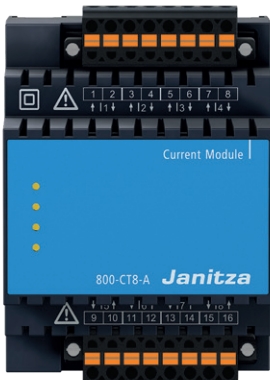


## Current measuring module 800-CT8-A Transfer modules 800-CON

### Data sheet

Current measuring module  
800-CT8-A



Transfer modules  
800-CON (output and input)



## Modules for UMG 801

Doc. no.: 2.053.013.1.f

Status: 07/2021

The German version is the original version of the documentation

## Subject to technical changes.

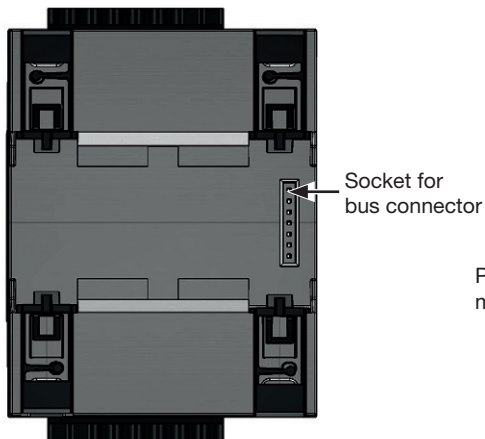
The content of our documentation has been compiled with the utmost care and is based on the latest information available to us. Nevertheless, we would like to point out that the updating of this document cannot always be performed simultaneously with the further technical development of our products.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

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

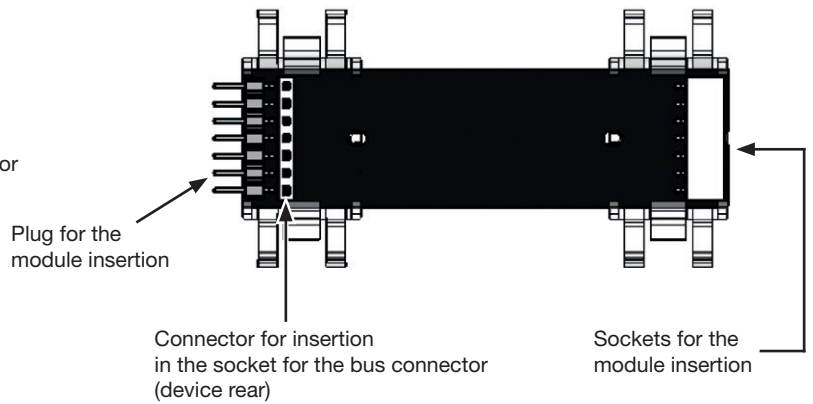
# DEVICE VIEWS - CURRENT MEASURING MODULE 800-CT8-A

· The figures serve as illustrations and are not true to scale.

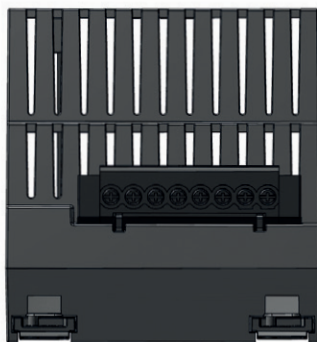
Rear view



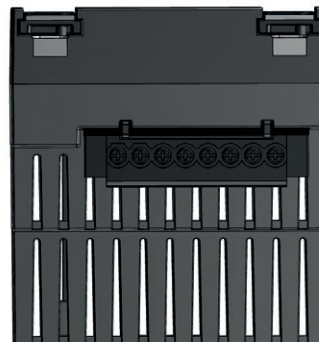
Bus connector for transfer module - output



