

DC/DC Signal Conditioners

NEW

WAVEANALOG DC/DC

- 3-way-isolation
- Analog signal conditioning
- Indication LED
- Cross-connectable voltage supply via cross-connectors

VCC

0...10 V/0...20 mA



VCC

0...10 V/4...20 mA



VVC

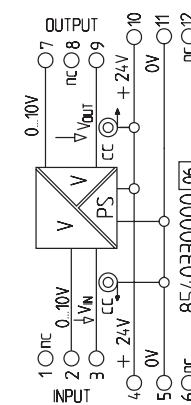
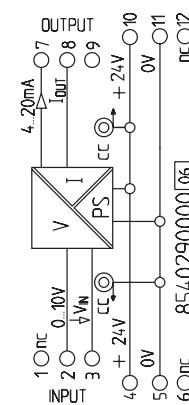
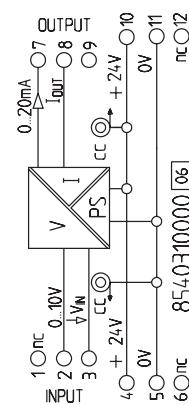
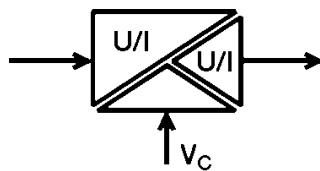
0...10 V/0...10 V



Approvals:



Block diagram



Ordering data

Type	Part No.	Type	Part No.	Type	Part No.
WAS5 VCC	8540310000	WAS5 VCC	8540290000	WAS5 VVC	8540330000
WAZ5 VCC	8540320000	WAZ5 VCC	8540300000	WAZ5 VVC	8540340000
0...10 V/0...20 mA		0...10 V/4...20 mA		0...10 V/0...10 V	

Technical data*

Input signal	0...10 V	0...10 V	0...10 V
Input voltage max.	15 V	15 V	15 V
Input resistance	typ. 100 kΩ	typ. 100 kΩ	typ. 100 kΩ
Output signal	0...20 mA	4...20 mA	0...10 V
Load resistance	≤ 600 Ω	≤ 600 Ω	≥ 1 kΩ
Accuracy at Tu=23°C	0.2%	0.2%	0.2%
Temperature coefficient	± 250 ppm/K	± 250 ppm/K	± 250 ppm/K
Response time	≤ 45 ms	≤ 45 ms	≤ 45 ms
Cut-off frequency (-3 dB)	10 Hz	10 Hz	10 Hz

General

Voltage supply	24 VDC ±25%	24 VDC ±25%	24 VDC ±25%)
(18 VDC...24 VDC...30 VDC)	(18 VDC...24 VDC...30 VDC)	(18 VDC...24 VDC...30 VDC)	(18 VDC...24 VDC...30 VDC)
Power consumption	< 1.5 W at I _{out} = 20 mA	< 1.5 W at I _{out} = 20 mA	< 1.3 W at I _{out} = 5 mA
Current carrying capacity of cross-connection	≤ 2 A	≤ 2 A	≤ 2 A
Operating temperature	0°C...+55°C	0°C...+55°C	0°C...+55°C
Storage temperature	when mounted horizontally	when mounted horizontally	when mounted horizontally
-20°C...+85°C	-20°C...+85°C	-20°C...+85°C	-20°C...+85°C
Dimensions W/L/H	mm (in.)	17.5/92.4/112.5 (.69/3.64/4.43)	17.5/92.4/112.5 (.69/3.64/4.43)
Approvals	CE, UL	CE, UL	CE, UL

Coordination of insulation according to EN 50178, 04/98

Rated voltage	300 V	300 V	300 V
Rated surge voltage	4 kV	4 kV	4 kV
Overvoltage category	III	III	III
Contamination class	2	2	2
Clearance and creepage distance	mm (in.)	≥ 3 (.12)	≥ 3 (.12)
Coupling capacity			
Input/output to supply	1 nF	1 nF	1 nF
Isolation voltage, voltage strength	4 kV _{eff} /1 min	4 kV _{eff} /1 min	4 kV _{eff} /1 min
Input/output to mounting rail			
Standards/specifications	EN 50178	EN 50178	EN 50178
EMC standards	EN 50081, EN 50082, EN 55011	EN 50081, EN 50082, EN 55011	EN 50081, EN 50082, EN 55011
Dimensions and accessories see	Page 356 + 366	Page 356 + 366	Page 356 + 366

*T_U = 23°C single module