Hand-Held multifunction process calibrators // MC 50.2
for electrical signals

MC 50.2

Highlights

- Highest accuracy
- Generation of RTD-, TC-, mA- and V signals as well as frequency and pulses
- For mobile on-site calibration

Technical data	
Resistance thermometers (RTD)	
Generation and measurement of RTD signals	Pt50, Pt100, Pt200, Pt500, Pt1000, Cu10, Cu50, Ni100, Ni120, Ni1000
Ω-generator function	0...4000 Ω
Ω-measurement function	0...4000 Ω
Accuracy (of reading + const.)	±0.012 %
Selectable temperature unit	°C / °F
Measurement of multi-wire connections	2 / 3 / 4
Thermocouples (TC)	
Generation and measurement of TC signals	J, K, T, R, S, B, N, E, U, L
mV-generator function	0...100 mV
mV-measurement function	0...100 mV
Accuracy (of reading + const.)	±0.013 %
Selectable temperature unit	°C / °F
Internal comparison point	±0.3 °C
Current (mA)	
Loop current signal generation	0(4)...24 mA
Loop current signal measurement	0(4)...50 mA
Accuracy (of reading + const.)	±0.0175 %
Current loop supply	24 V ±10 %, 22 mA
HART Communication protective resistor	250 Ω
Voltage (V)	
Voltage signal generation	0...20 V
Voltage signal measurement	0...50 V
Accuracy (of reading + const.)	±0.015 %

Technical datasheet

Technical data

Technical data	
Continuity (O/C)	
Continuity measurement	O / C
Switching threshold „open"	1 kΩ
Frequency and pulse (Hz)	
Frequency and pulse signal generation	0.01 Hz...10 kHz
Frequency and pulse signal measurement	0.01 Hz...20 kHz
Accuracy (of reading + const.)	±0.005 %

Functions	
Generation	
High-speed call values	10 points (flexible)
Linear steps and ramps	✓
User-defined synthesiser values	100
User-defined signal output characteristic	10 points
Editable units	✓
Transmitter function simulation	
Measurement	
Data memory	
Value tables and graphics function	
Offset programming for sensor characteristic	✓
Calibration data files and linearisation points	
User-defined measuring input characteristic	10 points
Editable units	✓
Measured value min. / max.	✓
Averaging function	✓

General data	
Features	
Sensor connection	4 safety sockets (1 channel) incl. 2 sets with safety instrument leads (4 mm) and alligator clips
Power supply	Rechargeable battery including power adapter, 230 VAC / 12 VDC
Operator guidance	Menu with pull-down windows Separate channels for parallel signal processing
Display	Multifunction display, double-LCD, 2 x 6 digit, illuminated
Housing	
Version	ABS plastic with protective cover
Dimensions	110 x 210 x 50 mm (H x W x D)
Weight	Approx. 900 g

Article numbers

Order code		
Type	**Version**	**Order number**
MC 50.2	Accuracy ±0.0175 % of reading + const.	EME8AOMC050200

Order code	
Accessories	**Order number**
DAkkS certificate	EKSIMMULTI000D
SIKA works calibration certificate	EKSIMMULTI000W
Transport case	EME8GKK3100000
Plug connector 4 mm, red	EME8AOSKLS40RT
Plug connector 4 mm, black	EME8AOSKLS40SW