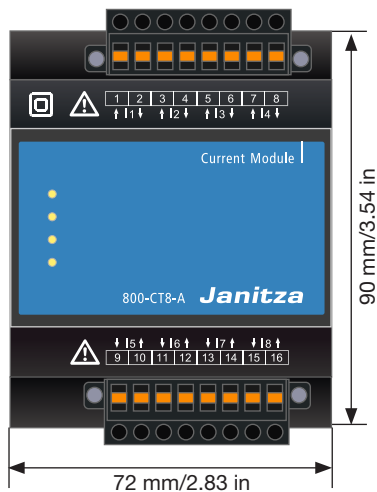
View from below



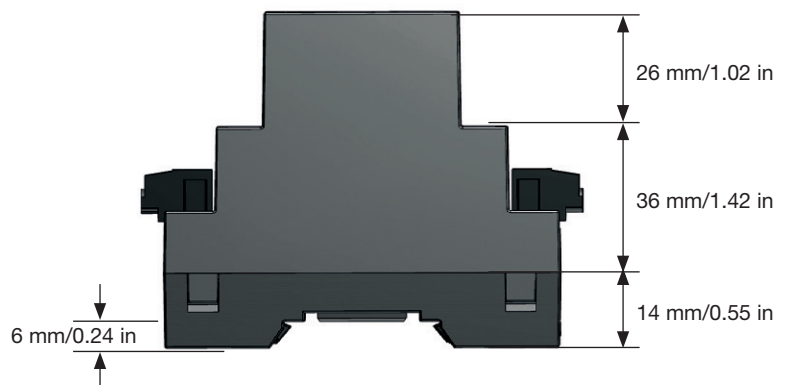
View from above



Front view



View from the left



# TECHNICAL DATA - MODULE 800-CT8-A

General information	
Net weight	Approx. 220 g (0.49 lb)
Device dimensions	approx. w = 72 mm (2.83 in), h = 90 mm (3.54 in), d = 76 mm (2.99 in)
Installation position	discretionary
Mounting/assembly - suitable DIN rails (35 mm)	<ul style="list-style-type: none"> <li>· TS 35/7.5 according to EN 60715</li> <li>· TS 35/10</li> <li>· TS 35/15 x 1.5</li> </ul>
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	-25 °C (-13 °F) up to +70 °C (158 °F)
Relative humidity (non-condensing)	0 to 95% RH at 25 °C (77 °F)

Ambient conditions during operation	
The device <ul style="list-style-type: none"> <li>• must be used in a weather-protected, stationary application.</li> <li>• fulfills the operating conditions according to DIN IEC 60721-3-3.</li> <li>• possesses protection class II according to IEC 60536 (VDE 0106, Part 1), a ground wire connection is not required!</li> </ul>	
Measurement temperature range	-10 °C (14 °F).. +55 °C (131 °F)
Relative humidity	5 to 95% at 25 °C (77 °F) without condensation
Pollution degree	2
Ventilation	No external ventilation required.
Protection against foreign bodies and water	IP20 according to EN60529

Interface and energy supply	
JanBus (proprietary)	Via bus connector, max. bus length 100 m

<b>Current measurement module 800-CT8-A</b>	
Rated current	5 A
Channels	2 systems (L1, L2, L3, N) Individual channels
Metering range	0.005 .. 6 A
Crest factor	2 (based on 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 ( $R_i = 5 \text{ m}\Omega$ )
Sampling frequency	8.3 kHz
Frequency of the basic oscillation	40 Hz .. 70 Hz
Harmonics	1 .. 9. (only odd)

<b>Terminal connection capacity (current measurement)</b>	
Connectable conductors. Only one conductor can be connected per terminal.	
Single core, multi-core, fine-stranded	0.2 - 2.5 mm <sup>2</sup> , AWG 26-12
Cable end sleeve (not insulated) - recommended stripping length	0.2 - 2.5 mm <sup>2</sup> , AWG 26-12 10 mm (0.3937 in)
Cable end sleeve (insulated) - recommended stripping length	0.2 - 2.5 mm <sup>2</sup> , AWG 26-12 13 mm (0.5118 in)
Tightening torque screw flange	0.2 Nm (1.77 lbf in)
Cable end sleeve Length of the contact sleeve	10 mm (0.3937 in)

# CURRENT MODULE 800-CT8-A FUNCTION CHARACTERISTICS

(ONLY VALID IN CONNECTION WITH UMG 801!)

Function	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 .. 12.6kVA	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	Cl. 1 (IEC61000-4-7)	1.. 9. (only odd)	0 A .. 999 kA
THD of the current	THDi	1.0 (IEC61557-12)	0 .. 999%	0 .. 999 %

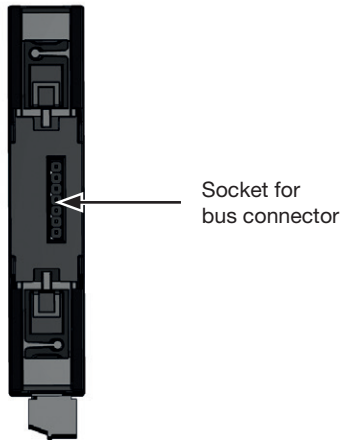
## INFORMATION

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.de](http://www.janitza.de)!

