - Inputs: 2-wire, 3-wire, 4-wire
 - Housing width (a): 45 mm
- AC auxiliary power supply: 57, 63.5, 100, 110, 230, 400, 500 V
- **Options:**
 - RS 232 or RS 485 serial communication port
 - Universal auxiliary power supply for DC & AC 24 ... 300 V DC / 40 ... 276 V AC

MEASURING TRANSDUCERS

MI 45x

COMPARISON AND COMMON CHARACTERISTICS					
TYPE					
DIN type	MI 450	MI 452	MI 454	MI 456	MI 458
MEASUREMENTS - PROCESS QUANTITIES					
Voltage DC				●	
Current DC					●
TAP position			●		
Resistance		●			
Temperature - RTD sensors	●				
MEASUREMENTS - GENERAL					
Accuracy					
U, I, ϕ , THD, PF (or process quantities)	0.5	0.5	0.5	0.5	0.5
POWER QUALITY					
Sampling rate, maximum samples per cycle	128	128	128	128	128
COMMUNICATIONS AND I/O OPTIONS					
RS485 or RS232 port	●	●	●	●	●
Baud rate	1200...115200 bps	1200...115200 bps	1200...115200 bps	1200...115200 bps	1200...115200 bps
Mudbus RTU & DNP3 on serial	●	●	●	●	●
Analog outputs	1	1	1	1	1
Maximum # of I/O	1	1	1	1	1
Analogue output braking points, zoom-in	●	●	●	●	●
Programmable I/O	●	●	●	●	●
POWER SUPPLY, CONNECTION AND DIMENSIONS					
Power supply	AC/DC (24...300 V DC, 40...276 V AC); AC various ranges	AC/DC (24...300 V DC, 40...276 V AC); AC various ranges	AC/DC (24...300 V DC, 40...276 V AC); AC various ranges	AC/DC (24...300 V DC, 40...276 V AC); AC various ranges	AC/DC (24...300 V DC, 40...276 V AC); AC various ranges
Mounting	DIN rail	DIN rail	DIN rail	DIN rail	DIN rail
Dimensions in mm	44.8x75x105.5	44.8x75x105.5	44.8x75x105.5	44.8x75x105.5	44.8x75x105.5

LEGEND:

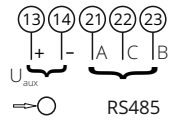
- feature supported

MEASURING TRANSDUCERS

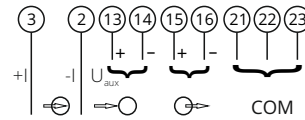
FAMILY OF MI 4xx

CONNECTION DIAGRAMS

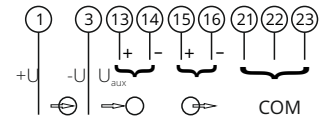
MI 488



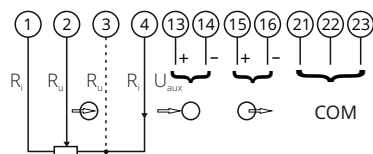
MI 458



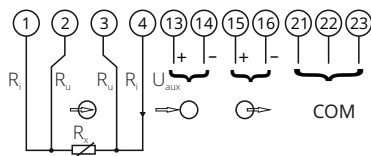
MI 456



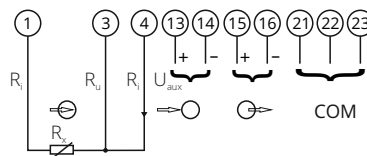
MI 454



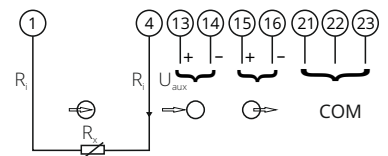
MI 452, 4-wire



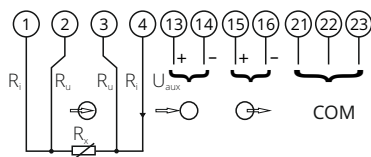
MI 452, 3-wire



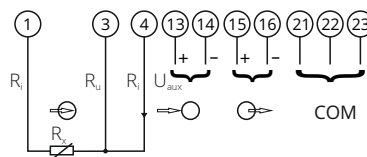
MI 452, 2-wire



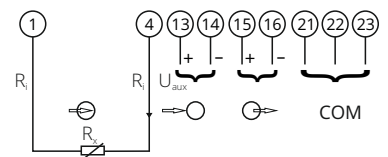
MI 450, 4-wire



MI 450, 3-wire

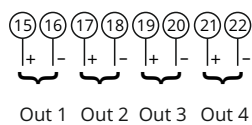


MI 450, 2-wire



MT 440

Transducers can have up to four analogue outputs



Note:

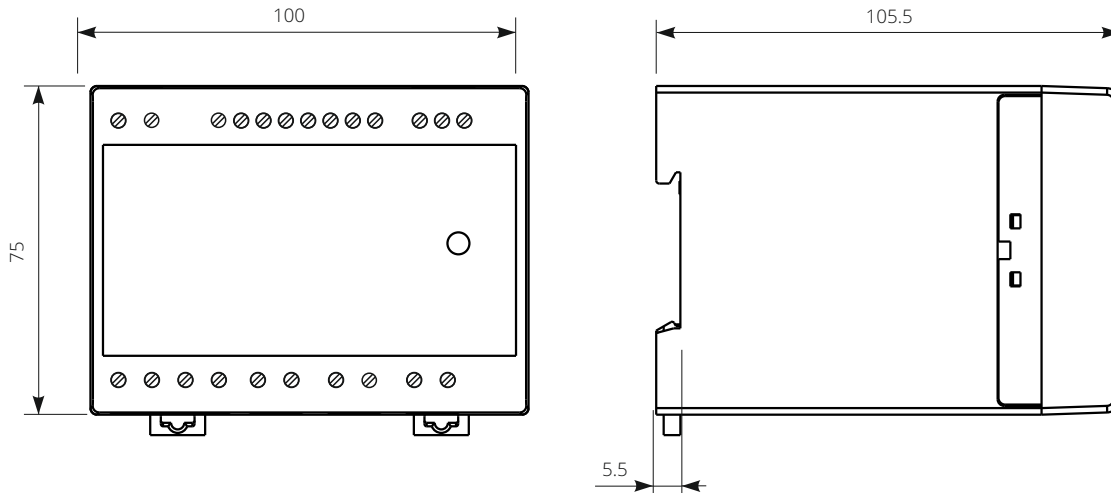
Auxiliary supply on connection terminals 13 (-) and 14 (+), output on connection terminals 15 (-) and 16 (+).

MEASURING TRANSDUCERS

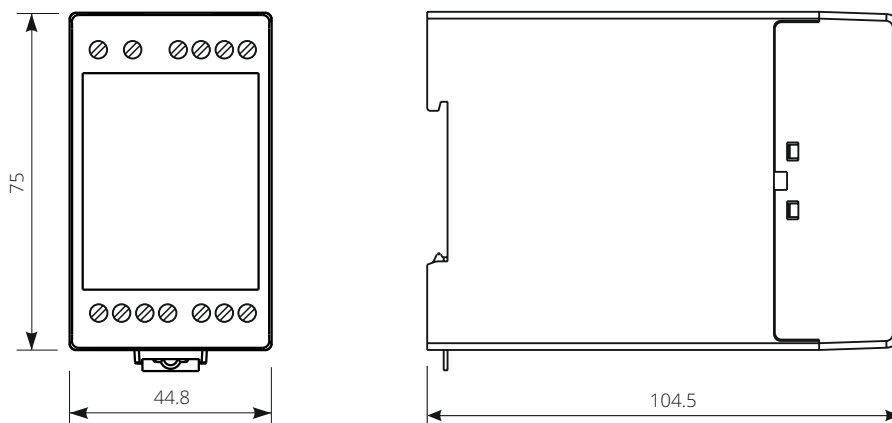
FAMILY OF MI 4xx, MT 440, RD 500

DIMENSIONS (in mm)

MT440



MI4xx



RD 500

