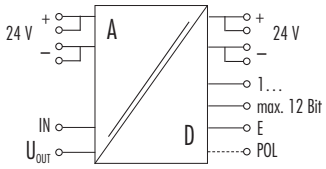
AD/DA converter

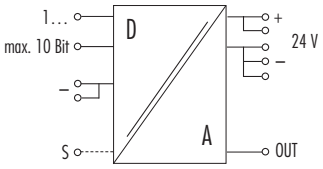
Inputs and outputs galvanically isolated

MAW
analog-digital converter

MDW
digital-analog converter

Circuit diagram





Ordering data		**Art.-No.**	**Art.-No.**
Digital	Analog		
8 Bit	4…20 mA	**44091**	**44073**
8 Bit	0…10 V DC	**44062**	**44067**
10 Bit	0…10 V DC	**44063**	**44068**

Technical data			
Supply voltage range		2 x 21…30 V DC, smoothed (with LED)	21…30 V DC, smoothed (with LED); ±15 V DC at Art.-No. 44078
Supply current		60 mA (no load) in addition to max. 100 mA per digital output	100 mA no load, max. 150 mA (full load)
Input signal		type dependend	0…30 V DC log 1 ≥ 16 V, log 0 ≤ 6 V (with LED)
Input current		type dependend	max. 10 mA/Bit
Output current		100 mA/Bit (with LED)	max. 40 mA at 0…10 V DC; max. 20 mA at 0…20 mA, 4…20 mA
Tolerance		± 1 LSB	± 1 %
Converter cycle time		80 ms, at 6 Bit adjustable 2.5/150 ms	–
Release input	E	log 1 ≥ 16 V, log 0 ≤ 6 V	
Test isolation voltage		2.5 kV AC	
Temperature range		0…+50 °C	
Mounting method		DIN-rail mounting to EN 60715	
Dimension	H x W x D	86 x 90 x 65 mm	

Description

The analog-digital converter from Murrelektronik changes analog input signals into a digital format. The inputs and outputs are isolated. On modules with voltage inputs, it is possible to set the maximum input signal using a trimmer. The output "POL" indicates the polarity. A voltage output U_{OUT} 15 V/20 mA (minimal ripple) can be used as a power supply for the analog output device. The hold input E will sample and hold the analog value. When E is set to HIGH the outputs will represent the last measured value. When E is set to low the converter will run again.

The Murrelektronik digital-analog converter changes digital input signals into an analog output. The inputs and outputs are isolated. The voltage output version has the facility of adjustment to the output signal to a maximum of supply voltage minus 2 V. The module therefore needs a supply of ±15 V. The outputs are short-circuit protected.

Notes

DIN-rail mounting to EN 60715