



Multifunction simulator Type MC 50

Resistance thermometer (RTD)	
RTD signal generation and measurement	Pt50, Pt100, Pt200, Pt500, Pt1000, Cu10, Cu50, Ni100, Ni120, Ni1000
Ω generator function	0...4000 Ω
Ω measurement function	0...4000 Ω
Accuracy (of rdg. + const.)	$\pm 0,012$ %
Selectable temperature unit	$^{\circ}\text{C}$ / $^{\circ}\text{F}$
Measurement of multi-wire	2 / 3 / 4
Thermocouples (TC)	
TC signal generation and measurement	J, K, T, R, S, B, N, E, U, L
mV generator function	0...100 mV
mV measurement function	0...100 mV
Accuracy (of rdg. + const.)	$\pm 0,013$ %
Selectable temperature unit	$^{\circ}\text{C}$ / $^{\circ}\text{F}$
Internal comparison point	$\pm 0,3$ $^{\circ}\text{C}$
Current (mA)	
Loop current signal generation	0(4)...24 mA
Loop current signal measurement	0(4)...50 mA
Accuracy (of rdg. + const.)	$\pm 0,0175$ %
Current loop supply	24 V ± 10 %, 22 mA
HART compatible internal loop resistor	250 Ω
Voltage (V)	
Voltage signal generation	0...20 V
Voltage signal measurement	0...50 V
Accuracy (of rdg. + const.)	$\pm 0,015$ %
Continuity (O / C)	
Continuity measurement	O / C
Switching threshold "open"	1 k Ω
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 rdg. + const.)	$\pm 0,005$ %
Functions at generation	
High-speed call values	10 points (flexible)
Linear steps and ramps	yes
User-defined synthesiser values	100
User-defined signal output characteristic	10 points
Editable units	yes
Functions at measurement	
Offset programming for sensor characteristic	yes
User-defined measuring input characteristic	10 points
Editable units	yes
Measured value min. / max.	yes
Averaging function	yes

MC50.2