INSTALLATION MANUAL

T201DCH600-MU

PRELIMINARY WARNINGS

The word **WARNING** preceded by the symbol ⚠ indicates conditions or actions that put the user's safety at risk. The word **ATTENTION** preceded by the symbol ⚠ indicates conditions or actions that could damage the instrument or connected equipment.
The warranty shall become null and void in the event of improper use or tampering with the module or devices supplied by the manufacturer as necessary for its correct operation, and if the instructions contained in this manual are not followed.

	**WARNING**: The full content of this manual must be read before any operation. The module must only be used by qualified electricians. Specific documentation is available using the QR-CODE shown on page 1.
	The module must be repaired and damaged parts replaced by the Manufacturer. The product is sensitive to electrostatic discharges. Take appropriate measures during any operation.
	Electrical and electronic waste disposal (applicable in the European Union and other countries with recycling). The symbol on the product or its packaging shows the product must be surrendered to a collection centre authorized to recycle electrical and electronic waste.

DOCUMENTATION

SENECA

QUALITY MANAGEMENT SYSTEM
ISO 9001:2015

SENECA s.r.l.; Via Austria, 26 – 35127 – PADOVA – ITALY; Tel. +39.049.8705359 - Fax +39.049.8706287

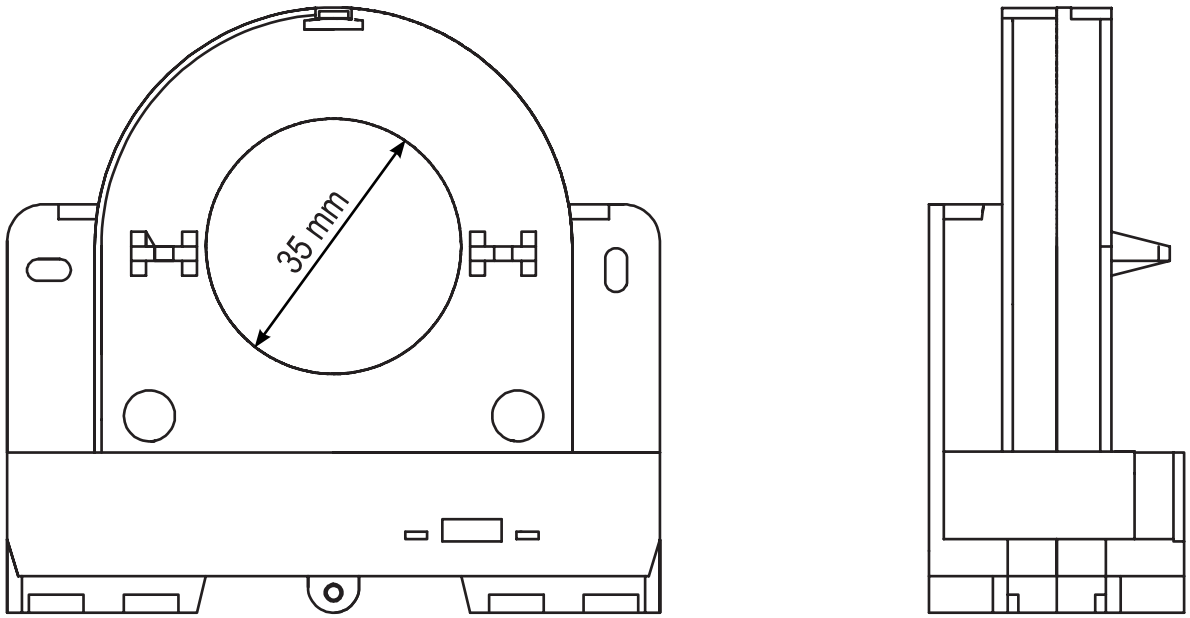
CONTACT INFORMATION

Technical support	supporto@seneca.it	Product information	commerciale@seneca.it

This document is the property of SENECA srl. Copies and reproduction are prohibited unless authorised.
The content of this document corresponds to the described products and technologies.
Stated data may be modified or supplemented for technical and/or sales purposes.

