

Data sheet | Item number: 789-620

Current signal conditioner; Current input signal: 80 ADC; Modbus RTU;

Supply voltage: 24 VDC

www.wago.com/789-620



789-620

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

Address	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							
4							
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NOTICE:
Only set the Modbus® address 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 ... 80 A
Resolution [bit]	15 bits

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

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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.)	≤ 0.5 % of upper-range value (at room temperature)
Temperature coefficient	≤ 0.01 %/K

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	15 mm
Connector	RJ-45

Physical data

Width	35 mm / 1.378 inches
Height	90 mm / 3.543 inches
Depth from upper-edge of DIN-rail	55 mm / 2.165 inches

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



Mechanical Data

Mounting type	DIN-35 rail
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Material Data

Fire load	0.283 MJ
Weight	80.2 g

Environmental requirements

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

Standards and specifications

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

Commercial data

Product Group	6 (INTERFACE ELECTRONIC)
eCl@ss 10.0	27-21-01-23
eCl@ss 9.0	27-21-01-23
ETIM 8.0	EC002475
ETIM 7.0	EC002475
PU (SPU)	1 pcs
Packaging type	box
Country of origin	DE
GTIN	4045454967604
Customs tariff number	85437090300


Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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Approvals / Certificates

General approvals

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

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

Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
	DNV DNV Germany GmbH	DNV-CG-0339, Aug. 2021	TAA00001D1
	PRS Polski Rejestr Statków	-	TE/2186/880590/18

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



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

789-620	2019 Jul 18	xml	Download
X81 - Datei		4.9 kB	

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



789-620	2019 Jul 18	docx 16.3 kB	Download
docx - Datei			

Additional Information

Disposal and Recycling	V 1.1.0	pdf	Download
Electrical and electronic equipment, Batteries, Packaging	2022 Aug 18	2.2 MB	

Application Notes

Application note, other

Anbindung eines Stromsensors 789-620 an ein Perspecto Bediengerät (a117001)	1.0.0	zip	Download
Dieses Anleitung beschreibt eine mögliche Anbindung der Stromsensoren 789-620 an ein Perspecto Bediengerät über eine serielle Verbindung unter Verwendung des Modbus-Protokolls.	2011 Aug 22	1.6 MB	

Application Note CoDeSys 2.3

Anbindung eines Stromsensors 789-620 an das WAGO-I/O-SYSTEM (a117000)	1.0.0	zip	Download
Dieses Anleitung beschreibt eine mögliche Anbindung der Stromsensoren 789-620 an das WAGO-I/O-System über eine serielle Verbindung unter Verwendung des Modbus-Protokolls.	2011 Aug 22	245.1 kB	

CAD/CAE-Data

CAD data

2D/3D Models 789-620	URL	Download
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CAE data

EPLAN Data Portal 789-620	URL	Download
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WSCAD Universe 789-620	URL	Download
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ZUKEN Portal 789-620	URL	Download
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 789-620	URL	Download
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Installation Notes

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