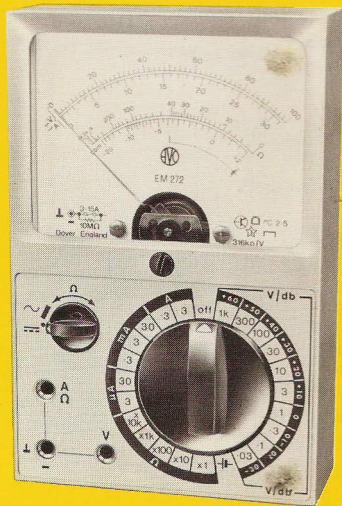




AVOMETER

Model EM 272

Operating Instructions



SPECIFICATION

Ranges

A.C./D.C. Voltage	30mV, 100mV, 300mV, 1V, 3V, 10V, 30V, 100V, 300V and 1 000V f.s.d.
A.C./D.C. Current	3 μ A, 30 μ A, 300 μ A, 3mA, 30mA, 300mA, and 3A f.s.d.
Resistance	1 Ω —4k Ω , 0—40k Ω , 0—400k Ω , 0—4M Ω and 0—40M Ω . Mid-scale values 40 Ω , 400 Ω , 4k Ω , 40k Ω , and 400k Ω .
Decibels	—50dB to +60dB in 10dB steps (0 dB level at 0.778V on the 1V range corresponding to 1 mW into 600 Ω .)

Accuracy

(20°C and 50Hz a.c.)

A.C./D.C. Voltage ranges	\pm 2.5% of f.s.d. (all ranges above 30mV). \pm 5% of f.s.d. (30mV range only). all up to approx. 1kHz on a.c.
A.C./D.C. Current Ranges	\pm 2.5% of f.s.d. (all ranges).
Resistance	\pm 5% at centre scale.

Bandwidth

(relative to 50Hz)

A.C. Voltage Ranges	\pm 5% up to 20kHz (all ranges up to 100V f.s.d.). \pm 5% up to 5kHz (300 and 1 000V ranges).
---------------------	--

SPECIFICATION

A.C. Current Ranges

$\pm 5\%$ to 20kHz (all ranges).

Measurement at low frequencies is only limited by the effect of needle flicker.

AC/DC Input Characteristics

Voltage Ranges

Impedance 316k Ω /V up to a maximum of 10M Ω .

Current Ranges

Maximum voltage drop between 120mV and 600mV at instrument terminals (see page 7).

Overload Protection

A.C. and D.C. Voltage Ranges

Prolonged overload could cause slight deterioration of accuracy.

260V r.m.s. on all ranges up to 10V f.s.d.

1,000V r.m.s. on 30V range and above.

A.C. and D.C. Current Ranges

Typically 10 times full scale deflection but not exceeding 10A. The possibility of accidental damage on these ranges is reduced by the provision of a separate socket for current measurements. All ranges fused at 3.15A.

Temperature Effect

Operating Range

0 to 40°C.

Storage Range

-40°C to +70°C.

Temperature Co-efficient

Less than $\pm 0.1\%/^{\circ}\text{C}$ on all ranges over 30mV.

Mechanical Shock

Will withstand a shock up to 40g.