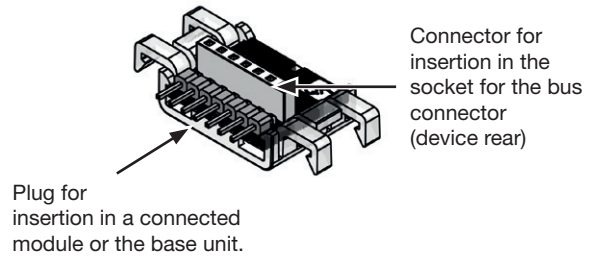
# DEVICE VIEWS - TRANSFER MODULE 800-CON

The figures serve as illustrations and are not true to scale.  
 The transfer modules (800-CON) provided in the **set of 2** can each be used as an output or an input.

Rear view



Bus connector for transfer module - **output**



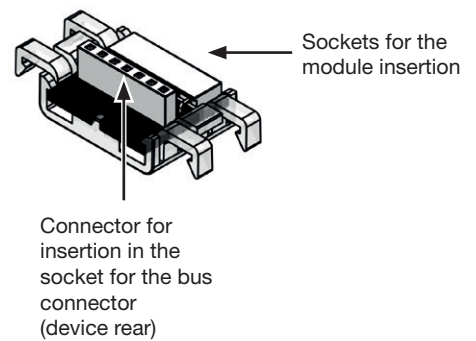
View from below



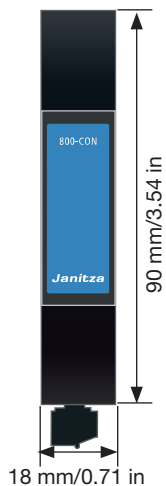
View from above



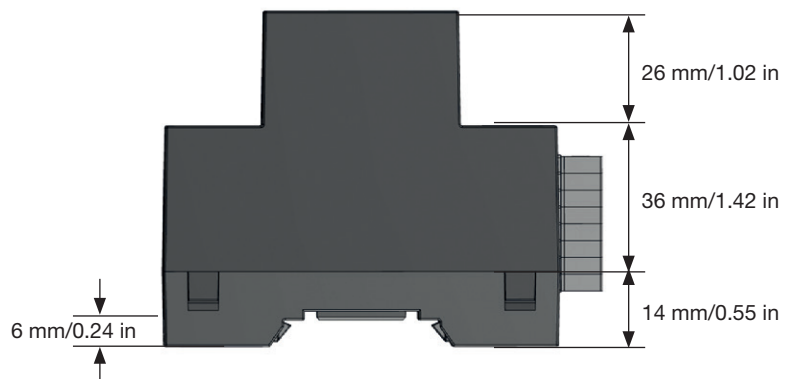
Bus connector for transfer module - **input**



Front view



View from the left





# TECHNICAL DATA - MODULE 800-CON

General information	
Net weight (with plug terminals)	Approx. 55 g (0.12 lb) - 1 device
Device dimensions	approx. w = 18 mm (0.71 in), h = 90 mm (3.54 in), d = 76 mm (2.99 in)
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
Impact resistance	IK07 according to IEC 62262

Transport and storage	
Free fall	1 m (39.37 in)
Temperature	K55 -25 °C (-13 °F) up to +70 °C (158 °F)
Relative humidity	5 to 95% at 25 °C (77 °F) without condensation

Ambient conditions during operation	
The device <ul style="list-style-type: none"> <li>• must be used in a weather-protected, stationary application.</li> <li>• fulfills the operating conditions according to DIN IEC 60721-3-3.</li> <li>• possesses protection class II according to IEC 60536 (VDE 0106, Part 1), a ground wire connection is not required!</li> </ul>	
Measurement temperature range	-10 °C (14 °F) .. +55 °C (131 °F)
Relative humidity	5 to 95% at 25 °C (77 °F) without condensation
Pollution degree	2
Ventilation	No external ventilation required.
Protection against foreign bodies and water	IP20 according to EN60529

Interface	
JanBus (proprietary)	Via bus connector, max. bus length 100 m

Terminal connection capacity	
Connectable conductors. Only one conductor can be connected per terminal.	
Single core, multi-core, fine-stranded	0.2 - 1.5 mm <sup>2</sup> , AWG 24-16
Cable end sleeve (not insulated)	0.2 - 1.5 mm <sup>2</sup> , AWG 26-16
Cable end sleeve (insulated)	0.2 - 1 mm <sup>2</sup> , AWG 26-18
Tightening torque	0.2 - 0.25 Nm (1.77 - 2.21 lbf in)
Stripping length	7 mm (0.2756 in)





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