LEM Current Probe Type LEM~flex RR3020

Description: The LEM~flex RR3020 is an AC current probe utilising Rogowski principle. The flexible and lightweight measuring head enables quick and easy installation in hard to reach areas. The LEM~flex RR3020 is designed for use with multimeters, recorders and data loggers.

Measuring ranges 30A/300A/3000A

Output sensitivity 100mV/10mV/1mV/A (AC coupled)

Accuracy (at 25°C) ± 1 % of range

Frequency range 10Hz to 20kHz (-1dB)

Phase error $\pm 1^{\circ}$ (45 to 65 Hz), $\pm 10^{\circ}$ (at 20kHz)

Linearity \pm 0.2% of reading from 10% to 100% of range Position sensitivity \pm 2% of range, cable >25mm (1") from coupling

External field ± 1% with cable > 200mm (8") from head

Minimum load $100k\Omega$ for specified accuracy

Noise level 8mV rms (0.26% of range) in 30A range

2mV rms (0.07% of range) in 300A and 3000A ranges

Operating temperature 0°C to 70°C (32°F to 158°F) Electronics Storage temperature -20°C to +70°C (-4°F to 158°F) Electronics

Gain variation $\pm 0.08\%$ °C

Power supply 2 x AA MN1500 LR6 batteries or equivalent

Battery life 200 hours typical

Low battery indication RED LED

Safety BS EN 61010-1: 1993, 600V CAT III Pol. Deg 2

EMC EN61326: 1998

Enclosure IP5X, Flame retardant UL94 -V0 rated

Material Valox 357 X
Output connections 4mm safety plugs
Weight 0.19 kg (0.4lb)

Measuring Head

Cable length 610mm (24 inches), double insulated

Cable diameter 14.3mm (0.562 inches)

Bend radius 38.1mm (1.5 inches) minimum

Connecting cable 2m (78.7 inches) long, double insulated TPE rubber, Polypropylene, UL94 -V0 rated

Operating temperature -20°C to +90°C (-4°F to 194°F) Head Storage temperature -40°C to +105°C (-40°F to 221°F) Head

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Weight 0.18kg (0.4 lb)

Dimensions See drawing overleaf

