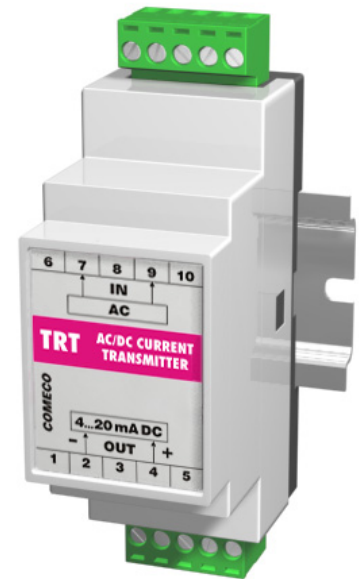


AC/DC Current Transmitter TRT



- ◆ Low cost
- ◆ 100% 2-wire AC/DC transmission
- ◆ Case for mounting inside current transformers available
- ◆ Reliable and accurate conversion
- ◆ High EMS suppression
- ◆ Input isolation option
- ◆ ZERO and SPAN adjustment
- ◆ In-head and DIN-rail versions

The current-to-current transmitter TRT is designed to convert alternative current signal coming from current transformers into a standard 2-wire current signal, which is more suitable for transmitting. Together with a current transformer, the TRT unit forms an AC/DC current converter suitable to measure big AC currents up to more than 1000 A. The 4...20 mA output can be used for measuring, regulation, and registration in special control systems. The TRT transmitter is based on modern integrated circuits and is a fixed-range transmitter. Its input ranges cover most popular current transformer output signals (0...1 A, 0...5 A) and customer specified inputs as well. TRT is available in a casing for mounting inside a current transformer, in 2 casings for DIN-rail mounting as well as mounted into an IP65 protection box, as the latter 3 versions can be equipped with an optional input isolation. TRT is an easy-to-use, low-cost, and EMS-protected device. Its application area includes power stations, electrical equipment, and electricity production and distribution. This transmitter can also be used as sensor transducer in various industrial control systems and everywhere, where AC to DC current conversion is desirable.



Technical specifications

Input

Input signal	alternative current
Frequency	50/60 Hz
Input range	0...1 A or 0...5 A
Other input ranges	0...max. 10 A
Input isolation (option) ⁽¹⁾	internal current transformer

Output

Output signal	4...20 mA, 2-wire
Current limits	Low = 3 mA, High = 28 mA
ZERO and SPAN adjustment	± 10%, via trimpots
Maximum line load	800 Ω at 24V/20mA

Accuracy

Measurement error at 25 °C	0.5% from span
Non-linearity	0.5% from span (up to 1.0% w/ input isolation)
Temperature drift	0.1% from span for 1 °C
Supply voltage variation influence	0.02% from span for 1 V

⁽¹⁾ Not available for the version for free mounting (G12 = "B")!

⁽²⁾ Only for the version for mounting in socket

⁽³⁾ May be mounted on rail by a special snap-on accessory, which is ordered separately (see 'Accessories').

⁽⁴⁾ May be also mounted on a DIN rail

⁽⁵⁾ Ordered separately (see 'Accessories')

Power supply

Mains supply voltage	230 VAC or 115 VAC ⁽²⁾
Isolated low voltage ⁽²⁾	12...24 V
Non-isolated low voltage	8...32 VDC
Admissible variations	10% p-p at 50 Hz

Operating conditions

Ambient temperature	-20...70 °C
Ambient humidity:	
- mounted in a transformer	0...80 %RH, non-condensing
- mounted on a rail	0...95 %RH, non-condensing
- mounted in a box	0...95 %RH

Design and materials

Mounting	free	in box ⁽³⁾	on rail	in socket ⁽⁴⁾
Dimensions [mm]	43x33x16	80x80x60	35x110x58	35x78x91
Weight	20 g	110 g	90 g	180 g
Protection, case/terminals	IP40/20	IP65	IP20	IP20
Case material	plastic	plastic	plastic	plastic
Wiring	screw terminals	screw terminals	plug-in terminals	socket UNDECAL ⁽⁵⁾

Ordering code TRT - G1.G6.G12 - #1

Code	Feature or option	Code values
G1	Power supply	D - 8...32 VDC, non-isolated, A - 230 VAC, B - 115 VAC ⁽²⁾ , Q - 12...24 V, isolated ⁽²⁾
G6	Input	EQ - 0...1 AAC, ER - 0...5 AAC, EZ - other ⁽⁶⁾
G12	Mounting	B - free (bare module), C1 - on DIN rail, C2 - in socket, D - in box IP65 (box included) ⁽³⁾
#1	Input isolation	X - none, I - input isolation ⁽¹⁾

⁽⁶⁾ Specify upper current limit within the range given in the 'Input' table section above.