

## QUALITY ELECTRONIC DESIGN





# CURRENT TRANSFORMER AC/DC LOOP POWERED

QI-300-I

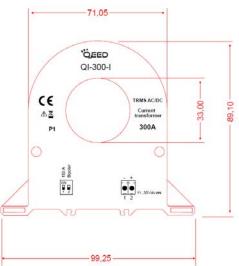


PATENT PENDING

POWER SUPPLY Passive loop powered, 11...30Vdc, Protections against polarity reversal and overtemperature. ABSORPTION Less then 3,5mA PROTECTION INDEX IP20 **ACCURACY** 0,5% F.S. RESOLUTION 12 bit TEMPERATURE COEFFICIENT < 200 ppm/°C WORKING TEMPERATURE -15...+65°C STORAGE TEMPERATURE -40°C... +85°C RESPONSE TIME 1000 ms TYPE OF MEASURE RMS (monopolar) or DC 300 Arms or 150 Arms dip-switch setting, bipolar (+/- 300A DC o +/-150A DC) **OUTPUT 4...20 mA** BAND WIDTH AT -3dB DC or 20...2000 Hz ISOLATION 3 kV on bare wire OVERLOAD 2000 A pulse, 500A continuos CREST FACTOR 1,4 HYSTERESIS 0,2% f.s. HUMIDITY 10...90% not condensing ALTITUDE Up to 2000 m s.l.m. WEIGHT 370 g. FILLING Epoxy Resins PBT, gray **BOX MATERIAL** MOUNTING Screw predisposition for vertical/ horizontal mounting, DIN Rail clips (included) for vertical/horizontal mounting TERMINAL Removable terminals 5,08mm DIP-SWITCH 2 poles LED N°1 yellow (Power on) STANDARDS CE EN55022: 2010-12: EN55024: 2010-11: DIMENSIONS 46,1x 63x 26,4 mm (terminal excluded)

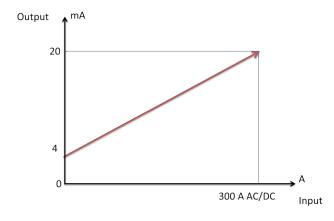
The QI-300-I is a AC/DC current transformer, galvanically isolated from the measuring circuit. The device is in the function and appearance very similar to a standard active TA, however, able to measure the DC component and AC RMS. The transformer is powered 4-20mA current loop and therefore does not require a direct power supply. It's the first Hall's effect current transformer loop-powered with 0.5% accuracy on the market.





CURRENT TRANSFORMER
AC/DC RMS LOOP POWERED

# INPUT O...300 A AC/DC AC/DC AC/DC AND CONNECTIONS 1. 2. +



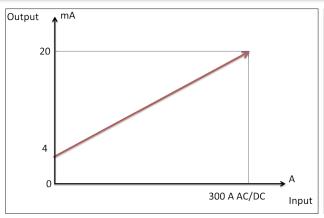


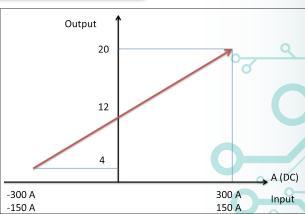




# CURRENT TRANSFORMER AC/DC TRMS LOOP POWERED

# QI-300-I





The QI-300-I has two dip-switches through which you can set the scale to 150 or 300A and select the monopolar or bipolar (see charts), the yellow led near the terminal will indicate the presence of the power supply. If you are using bipolar function on AC current, the value read will be 0 A (12 mA) because you are reading the average value.

Any changes made by dip-switch required to switch off the power supply. It's a safety condition in order to prevent any manumission on the device.

### MOUNTING:

QI-300-I

The current transformer QI can be mounted in any position (see photo below), horizontal or vertical mounting, horizontal or vertical through the two hooks for DIN rail included in the box.

## Dip-Switch Table :

DESCRIPTION	1	2
MONOPOLAR (RMS) or DC		0
BIPOLAR (MEAN VALUE)	0	1
300 A	0	
150 A	1	

Measurement Cut off: 250mA (precision class 0,5% \* full scale 50 A = 0,25 A)

#### DIN rail mounting instructions:

To mount the hooks on QI. If you want to mount horizontally, use the flexibility of hook to catch into prepared by pressing the center of the clip. For vertical mounting, slide the hooks into the slots, external holding the two tabs on the clip.

For mounting on DIN rail horizontally, once hooked on the bottom, push with both hands.

For vertical mounting on DIN rail, once hooked on the bottom, push with both hands on the hooks. To release from DIN rail, use a screwdriver and lever up to release the fins.

CAUTION: Magnetic fields of high intensity can vary the values measured by the transformer. Avoid installation near permanent magnets, electromagnets or iron masses that induce strong changes in the magnetic field. If any irregularity recommend reorient or move the transformer in the area most appropriate.

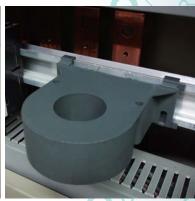


CURRENT TRANSFORMER
4C/DC RMS LOOP POWERED









Disposal of electrical & electronic equipment (applicable throughout the EU and offier countries wit separate collection programs). This symbol, found on your product or on its packaging, indicates that this product should not be treated as household waste when you wish to dispose of it instead, at should be handed over to an applicable collection point for the needing of electrical and electronic equipment. By ensuring this product is obsposed of correctly, you will help prevent lengable consequences to the environment and human health, which could otherwise be caused by inappropriate disposal of it. The recycling of this product, please contact, you local of politics or the relat store where you purchased this product.

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