

QUALITY ELECTRONIC DESIGN





CURRENT TRANSFORMER AC/DC RMS LOOP POWERED

QI-400-DC-I



POWER SUPPLY Passive loop powered, 11...30 Vdc, Protections against polarity reversal and overtemperature ABSORPTION Less then 3,5 mA PROTECTION INDEX IP 20

ACCURACY 0,5% F.S.

RISOLUTION 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 DC

RANGE 400 A DC o 200 A DC (f.s.: +10%) dip-switch setting

OUTPUT 4...20 mA

ISOLATION 3 kV on bare wire

OVERLOAD 2000 A pulse, 500 A continuos

HYSTERESIS 0,2% f.s.

HUMIDITY 10...90% 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 5,08 mm

DIP-SWITCH 2 poles

LED N°1 yellow (Power on)

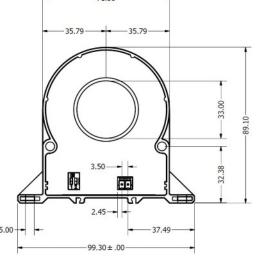
STANDARDS CE EN55022: 2010-12; EN55024:

2010-11

DIMENSIONS 99,3 x 30,3 x 89,1 mm (terminal excluded)

The QI-400-DC-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, able to measure the DC. 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



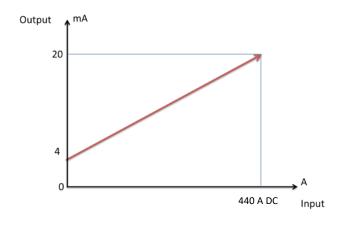




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ISOLATION AND CONNECTIONS

INPUT 0...440 A DC





ENGLISH





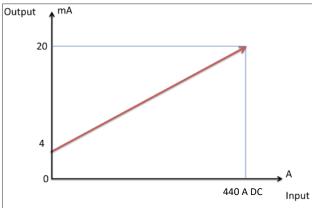
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The QI-400-DC-I has two dip-switches through which you can set 200 or 400 A DC. The yellow led near the terminal will indicate the presence of the power supply. If you are using bipolar function on AC current, the value read will be 0 A (12 mA) because 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 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.

Dip-Switch Table:

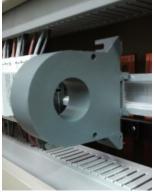
DESCRIPTION	1	2
MONOPOLAR		0
BIPOLAR (MEAN VALUE)		1
400 A DC	0	
200 A DC	1	

Measurement Cut off: 250 mA (precision class 0,5% * full scale 440 A = 2,2 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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