

One Range Ohmmeter RESISTOMAT®

Model 2354

2354 EN



Panel mount version



Desktop version

- Fixed ranges 2 Ω ... 200 kΩ alternatively
- Limit setting indicator
- Different interfaces optionally
- DIN panel mount housing

Application

This instrument is designed to measure resistances in four-wire technology, and is ideally suited to installation in control cabinets, instrument panels and control desks. The high-contrast LED display ensures good readability even from a distance. With a range of interfaces and large selection of functions, the meter can be integrated easily in machinery and industrial plants. The portable model in a rugged table-top case is suitable for mobile use e.g. on the factory bench or desk-top.

Description

The built-in A/D converter works on the proven dual-slope principle. This technique ensures optimum long-term stability and noise suppression. The user-programmable classifier comparator can be used to identify test specimens as OK or NOK, with the result provided at isolated relay outputs. Optionally available interfaces such as RS232 or BCD make the 2354 an ideal instrument for automation.

Technical Data

Measuring Range	Resolution	Measuring Current
2.0000 Ω	100 μΩ	8.5 mA
20.000 Ω	1 mΩ	6.8 mA
200.00 Ω	10 mΩ	0.68 mA
2.0000 kΩ	100 mΩ	68 μA
20.000 kΩ	1 Ω	54 μA
200.00 kΩ	10 Ω	5.4 μA

Analog Input

Sampling rate, technique: 16 conversions/sec., sigma-delta
 Setting time: approx. 0.15 sec
 NMR / CMR: > 48 dB / > 80 dB
 Max. burden voltage: ≥ 2 V

Accuracy

Resolution: 4 1/2 digit, ± 19999 counts
 Total error: ± 0.03 % rdg. ± 1 count
 Temperature coefficient: 25 ppm/K
 Long-term stability: 0.025 % drift for 3 years
 Analog output (option): ± 0.05 % of scale, T_c = 50 ppm/K

Display

Type: 7 segment LED, 14 mm, red
 Polarity: automatic + or - sign
 Overload (> 19999): Display ± 1 - - -
 Decimal points: all positions selectable
 Display memory: minimum / maximum / average hold / tare by external control
 Filter: average value selectable
 Step size: 1, 2, 5, 10 counts selectable

General Data

Panel mounted version

Protection class (EN 60529): front IP 50, connector IP 20, EMC meets EN 61000-6-4, EN 61000-6-2
 Case material: Noryl GFN 1, UL 94 V-1
 Connector: 10 pin remov. screw clamp connector
 Dimensions (W x H x D): 96 x 48 x 128 [mm]
 Weight: approx. 0.38 kg

Desktop version

Protection class: IP 40, EMC meets EN 61000-6-4, EN 61000-6-2
 Housing: Metal bench top housing
 Connector: power supply with standard IEC AC power inlet measure input via 5 pin socket with bayonet lock
 Dimensions (W x H x D): 140 x 115 x 240 [mm]
 Weight: approx. 1.5 kg

Environment

Operating temperature: - 10 °C ... + 50 °C
 Storage temperature: - 25 °C ... + 85 °C
 Relative humidity: < 92 % RH non condensing

Power supply

Supply voltage: 230 VAC, + 6 % ... - 10 % / 50Hz, option 115 V, option DC/DC converter 5 ... 30 VDC
 Power: approx. 4.5 VA
 Test voltage: 2500 VAC, at DC/DC converter 500 VDC

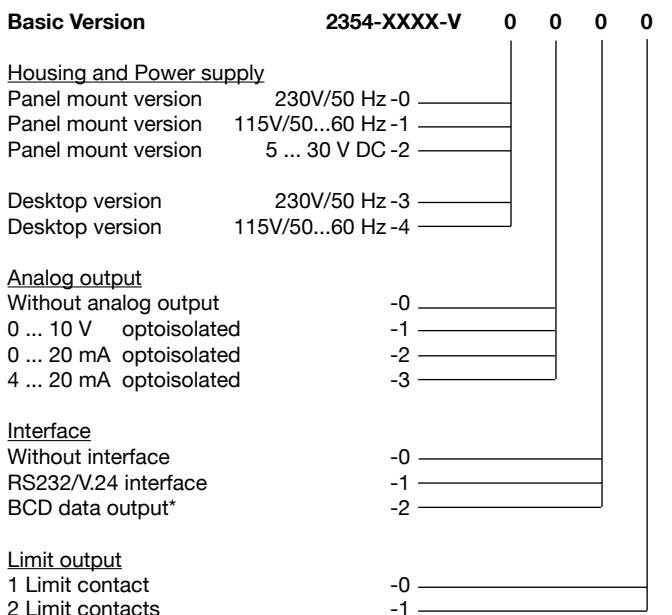
Output / Interface

Relay contacts: double-throw 48 VAC / 2 A, (2nd contact option)
 Digital optoisolated (option): BCD, V.24
 Analog galv. isolated (option): 0 ... 10 V, R_i ≥ 500 Ω
 0/4 ... 20 mA, R_b ≤ 500 Ω

Order Information

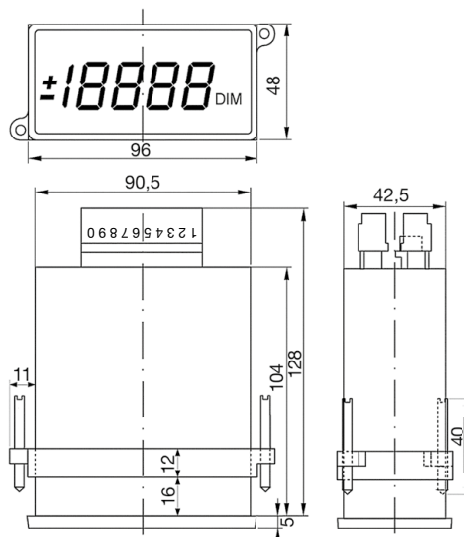
RESISTOMAT®				
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20 Ω - range	2354-5020-V	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
200 Ω - range	2354-5200-V	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 kΩ - range	2354-6002-V	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20 kΩ - range	2354-6020-V	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Basic Version

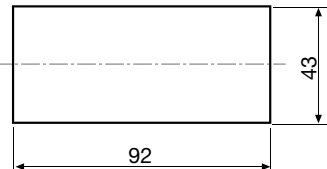


* Not available with any other option

Dimension in mm



Cutout



Connections

