CAMILLE BAUER
GMC-INSTRUMENTS GROUP

COMPACT TRANSDUCERS FOR HEAVY CURRENT VARIABLES

DIN RAIL TOP-HAT RAIL-MOUNTED DEVICES FOR MEASUREMENTS IN HEAVY CURRENT SYSTEMS

SIRAX SERIES OF MEASURING TRANSDUCERS

SIRAX BT5100 ▪ SIRAX BT5200 ▪ SIRAX BT5300 ▪ SIRAX BT5400

DIN rail top-hat rail-mounted devices for measurements in heavy current systems

Camille Bauer Metrawatt offers a wide range of high-quality measuring instruments for all tasks in heavy current systems.
With our DIN rail top-hat rail-mounted devices of the SIRAX series, we complement the portfolio of unifunctional measuring transducers for a very good price-performance ratio.
These devices have the basic functionalities of a measuring transducer and are used as cost-effective standard solutions for safe acquisition of a measured variable in a one-phase or three-phase heavy current system.
They convert a heavy current variable such as current, voltage, frequency or power, respectively, into a low-voltage signal (current or voltage).
The devices feature an LCD display and may be programmed by the buttons on-site or decentrally via RS485 Modbus RTU and the CB-Configurator software. In addition, the measured values may be visualised, stored and evaluated via SMARTCOLLECT. The SIRAX transducer series is designed for universal use in industrial machines and plants of automation and energy engineering.

COMPACT

Compact and robust housing

Measuring input for a measured variable (voltage, current, frequency or power)

On-site programming via two push buttons

Password protection

COMMUNICATIVE

Clear representation of measured data via LCD display with backlit

Two configurable outputs

RS485 interface with Modbus RTU

Software for configuration, data management and visualization

RELIABLE

Accuracy class 0.2

High quality guarantees plant safety

3 years of warranty

TECHNICAL DATA

	BT5100	BT5200
Type	Voltage	Current
Connection types	One-phase	One-phase
INPUTS		
Nominal voltage [U_N]	57...500 V	–
Voltage converter primary value [PT]	57...400 kV	–
Nominal current [I_N]	–	1...5 A
Current transformer primary value [CT]	–	1...9999 A
Nominal frequency	45...65 Hz	45...65 Hz
Power consumption	< 0.6 VA	< 0.2 VA
Overload capability	1.2 x U_N permanent 2 x U_N, 10x1 s, 10 min.	1.2 x I_N permanent 10 x I_N, 5x3 s, 5 min. 50 x I_N, 1x1 s, 1 h
POWER SUPPLY	60...300 V AC/DC ±5 % 24...60 V AC/DC ±10 %	60...300 V AC/DC ±5 % 24...60 V AC/DC ±10 %
MEASUREMENT UNCERTAINTY		
Measurement uncertainty	0.2 x C	0.2 x C
Measurement uncertainty phase angle, power factor	–	–
ANALOG OUTPUTS		
Linearization	Linear / kinked	Linear / kinked
Range	0...20 mA / 4...20 mA or 0...10 V	0...20 mA / 4...20 mA or 0...10 V
COMMUNICATION	Standard RS485: Modbus/RTU	Standard RS485: Modbus/RTU
ENVIRONMENTAL CONDITIONS		
Operating temperature	0 ... 23 ... 45 °C	0 ... 23 ... 45 °C
Storage temperature	-40...70 °C	-40...70 °C
Temperature influence	± 0.2% / 10 °C	± 0.2% / 10 °C
Relative humidity	≤ 75%	≤ 75%
Operating altitude	≤ 2000 m above sea level	≤ 2000 m above sea level
SAFETY		
Protection class	II (protection insulation acc. to EN61010)	II (protection insulation acc. to EN61010)
Pollution degree	2	2
Measuring category	CATIII	CATIII
Protection according to EN 60529	IP40 housing, IP20 terminals	IP40 housing, IP20 terminals
MECHANICAL PROPERTIES		
Display	LCD	LCD
Housing material	Lexan 940 (polycarbonate)	Lexan 940 (polycarbonate)
Flammability class	V-0 acc. to UL94, self-extinguishing, non-dripping, free of halogen	V-0 acc. to UL94, self-extinguishing, non-dripping, free of halogen
Weight	approx. 400 g	approx. 400 g
Dimensions [W x H x D]	43.75 x 65.5 x 106.5 mm	43.75 x 65.5 x 106.5 mm
ORDER CODE	175267 [60...300 V AC/DC] 194985 [24...60 V AC/DC]	175283 [60...300 V AC/DC] 194993 [24...60 V AC/DC]

