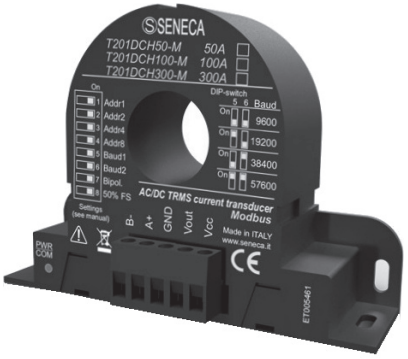
INSTALLATION MANUAL
T201DCH50-M
T201DCH100-M
T201DCH300-M

AC/DC TRUE RMS or DC BIPOLAR CURRENT TRANSDUCER
WITH RS485 PORT AND MODBUS RTU PROTOCOL

EN



T201DCH50-M

T201DCH100-M

T201DCH300-M

ISO 9001:2008

SENECA

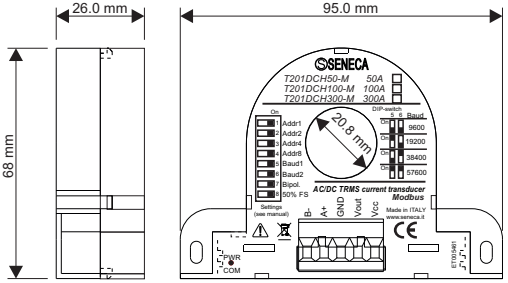
SENECA s.r.l.
Via Austria, 26 – 35127 – PADOVA – ITALY
Tel. +39.049.8705355 - 8705359 - Fax +39.049.8706287

Manuals and configuration software are available at website:
www.seneca.it/products/t201dch50-m or
www.seneca.it/products/t201dch100-m or
www.seneca.it/products/t201dch300-m

This document is property of SENECA Srl. Duplication and reproduction are forbidden, if not authorized. Contents of the present documentation refers to products and technologies described in it. This informations may be modified or integrated for technical and / or commercial requirements.

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

MODULE LAYOUT



Dimensions (L×H×W)	95 x 68 x 26 mm
Weight	120 g.
Case	Material PA6, Black color.
Mounting	Free-standing or on IEC EN60715 DIN rail with 2 accessories included.

LED SIGNALLING ON FRONT PANEL

LED	State	LEDs Meaning
PWR COM (Green)	On/Off	Power supply presence / The device is powered off
	Blinking	Communication presence on RS485 port.

TECHNICAL SPECIFICATIONS

STANDARDS	**EN61000-6-4** Electromagnetic emission, industrial environment **EN61000-6-2** Electromagnetic immunity, industrial environment **EN61010-1** Safety
INSULATION	When a sheathed wire is used, the insulation voltage is set by sheath properties. On a bare wire, it's stated to 3 kV∿.
ENVIRONMENTAL CONDITIONS	
Temperature	-20°C – +70°C.
Humidity	10% – 90% not condensing.
Altitude	Up to 2000 m a.s.l
Storage temperature	-40°C – +85°C.
Protection degree	IP20.
CONNECTIONS	Removable 5-way screw terminals, 5,08 mm pitch, for cables up to 2.5 mm². Through hole 20.8 mm (0.8 Inch) diameter.
COMMUNICATION PORT	RS485 serial port on screw terminals A+ and B-.

