

Data sheet | Item number: 789-621

Current signal conditioner; Current input signal: 140 ADC; Modbus RTU;

Supply voltage: 24 VDC; Module width: 35 mm

www.wago.com/789-621



789-621

Pin	Function
1	Ub
2	n.c.
3	n.c.
4	A (Data+)
5	B (Data-)
6	n.c.
7	n.c.
8	GND

Communication Description:

Modbus® Function	Read Holding Registers (0x03)
Address of Measured Value	0x0004
Data Type Measurement	Integer

Error Numbers:

Id	Description
01	Illegal Function
03	Illegal Data
101	Overflow (Current > +83 A)
102	Underflow (Current < -3 A)

DIP Switch Adjustability = ON

Adress	DIP Switch 2	DIP Switch 3	DIP Switch 4	DIP Switch 5	DIP Switch 6	Terminating Resistor	DIP Switch 1
1						150 Ohm	•
2							
3							
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NOTICE:
Only set the Modbus® Adress in the OFF state.

Item description

Short description:

WAGO's intelligent current sensor monitors solar plants or inverters for DC measurements within a large current measurement range. The sensor is mounted on DIN-35 rail.

Data

Technical data

Input

Input signal type	Current
Input signal (current)	DC 0 ... 140 A
Resolution [bit]	15 bits

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG
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Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.

Output Modbus

Number of devices (max.)	32
Connector	RJ-45
Bus length (max.)	1200 m
Terminating resistor	150 Ω (can be activated via DIP switch 1)

Communication

Communication	Modbus® RTU
Interface	RS-485
Transmission channels	Half duplex; 8-bit data; 1 stop bit
Number of devices (max.)	32
Baud rate	19.2 kBd
Parity	Even
Terminating resistor	150 Ω (can be activated via DIP switch 1)

Measurement Error

Transmission error (typ.)	$\leq 0.5\%$ of upper-range value (0 ... 80 A; at room temperature); $\leq 1\%$ of upper-range value (80 ... 140 A; at room temperature)
Temperature coefficient	$\leq 0.05\%/K$ (-20 ... 60 °C); $\leq 0.1\%/K$ (60 ... 70 °C)

Supply

Nominal supply voltage U_S	DC 24 V
Supply voltage range	12 ... 34 VDC
Current consumption at nominal supply voltage	≤ 8 mA

Safety and protection

Protection type	IP20
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Connection data

Feedthrough for measurement conductor	\varnothing 15 mm
Connector	RJ-45

Physical data

Width	35 mm / 1.378 inches
Height	90 mm / 3.543 inches

Subject to changes. Please also observe the further product documentation!



Depth from upper-edge of DIN-rail	55 mm / 2.165 inches
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Mechanical Data

Mounting type	DIN-35 rail
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Material Data

Fire load	0.283 MJ
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Weight	77.2 g
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Environmental requirements

Ambient temperature (operation)	-20 ... +70 °C
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Ambient temperature (storage)	-40 ... +85 °C
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Standards and specifications

Conformity marking	CE
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EMC immunity to interference	EN 61000-6-2
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EMC emission of interference	EN 61000-6-4
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Standards/specifications	DIN EN 50178
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Commercial data

Product Group	6 (INTERFACE ELECTRONIC)
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eCl@ss 10.0	27-21-01-23
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eCl@ss 9.0	27-21-01-23
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ETIM 8.0	EC002475
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ETIM 7.0	EC002475
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PU (SPU)	1 pcs
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Packaging type	box
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Country of origin	DE
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GTIN	4050821204565
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Customs tariff number	85437090300
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Environmental Product Compliance

CAS-No.	693-98-1
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7439-92-1

79-94-7

REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol
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	2-methylimidazole Lead
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c) 7(a) 7(c)-I
SCIP notification number (Austria)	77c8081c-6149-43ad-b28b-7c56601f9766
SCIP notification number (Belgium)	e3396f50-a4cf-4f77-a7d7-25320edc160f
SCIP notification number (Bulgaria)	741bfe5a-e1c6-4324-89fd-3f11dde19a58
SCIP notification number (Czech Republic)	4195e3e5-51cf-4daf-a440-fc593724f950
SCIP notification number (Denmark)	da3beef3-994d-4204-affc-190d42a7f58f
SCIP notification number (Finland)	60059775-336d-407c-a2b6-82a275ee0d6e
SCIP notification number (France)	712103bd-a867-4175-a487-ea4bc4b2ad77
SCIP notification number (Germany)	3d38c7f1-e498-4a7c-aa7a-23e6c2a268f8
SCIP notification number (Hungary)	0239df3b-76a4-4702-903d-cf2571aabe95
SCIP notification number (Italy)	d1aa1855-d18e-4153-b74c-fb4a70cbdeb4
SCIP notification number (Netherlands)	87ac9cb5-b0f9-4ac2-b4c8-225d47d5e696
SCIP notification number (Poland)	2eb05be4-e438-4d5e-8d45-22e2e6b2cac4
SCIP notification number (Romania)	54d5e54c-bbb6-43f0-bbaa-877e88f58320
SCIP notification number (Sweden)	6a04aec0-1e65-4e6e-96b8-b63527d4f3f7

Approvals / Certificates

General approvals

Logo	Approval	Additional Approval Text	Certificate name
	EAC Brjansker Zertifizierungsstelle	TP TC 020/2011	EAC RU C-DE.AM02. B.00087 /19

Optional accessories

Cables and pluggable connectors

Connector plug



Item no.: 750-975

ETHERNET RJ-45 connector, IP20; ETHERNET 10/100 Mbit/s; for field assembly

www.wago.com/750-975

Interface module

Interface module

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Item no.: 289-965

Interface module; 2xRJ-45; PCB terminal blocks, double-row; in mounting carrier

www.wago.com/289-965



Item no.: 289-966

Interface module; 2xRJ-45; PCB terminal blocks, double-row; in mounting carrier; with shield connection

www.wago.com/289-966

Downloads

Documentation

Bid Text

789-621 X81 - Datei	2019 Jul 18	xml 5.1 kB	Download
789-621 docx - Datei	2019 Jul 18	docx 16.4 kB	Download

Additional Information

Disposal and Recycling Electrical and electronic equipment, Batteries, Packaging	V 1.1.0 2022 Aug 18	pdf 2.2 MB	Download
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CAD/CAE-Data

CAE data

EPLAN Data Portal 789-621		URL	Download
WSCAD Universe 789-621		URL	Download
ZUKEN Portal 789-621		URL	Download

CAD data

2D/3D Models 789-621		URL	Download
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 789-621		URL	Download
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Installation Notes

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