

WAS1 CMA LP 1/5/10A AC**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Output current loop fed AC current monitoring components WAS/WAZ1 CMA LP.

They can measure single-phase 50/60 Hz AC currents of up to 10 A using the Root Mean Square (RMS) method on the input side. They can also be switched between three ranges. No external power supply is used; the supply is only via the 4...20 mA current loop on the output side.

The input and output circuits are securely isolated with 4 kV.

The monitoring components come in a 17.5-mm-wide WAVEBOX housing. These devices can be used in many process automation applications because they are not dependent on an external power supply.

International approvals (such as ATEX Zone 2 and UL C1D2) also permit usage in explosion-risk zones.

General ordering data

Version	Current monitoring, Input current: 0...1 A AC/ 0...5 A AC/ 0...10 A AC, Output : 4-20 mA, (loop powered)
Order No.	8528650000
Type	WAS1 CMA LP 1/5/10A AC
GTIN (EAN)	4032248160426
Qty.	1 pc(s).
Delivery status	This article will no longer be available in the future.
Available until	2023-12-30
Alternative product	2044850000

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Technical data

Dimensions and weights

Depth	112.4 mm	Depth (inches)	4.425 inch
Width	22.5 mm	Width (inches)	0.886 inch
Length	72 mm	Length (inches)	2.835 inch
Net weight	100.7 g		

Temperatures

Storage temperature	-20 °C...70 °C	Operating temperature	0 °C...70 °C
Humidity at operating temperature	0...95 % (no condensation)		

Probability of failure

SIL in compliance with IEC 61508	None	MTTF	564 a
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Input

Input current	0...1 A AC/ 0...5 A AC/ 0...10 A AC	Input frequency	50...60Hz
Number of inputs	1		

Output

Load impedance current	≤ 600 Ω	Number of outputs	1
Offset current	max. 100 µA	Output current	4...20 mA (current loop)
Output signal limit	Approx. 24 mA		

Output (digital)

Max. switching voltage, AC	0 V	Rated switching current	0.1 A
Status indicator	LED ON: OK; LED flashing: signal out of range; LED OFF: Error		

General data

Accuracy	0.5 % FSR	Configuration	DIP switch
Galvanic isolation	2-way isolator	Protection degree	IP20
Rail	TS 35	Step response time	typ. 700 ms
Temperature coefficient	≤ 200 ppm/K	Voltage supply	13...30 V DC, via output current loop

Insulation coordination

EMC standards	EN 55011, EN 61000-6	Galvanic isolation	2-way isolator
Impulse withstand voltage	6 kV	Insulation voltage	4 kV _{eff} / 5 s
Pollution severity	2	Rated voltage	300 V
Surge voltage category	III		

Connection data

Wire connection method	Screw connection	Type of connection	Screw connection
Clamping range, rated connection	2.5 mm ²	Clamping range, min.	0.5 mm ²
Clamping range, max.	2.5 mm ²		

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www.weidmueller.com**Technical data****Classifications**

ETIM 6.0	EC002653	ETIM 7.0	EC002653
ETIM 8.0	EC002653	ETIM 9.0	EC002653
ECLASS 9.0	27-21-01-20	ECLASS 9.1	27-21-01-20
ECLASS 10.0	27-21-01-20	ECLASS 11.0	27-21-01-20
ECLASS 12.0	27-21-01-20	ECLASS 13.0	27-21-01-20
ECLASS 14.0	27-21-01-20		

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Technical data

Tender specification sheets

Long specification

Monitoring component
for AC currents up to
10A with 4...20 mA loop
feed
and electrical isolation
Current monitoring
component in 22.5 mm
width for recording 50/
60 Hz AC currents
0...1 A / 0...5 A / 0...10
A. Input range can be
selected using DIP
switches.
Power is fed to the com-
ponent via the 4...20
mA current loop on the
output side.
The input and output
circuits have 6 kV of
electrical isolation.

