

SIRAX BT70x0 and SIRAX BT71x0 AC/DC current transformer with transmitter functionality

Description

The SIRAX BT7000 / BT7050 and SIRAX BT7100 / BT7150 series are current transformers with integrated transmitter functionality for monitoring single-phase AC or DC applications. The current measurement is done galvanically separated from the measured line. The large number of measured variables, the maximum current of up to 300 AAC or 400 ADC allow a versatile use of the devices.

Characteristics

- Break-resistant plastic housing made of PBT
- Flame retardant and self extinguishing according to UL94 V0
- Current sensing by Hall effect; range: 300 AAC / 400 ADC
- Galvanic separation from the measuring circuit
- Configuration by means of configuration software
- Serial RS485 Modbus/RTU output and analog 0...10 V or 4...20 mA output
- DIN rail or wall mounting for vertical or horizontal position



Application

The AC/DC current transformers with transmitter functionality are the ideal solution for applications where only current needs to be monitored. The devices are perfect for monitoring medium / large photovoltaic installations, battery charging systems and industrial processes.

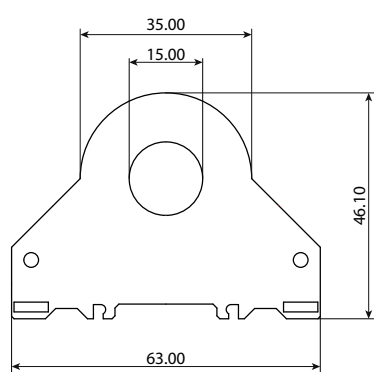
Technical specifications

	SIRAX BT7000	SIRAX BT7050	SIRAX BT7100	SIRAX BT7150
System type	1-phase AC/DC			
Type of measure	AC TRMS or DC			
Current measurement	Integrated Hall effect current sensor			
Installation form	DIN rail mounting			
Mounting position	arbitrarily, vertically or horizontally			
Input				
Measurement range	50 A AC/DC		300 A AC / 400 A DC	
Transformer ratio	1,0 standard (customizable)			
Power supply	12...30 VDC	passive loop powered 11...30 VDC	12...30 VDC	passive loop powered 11...30 VDC
Absorption	< 20 mA	< 3.5 mA	< 20 mA	< 3.5 mA
Max. cable diameter	ø14 mm		ø32 mm	
Output				
Analog output	0...10 VDC	4...20 mA	0...10 VDC	4...20 mA
Burden	≥ 1 kΩ	–	≥ 1 kΩ	–
Band width at -3dB	DC or 20...2000 Hz			
Digital output	RS485 Modbus/RTU	–	RS485 Modbus/RTU	–

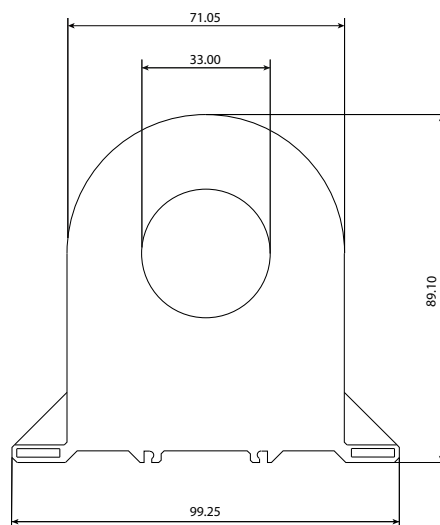
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	SIRAX BT7000	SIRAX BT7050	SIRAX BT7100	SIRAX BT7150
Accuracy				
Accuracy	0.5% F.S.			
Resolution	12 bit			
Temperature coefficient	< 200 ppm/°C			
Crest factor	2		1.4	
Safety and environmental conditions				
Operating temperature	-15 ... +65 °C			
Humidity	10 ... 90 % (not condensing)			
Housing protection IP	IP20			
Isolation	3 kV on bare wire			
Overload	2000 A (pulse); 300 A (continuous)		2000 A (pulse); 500 A (continuous)	
Altitude	max. 2000 m			
Mechanical properties				
Housing material	PBT			
Filling	Epoxy Resins			
Flammability	UL94 V-0, self-extinguishing, non-dripping, halogen-free			
Weight	72 g		370 g	
Connections	Plug-in terminals 3.5 mm, 5-pole	Plug-internals 3.5 mm, 2-pole	Plug-in terminals 3.5 mm, 5-pole	Plug-in terminals 3.5 mm, 2-pole
DIP switch	8-pole	2-pole	8-pole	2-pole
Programming	Modbus RTU and Software	DIP switch	Modbus RTU and Software	DIP switch
Mounting	Screw grooves for vertical and horizontal panel mounting / Fasteners for mounting on DIN rail			
Dimensions	46.1 x 63 x 26.4 mm (without terminals)		89.1 x 99.25 x 28.5 mm (without terminals)	
Standards				
Adhered standards	EN61000-6-4; EN64000-6-2; EN61010-1			
Order data				
Article-No.	179938	179946	179954	179962

Dimensions



SIRAX BT7000/BT7050



SIRAX BT7100/BT7150



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