

SPECIAL AC CURRENT



SELECTION GUIDE

M100-AX1	1 ph. aux. powered ave. sensing RMS calibrated
M100-AX3	3 ph. aux powered ave. sensing RMS calibrated
M100-AAS	3 ph. summation self powered
M100-ALS	3 ph. summation auxiliary powered

TYPICAL APPLICATIONS

The M100-AX1 and AX3 are essentially the same as the M100-AA1 and AA3, but they have auxiliaries which allows the working range to be 0-125% rather than 10-125%. Used where the average sensing of current is required from 0-125% of the nominal current.

The M100-AAS and M100-ALS are A.C. Current summation transducers. Both can have up to 3 inputs of either 1, 5 or 10 amps. These inputs are summed by the transducer and one D.C. Output is provided, which is proportional to the sum of the inputs.

The M100-AAS is self powered with a range of 10-125%, the M100-ALS is auxiliary powered and provides a 4-20mA output with a working range of 0-125%.

Typical application is to measure the total current in a 3 phase system and display it via one meter. For example, if a 3 phase system has 3 current transformers 2500/5 then a moving coil meter could be connected to a M100-AAS scaled 0-7500. Note the C.T.s must all have the same ratio or the output from the transducer will not be the sum of the total current in the system.

TECHNICAL SPECIFICATION

INPUT

Rated value In	1 or 5 Amp C.T. connected 0.5-10 Amp direct connected
Power consumption	<0.2 VA (AX1, AX3 ALS) <1 VA (AAS)
Working range	0-125% In (AX1, AX3, ALS) 10-125% In (AAS)
Rated Frequency	50 / 60 / 400 Hz
Frequency influence	0.005 % / Hz
Overload continuous	4 x In
Overload for 1 sec.	50 x In

OUTPUT

Rated value mA	0-1/5/10/20mA (AX1, AX3, AAS)
Rated value mA	4-20mA (ALS)
Rated Value Volts	Not available on (AAS)
Rated Value Volts	1-5 V (ALS)
Rated Value Volts	0-5 / 10V (AX1, AX3)

ADJUSTMENT

Zero	No adjustment (AX1, AX3, AAS)
Zero	± 2% (ALS)
Span	± 10% (AX1, AX3, ALS)

AUXILIARY

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

WEIGHT & CASE SIZE

M100-AX1	Approx. 0.4 kg. 55mm case
M100-AAS	Approx. 0.6 kg. 100mm case
M100-ALS, AX3	Approx. 0.7 kg. 100mm case

ORDERING INFORMATION

Product Code	Input	In	Output	Aux	Freq.	Options
M100-ALS	3 x 5A	0-20mA	115V	50Hz	Cal. 40°C	

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