

WAVESERIES Signal Conditioners DC/DC CCC LP with Voltage Supply on the Output Side

Type	Cat. No.
Screw-type connection	
WAS4 CCC DC 4 ... 20 mA/4 ... 20 mA	8444980000
WAS4 CCC DC 4 ... 20 mA/0 ... 20 mA	8445010000
WAS4 CVC DC 4 ... 20 mA/0 ... 10 V	8445040000
Tension clamp connection	
WAZ4 CCC DC 4 ... 20 mA/4 ... 20 mA	8444990000
WAZ4 CCC DC 4 ... 20 mA/0 ... 20 mA	8445020000
WAZ4 CVC DC 4 ... 20 mA/0 ... 10 V	8445050000

Read these instructions before using the product and retain for future information.

1 General instructions

The WAVESERIES signal conditioner DC/DC CCC LP with voltage supply on the output side should only be installed by qualified staff and be powered up following professional installation.

2 Application

The WAVESERIES signal conditioner DC/DC CCC LP with voltage supply on the output side converts feedback-free input signals from the field into a standardised output signal. The output circuit is supplied with voltage and is galvanically isolated.

3 Mounting and dismounting

Warning!! Mounting and dismounting may only be carried out when the power supply has been disconnected. Failure to observe will lead to considerable damage!

3.1 Mounting onto TS 35 DIN rails

(s. Fig. 1)

3.2 Pluggable electronic components for range alteration (depending on model)

(s. Fig. 2)

1. Remove connector, (depending on model either screw-type or tension clamp).
2. Press locking clips on both sides of the enclosure.
3. Pull out the circuit board.

Warning!! The circuit board can only be inserted in one position.
The connectors have been coded by the manufacturer, ensuring that they cannot be reversed.

3.3 Pluggable cross-connections for voltage supply

(s. Fig. 3)

A maximum feed through of 2 A is possible.

If a signal conditioner is accidentally rotated through 180°, the cross-connection cannot be inserted.

3.4 Labelling possibilities

(s. Fig. 4)

WS 10 connector markers can be used to label module.

4 Electrical connection

(s. Fig. 5)

Cat. No. 8444980000

(s. Fig. 6)

Cat. No. 8445040000

5 Dimensions

(s. Fig. 7)

6 Notes on CE labelling of WAVESERIES modules

WAVESERIES modules, that carry CE-labelling, fulfil the requirements of the EU-Guidelines 89/336/EU "electromagnetic compatibility" and the therein listed harmonised European Norms (EN).

The declarations of conformity are, in accordance with the above-mentioned EU-Guideline, Article 10, held at the following address for the relevant authorities:

Weidmüller Interface GmbH & Co.
Postfach 3030
D-32720 Detmold

7 Technical data

Input

Input signal

4 ... 20 mA

Input voltage, max.

7 V

Input current, max.

25 mA

Output

Output signal

**0 ... 20 mA or 4 ... 20 mA
or 0 ... 10 V**

Load resistance

$\leq 500 \Omega$ (0 ... 20 mA, 4 ... 20 mA)
 $\geq 1 \text{ k}\Omega$ (0 ... 10 V)

Accuracy by $T_u = 23 \text{ }^\circ\text{C}$

$< 0.2 \%$ from end value

Temperature coefficient

$\leq 250 \text{ ppm/K}$ from measured value

Step response time

$\leq 30 \text{ ms}$ (typ. 20 ms)

Cut-off frequency (-3 dB)

$\geq 15 \text{ Hz}$ (typ. 20 Hz)

Coordination of Insulation according to EN 50178, 04.98

Rated Voltage	300 V
Rated surge Voltage	4 kV
Overtoltage category	III
Contamination class	2
Clearance and creepage distances	≥ 3 mm

Isolation voltage

Voltage endurance

Input/output/to mounting rail 4 kV_{eff}/1 min

Connection data

Connection	BLZ/SL
Insulating stripping length	8 ± 0.5 mm
Solid core	0.5 ... 2.5 mm ²
Flexible core	0.5 ... 2.5 mm ²
With ferrules	0.5 ... 1.5 mm ²

EMC specification

according to EN 55011,
class B, group 1
according to EN 50081-1
according to EN 50082-2

General

Voltage supply

24 Vdc \pm 20 % (19.2 ... 28.8 Vdc)

Current consumption

< 32 mA at $I_{out} = 20$ mA
(0 ... 20 mA, 4 ... 20 mA)
< 20 mA at $I_{out} = 10$ mA
(0 ... 10 V)

Cross-connection, upper

24 V, max. 2 A

Cross-connection, lower

0 V, max. 2 A

Operating temperature

0 ... +55 °C

Storage temperature

-20 ...+85 °C

Approvals

CE, CSA, UL

8 Accessories

Cross-connection ZQV 2,5N/2 black	1718080000
Cross-connection ZQV 2,5N/2 red	1717900000
Cross-connection ZQV 2,5N/2 blue	1717990000
Cross-connection ZQV 2,5N/2 yellow	1693800000

Terminal connector, 2-pole for screw-type connection
BLZ 5,08/2 SN OR

- orange	1526460000
- black	1526410000

Terminal connector, 2-pole for tension clamp connection
BLZF 5,08/2

- orange	1707460000
- black	1707690000

Connector markers

WS 10/5 Multicard for plotter labelling	1635010000
WS 10/5 blank	1060860000

In the interest of protecting the environment, return any spare operating instructions to your local stockist for re-use.

Printed on chlorine-free bleached paper.