Add-on housing for
TS35 rail mounting
Dimensions: L/W/H 72/
22.5/ 92.4 mm
Screw connection /
Nominal cross-section
2.5 mm²
Protection degree: IP
20
Input 0...1
A / 0...5 A / 0...10 A AC
switchable 50 /
60 Hz
Voltage of measuring
circuit 250 V AC
Out-
put
4...20 mA current loop
Load resistance <
600 Ohm Strom
>1 kOhm / voltage
Transmission er-
ror < 0,5% v. E.
Temperature coeffi-
cient 200 ppm / K
Step response time typ.
700 ms
Auxiliary pow-
er
via output-side current
loop
Ambient
temperature range 0
°C...+50 °C

Secure isola-
tion EN 50178,
2-way isolation up to 6
kV
Test volt-
age 4 kV
input against output
Rated
voltage 300 V AC/DC at
overvoltage category III
and pollution degree 2
Approvals cULus

Short specification

Monitoring component
for AC currents up to
10A with 4...20 mA loop
feed
and electrical isolation
Current monitoring
component in 22.5 mm
width for recording 50/
60 Hz AC currents
0...1 A / 0...5 A / 0...10
A. Input range can be
selected using DIP
switches.
Power is fed to the com-
ponent via the 4...20
mA current loop on the

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Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	7a, 7cl
REACH SVHC	Lead 7439-92-1 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol 119-47-1
SCIP	f8333314-0c66-4444-aa47-78252861a7fb

Important note

Product information	This product will soon be replaced by a new product. Please do not use with new systems. Please contact our technical support.
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Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate no. (cULus)	E141197

Downloads

Approval/Certificate/Document of Conformity	Application notes – Declaration of Conformity
Engineering Data	CAD data – STEP
Product Change Notification	20220218 Technical change - WAVE series' signal conditioners WS WZ
User Documentation	Device description – Instruction sheet
Catalogues	Catalogues in PDF-format
Brochures	

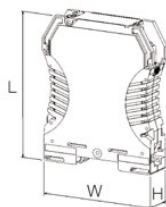
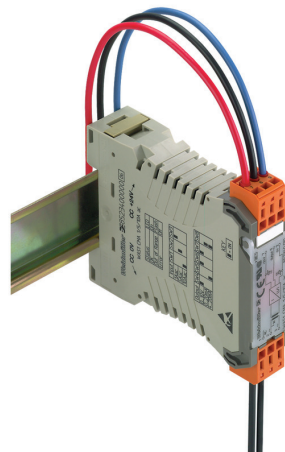
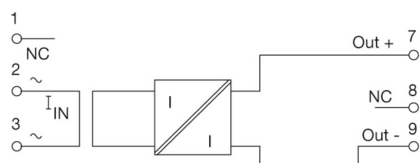
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Drawings

Electric symbol



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www.weidmueller.com**Accessories****2.5 mm²**

2.5
mm²

The plug-in cross-connections feature easy handling and quick installation. This saves a great deal of time during installation in comparison with screwed solutions.

General ordering data

Type	ZQV 2.5N/2 BL	Version
Order No.	1717990000	W-Series, Cross-connector, 24 A
GTIN (EAN)	4008190349295	
Qty.	60 pc(s).	
Type	ZQV 2.5N/2 SW	Version
Order No.	1718080000	W-Series, Cross-connector, 24 A
GTIN (EAN)	4008190349301	
Qty.	60 pc(s).	
Type	ZQV 2.5N/2 RT	Version
Order No.	1717900000	W-Series, Cross-connector, 24 A
GTIN (EAN)	4008190349288	
Qty.	60 pc(s).	
Type	ZQV 2.5N/2 GE	Version
Order No.	1693800000	W-Series, Cross-connector, 24 A
GTIN (EAN)	4008190883621	
Qty.	60 pc(s).	

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Accessories

Blank



WS markers are the perfect match for the W-series connectors. Thanks to their system compatibility, the WS tags can also be used with the I-series and the Z-series. The large marking surfaces do not only permit long character strings but also multi-line text. WS markers are ideal for labels with long, customised character strings. Thanks to the proven MultiCard format, printing with PrintJet CONNECT oder/or Plotter is possible.

- Can be fitted in strips or individually
- Markers in proven MultiCard format

For custom printing: Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

General ordering data

Type	WS 10/5 MC NE WS	Version
Order No.	1635000000	WS, Terminal marker, 10 x 5 mm, Pitch in mm (P): 5.00 Weidmueller,
GTIN (EAN)	4008190261948	Allen-Bradley, white
Qty.	720 pc(s).	