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

MODULE LAYOUT



Dimensions LxHxD: 95 x 75 x 35 mm; **Weight:** ≈ 150 g; **Enclosure:** PA6, black

SIGNALS VIA LED ON FRONT PANEL

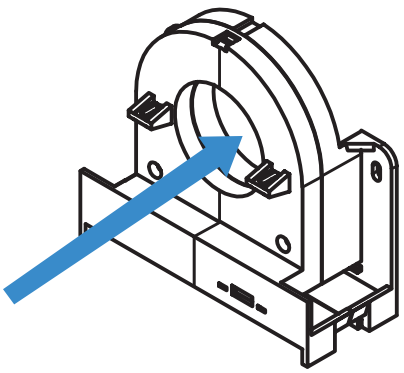
LED	STATUS	LED meaning
PWR/COM Green	ON	The device is powered correctly
PWR/COM Green	Flashing	Communication via USB port
D-OUT Yellow	ON	Digital output activated

ASSEMBLY

The device can be mounted in any position, in compliance with the expected environmental conditions.
Use the accessories supplied for fixing on a DIN rail.
Attention: magnetic fields of considerable magnitude can alter the measurement: avoid proximity to permanent magnetic fields, solenoids or ferrous masses which induce strong alterations of the magnetic field;
possibly, if the zero error is greater than the declared error, try a different arrangement or change orientation.

⚠ ATTENTION

Please, install the module as shown in the figure. Pay attention to the direction of the current flow.
To increase the current measurement sensitivity, insert the cable several times into the central hole of the instrument, creating a series of coils. The current measurement sensitivity is proportional to the number of turns

