

ACM3-01D4

True rms AC current measurement module

30.5.2007



Features

- True RMS AC current measurement
- 3 Phase, individual channels
- 31Arms / phase
- Factory calibrated
- Fully Isolated
- Linet connection

Application

- Current consumption monitoring
- Over current alert
- Main fuse protection

Description

ACM3-01D4 module measures AC current from 3 phases simultaneously.

Operating frequency is 40-60Hz sinusoidal waveform. All 3 channels are sampled and integrated simultaneously over a period of time. Data is calculated to create true rms reading. Each current carrying wire must be routed via one internal current transformer. Current measurement is fully isolated and independent. Module is factory calibrated. Wire diameter is max. 7mm.

Instructions

CAT6 type Linet cable shall be connected to the network connector. After system is powered up all channels in the module shall be configured as DATA12 group type. After that the module transmits three 12-bit data values relative to the measured currents in three separate groups.

Current measurement data:

Calculation formula:

Data value /100 = current in amperes

Example:

Data 3056 = 30.56 Arms
2167 = 21.67 Arms
1000 = 10.0 Arms
4095 = Overflow

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Technical specifications

Parameter	Value	Unit
Measurement range	0 – 31	Amperes
Accuracy (full scale)	1% or better	Amperes
Resolution	0,01	Amperes
Operating temperature	0 – 50	Celsius
Operating humidity	Non condensing	
Dimensions	90 x 55 x 88	mm
Max wire diameter	7	mm

Ordering

ACM3-01D4

3-channel true RMS AC current meter