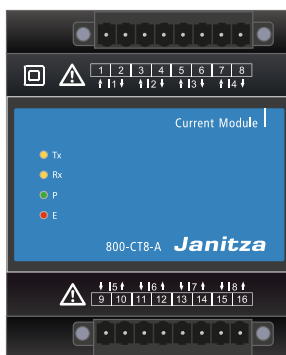


## Current measuring module 800-CT8-A

### Data sheet



## 800-CT8-A current measuring module

(Suitable for basic devices of the 800 series -  
suitable basic devices see user manual of the module)

Doc. no.: 2.053.104.2.a

Status: 11/2023

The German version is the original version of the documentation

## Subject to technical changes.

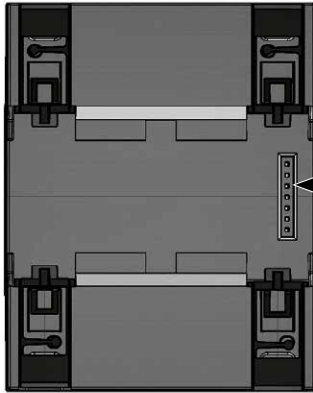
The content of our documentation has been compiled with the utmost care and is based on the latest information available to us. Nevertheless, we would like to point out that the updating of this document cannot always be performed simultaneously with the further technical development of our products. Information and specifications can be changed at any time.

Please consult [www.janitza.com](http://www.janitza.com) for information on the current version.

# Device views

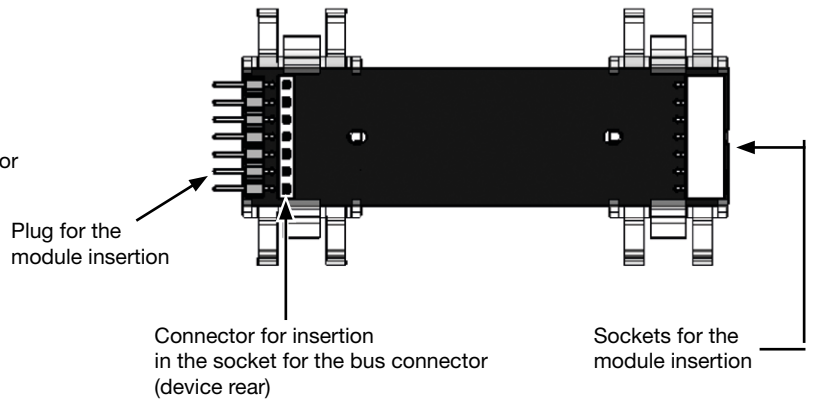
- The figures serve as illustrations and are not true to scale.
- Dimensions in mm (in).

Rear view



Socket for bus connector

Bus connector for transfer module - output

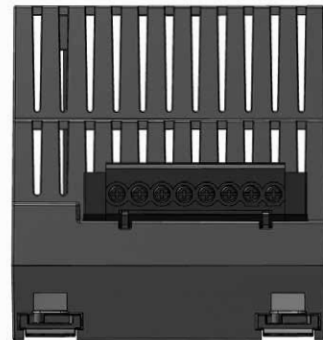


Plug for the module insertion

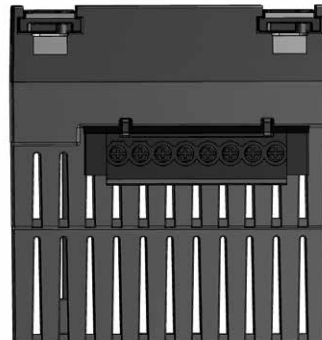
Connector for insertion in the socket for the bus connector (device rear)

Sockets for the module insertion

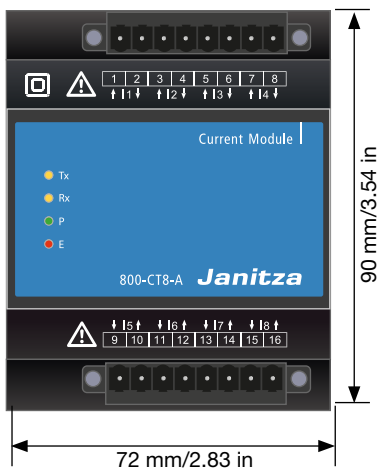
View from below



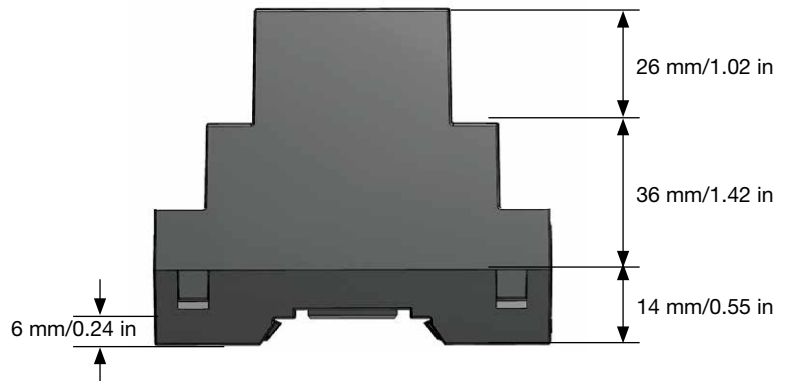
View from above



Front view



View from the left



# Technical data

General information	
Net weight	220 g (0.49 lb)
Device dimensions	B = 72 mm (w = 2.83 in), H = 90 mm (h = 3.54 in) , T = 76 mm (d = 2.99 in)
Width of the device in horizontal pitches	4 HP (1 HP = 18 mm)
Installation position	discretionary
Mounting/assembly - suitable DIN rails (35 mm / 1.38 in)	TS 35/7,5 according to EN 60715 TS 35/10 TS 35/15 x 1,5
Protection against foreign matter and water	IP20 according to EN60529
Impact resistance	IK07 according to IEC 62262

