

ASC451LP Loop Powered Split Core AC Current Transducer

- Split core CT for easy non-intrusive installation
- Suitable for SIL 1, SIL 2 & SIL 3 rated (IEC61508-2) safety instrumented system (SIS) loop monitoring applications
- Loop powered, reducing wiring
- 5 year warranty as standard
- CE compliant
- Network rail Approved (086/036401)

APPLICATION

- Fan / Pump / Blower / Motor / Heating Element current monitoring.
- General AC current signal conditioning.

TECHNICAL SPECIFICATION

INPUT

Current can be specified in the range of:
0 – 20A, 0 - 30A, 0 - 40A, 0 - 50A, 0 - 100A, 0 - 200A, 0-300A AC
(Other intermediate ranges available on request)
Frequency: 50Hz/60Hz nominal, other ranges available.
(Multi-Turns required at installation for ranges <20A.
E.g. 0-5A= 4 x through turns, 0-10A= 2 x through turns)

OUTPUT

4 – 20mA DC Sinking current. 30mA max
Output Load: 600 ohms max @ nom 24Vdc supply.
Loop voltage 12 to 30Vdc.
Linearity: < $\pm 0.3\%$
Accuracy: < $\pm 2\%$
Response time: Typically < 400ms
Calibration: Average RMS

CONTROLS

15 turn potentiometers for output calibration adjustment.

Zero: $\pm 5\%$
Span: $\pm 5\%$

PROTECTION

Isolation 2000V RMS. Input / Output / Case
Input over range up to 200% continuous.
Enclosure: ABS (UL 94V-0) / IP20

ENVIRONMENTAL CONDITION

Storage temperature: - 10 to +70 °C
Operating Ambient: -10 to +50 °C
Relative Humidity: 20 to 95% RH (Non-condensing)
Temp Coefficient: $\leq 200\text{ppm}$

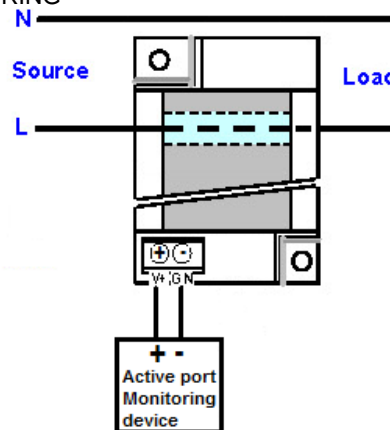
MOUNTING

Mounting: Din Rail (TS35) or Surface by corner fixing holes
Weight < 150g
Installation: CAT II



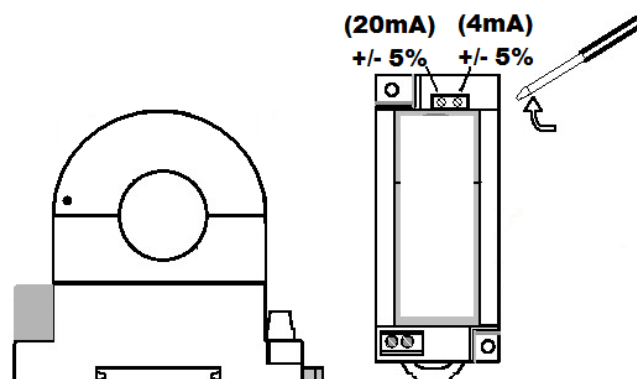
Network rail Approved (086/036401)

WIRING



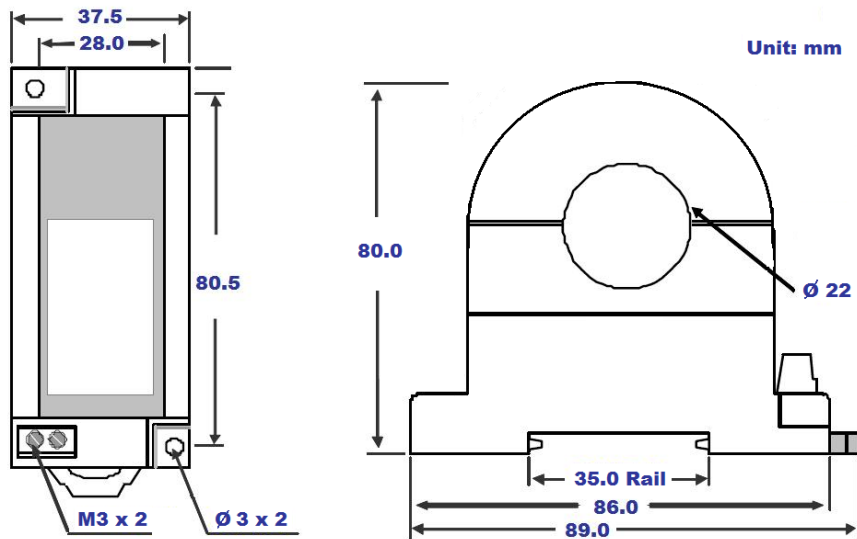
Wiring terminal:
5A/300Vac, M2.0, 0.5~1.3mm² (22~16AWG)

CALIBRATION



ASC451LP Loop Powered Split Core AC Current Transducer

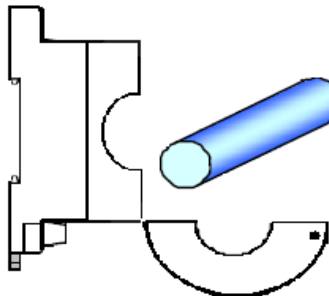
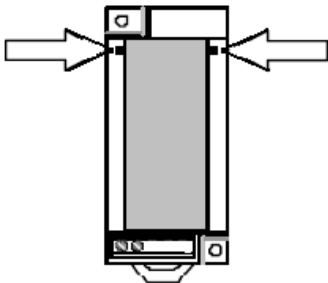
DIMENSION



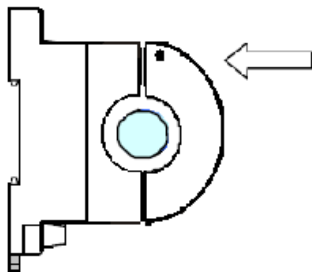
INSTALLATION

To avoid damage to the case, input cable should be formed to shape and supported. Use surface mount option instead of din rail for more secure fixing.

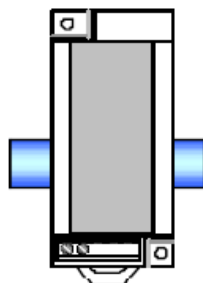
1. Push the two side buttons simultaneously to release.
2. Place the cable.



3. Push to lock.



4. Finish



SAFETY NOTE:

Although the voltage(s) directly connected to this instrument and its internal voltages are low. The cable running through the split core may carry dangerous high voltage. For this reason, this product should only be installed by a competent person. If the unit fails to operate correctly, then first please check whether the wiring is correct. Under no circumstances should the unit be taken apart to gain access to internal circuitry for any reason whilst it has a live cable through the split core!