BT5300	BT5400
Frequency One-phase	Power One-phase 3-phase 3-wire balanced or unbalanced load 3-phase 4-wire balanced or unbalanced load
57 ... 500 V – – – 45...55 Hz, 48...52 Hz, 55...65 Hz, 45...65 Hz < 0,6 VA 1.2 x U_N permanent 2 x U_N, 10x1 s, 10 min.	100...500 V 100...692 kV 1...5 A 1...9999 A 25...60 Hz < 0,6 VA (voltage) / < 0,2 VA (current) 1.2 x U_N / I_N permanent 2 x U_N, 10x1 s, 10 min. / 10 x I_N, 5x3 s, 5 min. 50 x I_N, 1x1 s, interval 1 h
60...300 V AC/DC ±5 % 24...60 V AC/DC ±10 %	60...300 V AC/DC ±5 % 24...60 V AC/DC ±10 %
0.2 x C –	0.2 x C 0.5 x C
Linear / kinked 0...20 mA / 4...20 mA or 0...10 V	Linear / kinked Unipolar 0...20 mA / 4...20 mA or 0...10 V Bipolar -20...0...+20 mA or -10...0...+10 V
Standard RS485: Modbus/RTU	Standard RS485: Modbus/RTU
0 ... 23 ... 45 °C -40...70 °C ± 0.2% / 10 °C ≤ 75% ≤ 2000 m above sea level	0 ... 23 ... 45 °C -40...70 °C ± 0.2% / 10 °C ≤ 75% ≤ 2000 m above sea level
II (protection insulation acc. to EN61010) 2 CATIII IP40 housing, IP20 terminals	II (protection insulation acc. to EN61010) 2 CATIII IP40 housing, IP20 terminals
LCD Lexan 940 (polycarbonate) V-0 acc. to UL94, self-extinguishing, non-dripping, free of halogen approx. 400 g 43.75 x 65.5 x 106.5 mm	LCD Lexan 940 (polycarbonate) V-0 acc. to UL94, self-extinguishing, non-dripping, free of halogen approx. 400 g 78.5 x 65.5 x 106.5 mm
175308 [60...300 V AC/DC] 195001 [24...60 V AC/DC]	175316 [60...300 V AC/DC] 195009 [24...60 V AC/DC]

SIRAX BT5100

SIRAX BT5200

SIRAX BT5300

SIRAX BT5400

VISUALISATION

CLEAR REPRESENTATION OF MEASURED VALUES

The LCD display shows measured values directly on site.

- Display of input and output parameters
- High-contrast display with backlit for good reading of measurement values
- Clear and unambiguous display of measured data
- Simple navigation via two push buttons

SIMPLE ON-SITE PROGRAMMING OF MEASURED VALUES

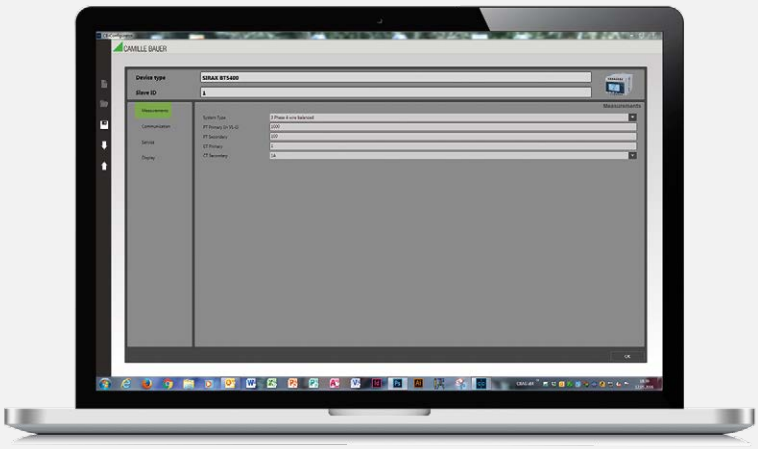
The following parameters can be set directly on site by means of the LCD display and two push buttons.

- Network configuration
- Values of current and voltage transformers
- Input and output parameters
- Communication parameter Modbus RTU
- Password protection

ADDITIONAL PROGRAMMING OF MEASURED VALUES VIA CB-CONFIGURATOR SOFTWARE

Via RS485 (Modbus RTU) interface and the CB-Configurator software the measured values may be programmed even more easily.

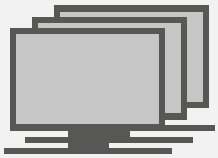
- Devices may be selected directly in the software
- Setting of input and output parameters
- Offline parameterization of measured values
- Loading and storage of configuration
- Upload of predefined configurations to several devices at the same time
- Password protection



SMARTCOLLECT® SC²

Building management system and enterprise applications

Upstream
Modbus/TCP
OPC UA
BACnet
SNMP
DNP3
IEC61850 MMS
RESTful API
DDE
etc.



Multiple users

SMARTCOLLECT SC²

Downstream
Modbus/TCP
Modbus/RTU
etc.

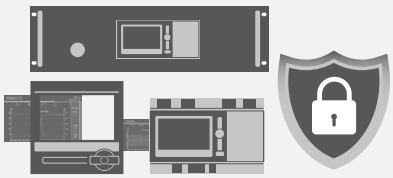
Features

Open platform

Web-based and secure including RBAC

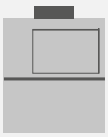
Native cloud support

Operating system agnostic (Windows, Linux, MacOS)



Cyber secure Camille Bauer devices

Third-party devices



Gas meter

Energy meter

Flow

Temperature

Water meter

To see the benefits for yourself, visit our live page:
www.scada-smartcollect.com

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