Transport and storage	
The following information applies to devices which are transported and stored in the original packaging.	
Free fall	1 m (39.37 in)
Temperature	K55: -25 °C (-13 °F) to +70 °C (158 °F)
Relative humidity	0 to 95% RH at 25 °C (77 °F) non-condensing

Ambient conditions during operation	
The module · only operate with suitable basic devices (see „Tab. suitable basic devices“ in the module user manual). · must be used in a weather-protected, stationary application. · fulfills the operating conditions according to DIN IEC 60721-3-3. · possesses protection class II according to IEC 60536 (VDE 0106, Part 1), a ground wire connection is not required!	
Measurement temperature range	-10 °C (14 °F).. +55 °C (131 °F)
Relative humidity	5 to 95% at 25 °C (77 °F) non-condensing
Pollution degree	2
Ventilation	No external ventilation required.

Current measurement	
Rated current for the current sensors (current transformers)	5 A
Kanäle	8 (2x4) · 2 systems - L1, L2, L3, N · Individual channels
Metering range	0 .. 6 A <sub>rms</sub>
Crest factor	2 (based to 6 Arms)
Overload for 1 s	120 A (sinusoidal)
Resolution	0.1 mA (color graphic display 0.01A)
Overvoltage category	300 V CATII
Rated surge voltage	2.5 kV
Power consumption	approx. 0.2 VA (R <sub>i</sub> = 5 mΩ)
Sampling frequency	8.3 kHz
Frequency of the basic oscillation	40 Hz .. 70 Hz
Harmonics	1. .. 25. (only odd)

Interface and power supply	
JanBus (proprietary)	· Via bus connector.
Supply voltage (via JanBus interface)	24 V

Connecting capacity of the terminals	
Connectible conductors. Only connect one conductor per terminal point!	
Single core, multi-core, fine-stranded	0.2 - 2.5 mm <sup>2</sup> , AWG 26-12
Wire ferrules (non-insulated) - Recommended strip length	0.2 - 2.5 mm <sup>2</sup> , AWG 26-12 - 10 mm (0.39 in)
Wire ferrules (insulated) * - Recommended strip length **	0.2 - 2.5 mm <sup>2</sup> , AWG 26-12 - 12 mm ( $\leq 1.5$ mm <sup>2</sup> ), 10 mm ( $> 1.5$ mm <sup>2</sup> ) / 0.47 in ( $\leq 1.5$ mm <sup>2</sup> ), 0.39 in ( $> 1.5$ mm <sup>2</sup> )
Wire ferrules: Length of the contact sleeve **	8 - 12 mm (0.31 - 0.47 in)
Screw flange tightening torque	0.2 Nm (1.77 lbf in)

\* ... Applies to ferrules with a maximum outer diameter of the plastic collar up to 4.5 mm (0.18 in).

\*\*.. Depending on the type of ferrule used (ferrule manufacturer).

# Function characteristics

(Only valid in conjunction with the UMG 801 as a basic device!)

Function Symbol	Symbol	Accuracy class - 5 A rated current	Metering range	Display range
Total active power	P	0.5 (IEC61557-12)	0 .. 12.6 kW	0 .. 999 GW
Total reactive power	QA, Qv	1 (IEC61557-12)	0..16.6 kvar	0 .. 999 Gvar
Total apparent power	SA, Sv	0.5 (IEC61557-12)	0 .. 12.6 kVA	0 .. 999 GVA
Total active energy	Ea	0.5 (IEC61557-12) 0.5S (IEC62053-22)	0 .. 999 GWh	0 .. 999 GWh
Total reactive energy	ErA, ErV	1 (IEC61557-12)	0 .. 999 Gvarh	0 .. 999 Gvarh
Total apparent energy	EapA, EapV	0.5 (IEC61557-12)	0 .. 999 GVAh	0 .. 999 GVAh
Phase current	I	0.5 (IEC61557-12)	0 .. 7 Arms	0 .. 999 kA
Calculated neutral conductor current	INc	1.0 (IEC61557-12)	0.03 .. 25 A	0.03 .. 999 kA
Power factor	PFA, PFV	1 (IEC61557-12)	0.00 .. 1.00	0.00 .. 1.00
Current harmonics	Ih	KI. 1 (IEC61000-4-7)	1. ... 25. (only odd)	0 A .. 999 kA
THD of the current	THD <sub>I</sub>	1.0 (IEC61557-12)	0 .. 999 %	0 .. 999 %

## **INFORMATION**

Detailed information on the device functions and data can be found in the usage information, which is enclosed with the device or is available as a download at [www.janitza.com](http://www.janitza.com)!

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