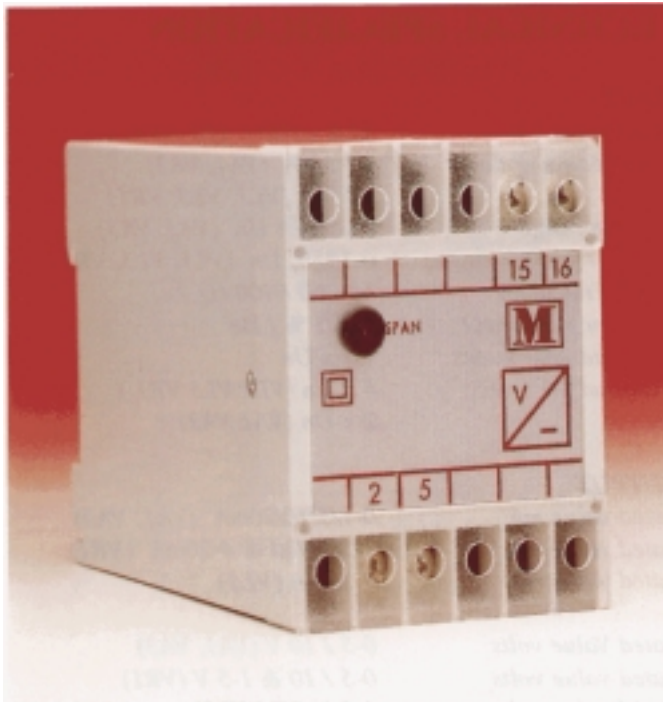


# SPECIAL AC VOLTAGE



## TECHNICAL SPECIFICATION

### INPUT

Rated value $U_n$	57.8 < 100 / 110 < 600 V
Power consumption	< 1 VA (VX1, VX3) < 1.5 VA (VS1)
Working range	0-125% $U_n$ (VX1, VX3) 10-30% $U_n$ (VS1)
Rated Frequency	50 / 60 / 400 Hz
Frequency influence	0.005 % / Hz
Overload continuous	1.5 x $U_n$
Overload for 1 sec.	2 x $U_n$

### OUTPUT

Rated value mA	0-1 / 5 / 10 / 20mA (VX1, VX3)
Rated value mA	1/5/10/20 & 4-20mA (VS1)
Rated value volts	0-5 / 10 V (VX1, VX3)
Rated value volts	0-5 / 10 V & 1-5 V (VS1)

### ADJUSTMENT

Zero	No adjustment (VX1, VX3)
Zero	$\pm 2\%$ (VS1)
Span	$\pm 10\%$ (VX1, VX3, VS1)

### AUXILIARY

A.C. Voltage	115 / 230 / 400 V ( $\pm 25\%$ / 45-65Hz / < 2 VA)
D.C. Voltage	24 / 48 / 110 V ( $\pm 20\%$ galvanically isolated / < 3 W) Note M100-VS1 is self powered

### WEIGHT & CASE SIZE

M100-VS1, VX1	Approx. 0.4 kg. 55mm case
M100-VX3	Approx. 0.7 kg. 100mm case

## ORDERING INFORMATION

Product Code	Input $U_n$	Output	Aux	Freq.	Option
M100-VS1	110V $\pm 15\%$	20mA	-	50Hz	

## OPTIONS

1. Non standard inputs / outputs only as far as technically acceptable.
2. A.C. Auxiliary in range 57.7 to 450 volts
3. Calibration at nominal Hz 35.....450Hz
4. Calibration at temperature other than 23°C

## SELECTION GUIDE

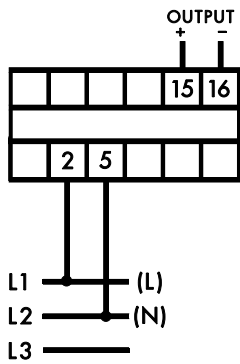
M100-VS1	Suppressed zero voltage auxiliary powered
M100-VX1	1 ph. aux. powered ave. sensing RMS calibrated
M100-VX3	3 ph. aux. powered ave. sensing RMS calibrated

## TYPICAL APPLICATIONS

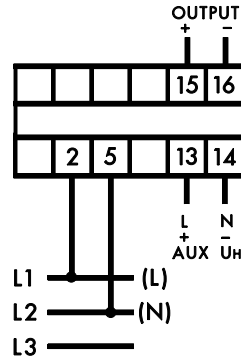
The M100-VS1 is a self powered voltage transducer. The suppression allows the transducer to accurately measure a voltage system over a narrow band either side of a nominal voltage. The range can be between  $\pm 10\%$  to  $\pm 30\%$  which can be specified when ordering. Typical application is to display the voltage on an analogue meter with an expanded scale. This allows the user to read small changes in the voltage in a single or 3 phase system. The output could also be fed to a computer that could then control the voltage of the system, to ensure that it stays within the narrow band.

The M100-VX1 and VX3 are essentially the same as the M100-VA1 and VA3, but they have auxiliaries which allow the working range to be 0-125% rather than 10-125%. Used where the average sensing of voltage is required from 0 to 125% of the nominal voltage.

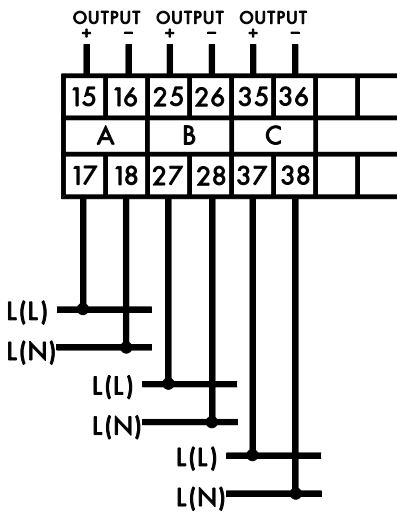
# AC VOLTAGE CONNECTION DIAGRAMS



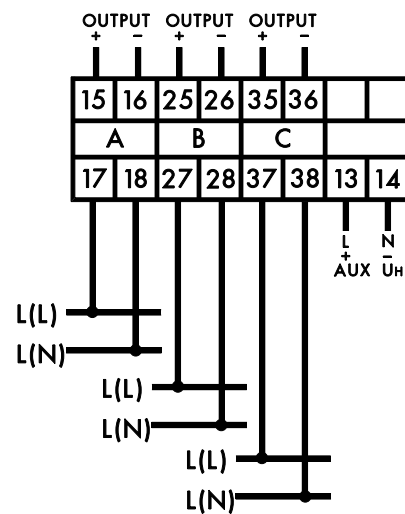
M100-VA1 / VS1



M100-VL1 / VR1 / VX1



M100-VA3



M100-VL3 / VX3