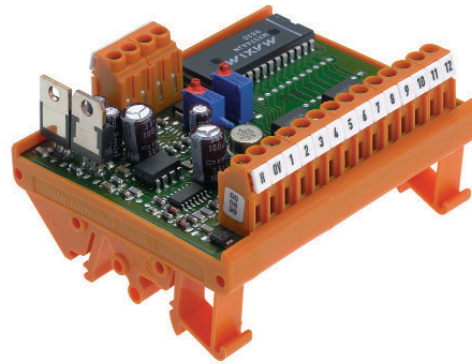
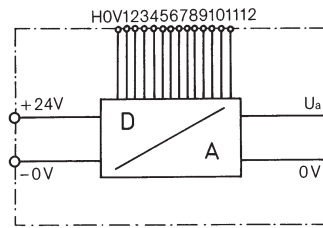


# 12-Bit Digital/Analog Converters



Block diagram

Block diagram



Ordering data	Type	Part No.	Type	Part No.	Type	Part No.	Type	Part No.
	RS/D 12-U	1160861001	RS/D 12-U	1166161001	RS/D 12-I	1166061001	RS/D 12-I	1165961001
<b>Technical data</b>								
Input signal/measurement range	12 Bit (1 Bit as prefix)		12 Bit		12 Bit		12 Bit	
Max. input voltage	24 V-, ±20%		24 V-, ±20%		24 V-, ±20%		24 V-, ±20%	
Input current, I <sub>nom</sub>	4.2 mA		4.2 mA		4.2 mA		4.2 mA	
Input resistance	5.7 kΩ		5.7 kΩ		5.7 kΩ		5.7 kΩ	
Prefix	MSB: H △ positive, L △ negative							
Resolution	4.88 mV △ 1 LSB		2.44 mV △ 1 LSB		4.9 μA △ 1 LSB		4 μA △ 1 LSB	
<b>Output signal</b>	<b>-10 V...+10 V</b>		<b>0 V...10 V</b>		<b>0...20 mA</b>		<b>4...20 mA</b>	
Output current	≤ 10 mA		≤ 10 mA		0...20 mA (as source)		4...20 mA (as source)	
Output level								
Load resistance	≥ 1 kΩ		≥ 1 kΩ		≤ 500 Ω		≤ 500 Ω	
Transmission error	±1 LSB		±1 LSB		±1 LSB		±1 LSB	
Conversion time	≤ 4 μs		≤ 4 μs		≤ 4 μs		≤ 4 μs	
Temperature coefficient	±100 ppm from FSR/°C		±100 ppm from FSR/°C		±100 ppm from FSR/°C		±100 ppm from FSR/°C	
Supply	24 V-, ±20%, 40 mA		24 V-, ±20%, 40 mA		24 V-, ±20%, 60 mA		24 V-, ±20%, 60 mA	
Max. power loss								
Connection arrangement	Terminal 1 LSB ⋮ Terminal 12 MSB		Terminal 1 LSB ⋮ Terminal 12 MSB		Terminal 1 LSB ⋮ Terminal 12 MSB		Terminal 1 LSB ⋮ Terminal 12 MSB	
	Hold function: High △ +24 V △ storage of analog signal Low △ 0 V △ enabling the conversion cycle		Hold function: High △ +24 V △ storage of analog signal Low △ 0 V △ enabling the conversion cycle		Hold function: High △ +24 V △ storage of analog signal Low △ 0 V △ enabling the conversion cycle		Hold function: High △ +24 V △ storage of analog signal Low △ 0 V △ enabling the conversion cycle	
Storage temperature	-40°C...+85°C		-40°C...+85°C		-40°C...+85°C		-40°C...+85°C	
Operating temperature	0°C...+50°C		0°C...+50°C		0°C...+50°C		0°C...+50°C	
EMC EN 50 081-1/50 082-2								