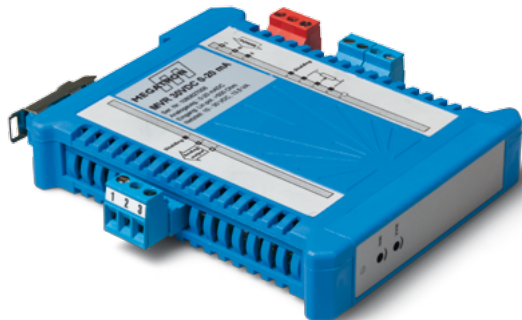


# Data Sheet for Amplifier

External amplifier for potentiometers (linear and rotary)

Series MVR



## Amplifier for potentiometers (linear and rotary)

MVR amplifiers are available with 30 AC/DC power supply and 0..10 V and 0..20 mA output signals.

- DIN-Rail (35 mm) Amplifier: 113 x 98 x 22 mm
- For 0.5..100 kOhm potentiometers
- Integrated sensor supply
- For direct connection of linear and rotary potentiometers
- Most common output signals available
- Easy adjustment of output signal by trim potentiometers

### Electrical Data

Supply voltage	10..30 AC/DC, max. 5 VA, PF $\geq$ 0.4 $I_{STP} < 40$ A/1 ms (optional 80..250 AC/DC, max. 5 VA, PF $\geq$ 0.4 $I_{STP} < 40$ A/1 ms)
Power consumption (with load)	max. 150 mA @ 24 VDC, max. 300 mA @ 12 VDC
Power consumption (no load)	max. 80 mA @ 24 VDC, max. 100 mA @ 12 VDC
Supply voltage sensor	10 VDC $\pm$ 0.2%
Input	0..10 VDC
Setting range offset	$> \pm 10\%$
Setting range amplification	$> \pm 10\%$
Output signal	0..2 V, 0..5 V, 0..10 V (optional $\pm 10$ V) 0..20 mA / 4..20 mA (optional $\pm 20$ mA)
Noise, residual ripple	$< 15$ mV <sub>eff</sub> (DC..20 MHz)
Linearity deviation	$\pm 0.1\%$
Temperature coefficient sensitivity	$< \pm 0.001\%$ /°C
Temperature coefficient zero point	$< \pm 0.004\%$ /°C
Limit frequency / Output (3db)	1 kHz
Insulation resistance 1.)	1 GOhm @ 500 VDC
Insulation voltage 1.)	4 kVAC, 1 min
Overvoltage max.	40 V

### Mechanical Data, Environmental Conditions, Miscellaneous

Housing	PA66 in 113 x 98 x 22 mm
Mounting	DIN Rail (35 mm)
Operating temperature range	0 °C up to +60 °C
Storage temperature range	-10 °C up to +85 °C
Mass	ca. 140 g

1.) According IEC 60393

2.) Determined by climatic conditions according to IEC 68-1, para. 5.3.1 without load collectives

Please note: Max. permissible supply voltage  $< 75$  VDC respectively  $< 50$  VAC in addition the max. power rating must be observed

# Data Sheet for Amplifier

External amplifier for potentiometers (linear and rotary)

Series MVR

Order code				
Description	Selection: <b>standard=black/bold</b> , possible <i>options=grey/italic</i>			
<b>Series:</b>	<b>MVR</b>			
<b>Supply voltage:</b> <b>30 V (10..30 V)</b> <i>Option 250 V (80..250 V)</i>		<b>30 VDC</b> <i>250 VDC</i>		
<b>Output signal:</b> 0..5 V 0..10 V ±5 V ±10 V 0..20 mA 4..20 mA			0-5V 0-10V ±5V ±10V 0-20MA 4-20MA	
<b>Excitation voltage:</b> 5 V 10 V				- 10 V

For higher quantities or on-going demand, additional options are available on request

# Data Sheet for Amplifier

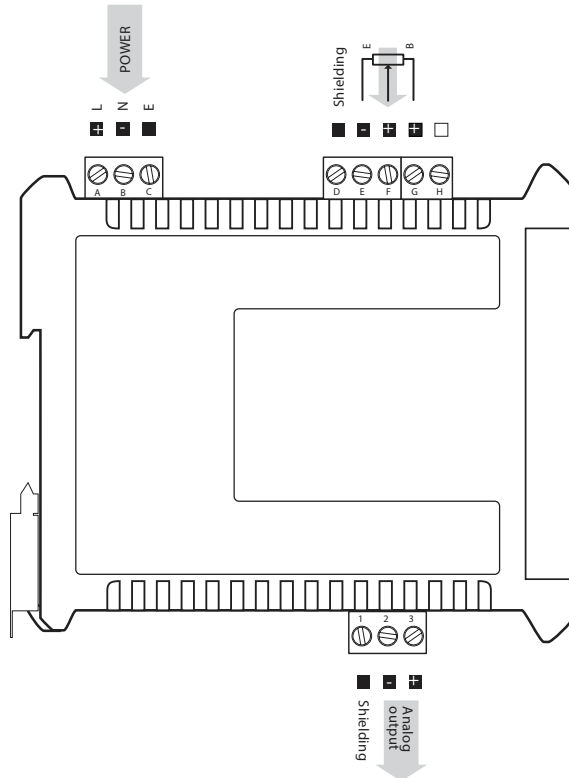
External amplifier for potentiometers (linear and rotary)

Series MVR

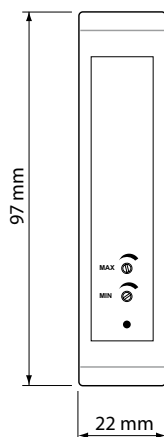
## Drawing

### CONNECTION

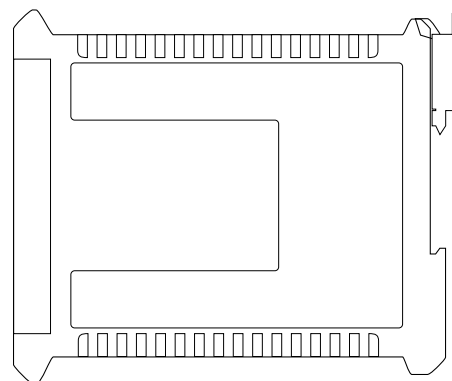
! Grounding on terminal „E“ has to be connected at all times.



Front view



Side view



Installation to DIN rail of 35 mm width