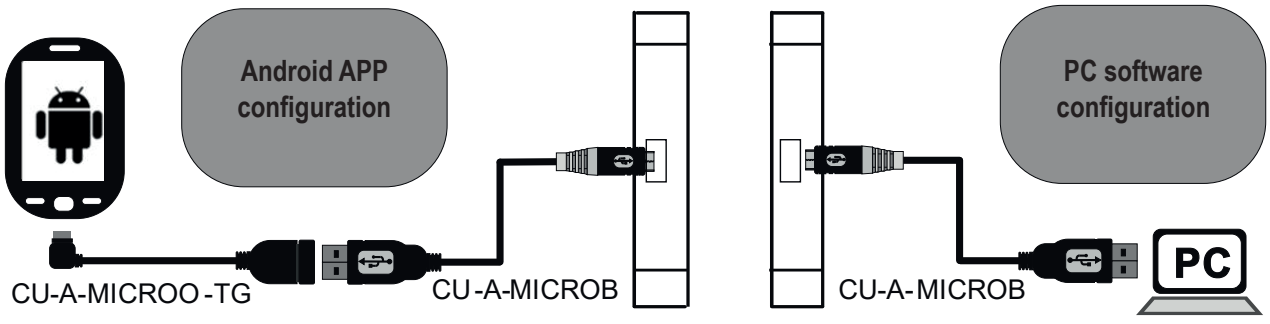


TECHNICAL SPECIFICATIONS

CERTIFICATIONS	CE UKCA	
INSULATION	Using an insulated conductor, its sheath determines the insulation voltage. An insulation of 3 kVac is guaranteed on bare conductors	
ENVIRONMENTAL CONDITIONS	*Temperature*: -25 – + 70 °C *Humidity*: 10%– 90% non condensing. *Altitude:* Up to 2000 m above sea level with bare conductor Up to 3500 m above sea level with insulated conductor *Storage temperature:* -40 – + 85°C *Degree of protection:* IP20.	
ASSEMBLY	35mm DIN rail IEC EN60715, wall mounted with dowels, suspended with ties	
CONNECTIONS	Removable 6-way screw terminals, 5 mm pitch for cable up to 2.5 mm^2 micro USB (CONFIGURATION ONLY)	
POWER SUPPLY	Voltage: on Vcc and GND terminals, 11.5 – 28 Vdc; Absorption: Typical: 21 mA (LOAD EXCLUDED)	
COMMUNICATION PORT	RS485 serial port on terminals A+ and B-	
INPUT	*Type of measurement*: AC/DC TRMS or DC Bipolar *Crest factor*: 2 *Pass-band:* 1 kHz *Overload:* 2000 A impulsive, 3 x I_N continuing	
CAPACITY	**AC/DC True RMS (DIP7=OFF)**	**DC Bipolar (DIP7=ON)**
T201DCH600-MU	0 – 300A or 0 - 600A	-300 – +300A or -600 - +600A
ANALOGUE OUTPUT on Vout and GND terminals	*Type*: 0 – 10 Vdc, minimum load R_{LOAD} =2 kΩ. *Protection*: Reverse polarity protection and over voltage protection *Resolution:* 13 bit (10000 points) *EMI error:* < 0.5% *Temperature coefficient*: < 200 ppm/°C *Hysteresis on measurement*: 0.2% of full scale *Response speed:* RMS: with 'Fast' filter 1400 ms, with 'Slow' filter 2900 ms. Bipolar: with 'Fast' filter 78 ms, with 'Slow' filter 650 ms. **The type of output can be selected via software**	
DIGITAL OUTPUT on DO and GND terminals	*Type*: active, 0 – Vcc, maximum load 50 mA **The type of output can be selected via software**	
ACCURACY	**below 2% of full scale**	**above 2% of full scale**
T201DCH600-MU	1% of full scale at 50/60 Hz, 23°C	0.5% of full scale at 50/60 Hz, 23°C
OVERVOLTAGE CATEGORIES	*Bare conductor:* CAT. III 300 V *Insulated conductor:* CAT. III 600 V	

USB PORT

The module is designed to exchange data according to the modes defined by the MODBUS protocol. It has a micro USB connector on the front panel and can be configured using applications and/or software programs.
The USB serial port uses the following communication parameters: **38400,8,N,1**
The USB communication port responds exactly like the serial ports, with the exception of the communication parameters. For more information, visit the site shown on page 1.



Check that the device in question is included in the list of products supported by the Easy Setup APP in the store.

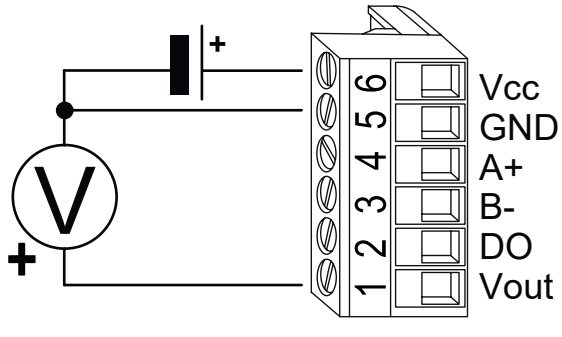
SETTING THE DIP-SWITCHES

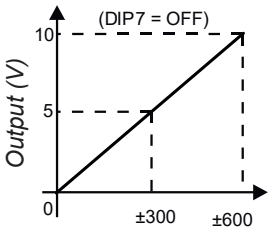
The position of the DIP-switches defines the Modbus communication parameters of the module: Address and Baud Rate. The following table shows the values of the Baud Rate and the Address according to the setting of the DIP-switches:

DIP-Switch status								
POSITION 1 2 3 4	ADDRESS	POSITION 5 6	BAUD RATE	POSITION 7	TYPE OF MEASUREMENT	POSITION 8	MEASURING SCALES	
	#1		9600		AC/DC true RMS		Full scale	
	#2		19200		DC Bipolar		Half scale	
	#3		38400	DIP-switches must be set while the module is not powered on in order to avoid damaging it.			KEY	
• • • • • •	#...		57600					
	#14	The instrument is supplied configured for 600 A (DCH600), with 800 ms filter inserted and TRMS mode selected.						ON
	#15							OFF
All dip-switches set to OFF: parameters from flash memory. See the USER manual								

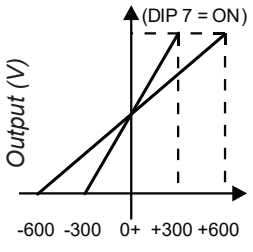
Note: When DIP switches 3 to 8 are OFF, the communication settings are taken from programming (EEPROM).

ELECTRICAL CONNECTIONS





Input (A) TRMS



Input (A) DC Bipolar

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000