

DEND

QUALITY ELECTRONIC DESIGN



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CURRENT TRANSFORMER AC/DC LOOP POWERED

QI-300-I

CE

QI-300-I

	POWER SUPPLY Passive loop powered, 1130Vdc, 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 DO
	RANGE 300 Arms or 150 Arms dip-switch setting, bipolar (+/- 300A DC o +/-150A DC)
	OUTPUT 420 mA
	BAND WIDTH AT -3dB DC or 202000 Hz
	ISOLATION 3 kV on bare wire
	OVERLOAD 2000 A pulse, 500A continuos
	CREST FACTOR 1,4
	HYSTERESIS 0,2% f.s.
	HUMIDITY 1090% not condensing
-	ALTITUDE Up to 2000 m s.l.m.
	WEIGHT 370 g.
	FILLING Epoxy Resins
	BOX MATERIAL PBT, gray
	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.







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Output

20

12

4

-300 A

-150 A





A (DC)

Input

0

1

CURRENT TRANSFORMER AC/DC TRMS LOOP POWERED



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:

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.

DIN rail mounting instructions:

To mount the hooks on Ql. 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.









QI-300-I

CURRENT TRANSFORMER 4C/DC RMS LOOP POWERED

 Dip-Switch Table :

 DESCRIPTION
 1

 MONOPOLAR (RMS) or DC
 0

 BIPOLAR (MEAN VALUE)
 0

300 A

150 A

300 A 0 150 A 1

Measurement Cut off : 250mA (precision class 0.5% * full scale 50 A = 0.25 A)

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.

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Disposal of electrical & electronic equipment (applicable throughout the EU and other countries wit separate collection programs). This symbol, found on your product or on the packaging, indicates that this product should in be treated as household wasts when you wish to dispose of I. Instead, it should be handed over to an applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences to the privintoment and human health, which could otherwise be caused by inappropriate disposal of it. The recycling of materials will be conserve natural resources. For more detailed information about the recycling of this product. Jease constict your local city office, waste disposal sories or the retail store where you purchased this product. This document is the property of DEM spa. Duplication or reproduction is prohibited. The contents of this document correspond to the products and technologies described. This information may be amended or supplemented by technical and commercial requirements