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

TECHNICAL SPECIFICATIONS

POWER SUPPLY *Tension* *Power absorbed*	On screw terminals Vcc and GND. 11.5 – 28 V⎓. 21 mA (without load).	
INPUT *Type of measure* *Peak factor* *Pass-band* *Over-current*	On through hole 20.8 mm diameter. AC/DC True RMS or Bipolar DC 2 1 kHz 2000 A impulsive, 300 A continuous.	
Current-carrying capacity	AC/DC True RMS (DIP7=OFF)	DC Bipolar (DIP7=ON)
T201DCH50-M	0 – 25A or 0 – 50A	- 25 – +25A or - 50 – + 50A
T201DCH100-M	0 – 50A or 0 – 100A	- 50 – +50A or -100 – +100A
T201DCH300-M	0 – 150A or 0 – 300A	-150 – +150A or -300 – +300A
OUTPUT *Type* *Protections* *Resolution* *EMI error* *Temperature coeff.* *Measure hysteresis* *Response time*	On screw terminals Vout and GND. 0 – 10 V⎓, Minimum load R_{LOAD} = 2 kΩ. Reversal polarity protection and over-voltage protection 13 bit (10000 points) < 0.5% < 200 ppm/°C 0.2% of full-scale RMS: with 'Fast' filter 1400 ms, with 'Slow' filter 2900 ms. Bipolar: with 'Fast' filter 78 ms, with 'Slow' filter 650 ms.	

Type	*Precision Under 2%* of full-scale	*Precision Over 2%* of full-scale
T201DCH50-M *T201DCH100-M* *T201DCH300-M*	1% of full-scale at 50/60Hz, 23°C	0.5% of full-scale at 50/60Hz, 23°C
OVER-VOLTAGE CATEGORY	*Bare conductor* *Insulated conductor*	CAT. III 300 V CAT. III 600 V

PRELIMINARY WARNINGS

Before performing any operation is mandatory to read the full contents of this manual. The module may only be used by qualified and skilled technicians in the field of electric installation. Specific documentation is available on the site on the product page

Only the Manufacturer is authorized to repair the module or to replace damaged parts. The product is susceptible to electrostatic discharge, take appropriate countermeasures during any operation.

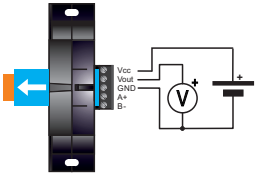
No warranty is granted in connection with faults resulting from improper use, from modifications or repairs carried out by Manufacturer-unauthorized personnel on the device, or if the content of this user Manual is not followed.

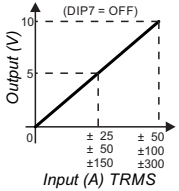
LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

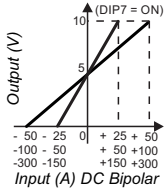
PRELIMINARY WARNINGS

Disposal of electrical & electronic equipment (applicable throughout the EU and other countries with separate collection programs). The symbol found on this product or on its packaging, indicates that this product it must be handed over to an authorised collection point for **the recycling of electrical and electronic equipments.**

ELECTRICAL CONNECTIONS

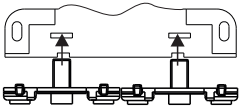






MOUNTING

2 accessories, included, for DIN rail mounting



The device can be located in any position and place, in accordance with the operating conditions above stated. Use the included hooking bracket t when fixing to a DIN rail.

WARNING: High-strength magnetic fields may change the output value: let avoid closeness to permanent magnets, electromagnets or iron bulks that cause such a modification of the surrounding magnetic field; try a different arrangement or orientation if zero error was greater than expected.

CONFIGURATIONS

SW 1	2	3	4	Address	SW 5	6	Baud Rate	SW 7	Type of measure	8	Scale of measure
↑				#1			9600		AC/DC True RMS		Full scale
	↑			#2	↑		19200	↑	DC Bipolar	↑	Half scale
↑	↑			#3		↑	38400		
↑		↑	↑	#13	↑	↑	57600		
	↑	↑	↑	#14			
↑	↑	↑	↑	#15			

DIP-switches must be set with the power supply NOT connected to avoid module damaging.

the instrument is factory configured for the range 50 A (DCH50), 100A (DCH100) and 300A (DCH300), with filter 800ms and AC/DC True RMS type of measure.

All switch OFF = parameters from Flash memory. See User Manual.

KEY

↑	ON	↑
	OFF	↓

CONTACTS

Technical support	Support@seneca.it	Product Informations	sales@seneca.it

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