



MC-2K-IP

Dual Channel LVDT/RVDT Amplifier in aluminium die-cast enclosure

- Supply Voltage 10 ... 18 VDC / 18 ... 30 VDC
- Analogue Output 0 ... 10 V / ± 10 V / 4 ... 20 mA
- EMC aluminium die-cast enclosure IP66
- Dimensions (W x H x D) 220 x 71 x 140 mm



Description

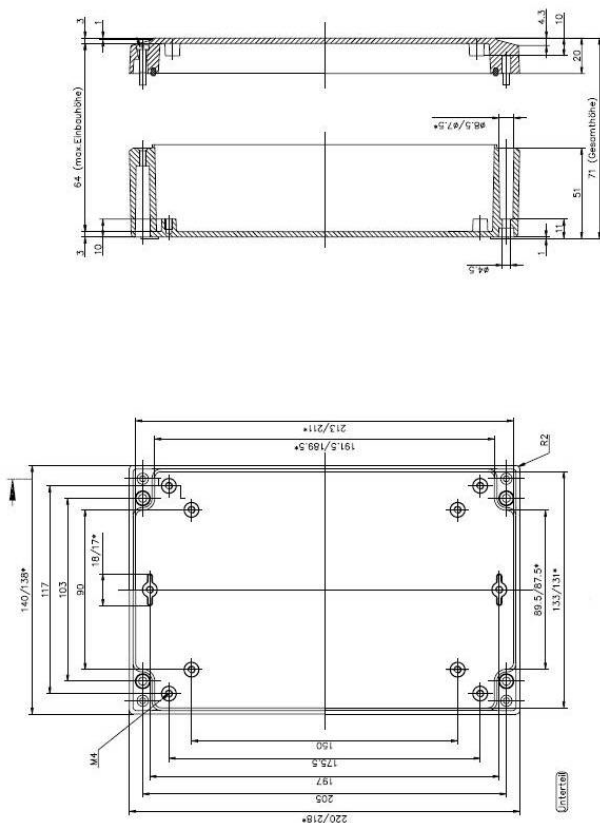
Power supply and amplifier unit for inductive transducers (differential transformers, e.g. displacement transducers (LVDT) or angle of rotation transducers (RVDT)) in robust aluminium housing with IP66 protection. The supply voltage and the analog outputs are galvanically isolated.

Specifications

Number of measuring channels:	2
Supply voltage:	10 ... 18 VDC*, 18 ... 30 VDC*, electronic is protected against voltage reversal
Voltage insulation between supply voltage and analogue output:	200 V, higher voltage insulation on request
Power consumption:	max. 3 W
LVDT/RVDT oscillator voltage:	2,2 VAC
Oscillator frequency:	4,8 kHz ($\pm 5\%$) 10 kHz ($\pm 5\%$) Other oscillator frequencies on request
LVDT/RVDT-transducer primary impedance:	>160 Ohm
Analogue output signal / burden:	0 ... 10 V / ± 10 V, max. 1 mA (not short-circuit proof) 4 ... 20 mA, max. 500 Ω
Frequency range (-3 dB):	Oscillator frequency / 10
Gain adjustment:	4 ... 27 adjustable per DIP switch
Linearity deviation demodulator:	$\pm 0,05$ % FS
Temperature error:	25 ppm/K (typ.)
Electrical connection:	EMC cable glands on internal spring-cage terminal blocks
Enclosure:	EMC-safe aluminium die-cast enclosure (IP66)
Dimensions (W x H x D):	220 x 71 x 140 mm (without EMC cable gland)
Weight:	1,7 kg
Temperature, storage:	-20 °C ... +60 °C
Temperature, operating:	-20 °C ... +60 °C

***Note:** A internal self-restoring „Polyswitch-Resetable“®- fuse, according to the supply voltage, is used to protect the electronics. It is recommended to use a power supply with at least 10 Watt and a slow current limit.

Dimensions of enclosure



Terminal wiring

Electrical connections are made via the EMC-cable glands to the internal spring-cage terminal blocks. The maximal connection cross section is 2,5 mm². The terminal numbering is stated on the terminal block. Although this system is designed with a high degree of immunity to electromagnetic interferences (EMI), proper installation and wiring methods must be followed to ensure compatibility in each application.

Terminal	Description	Terminal	Description	
1	+Supply voltage	9	+ Supply voltage LVDT / RVDT	Channel 1
2	GND Supply voltage	10	– Supply voltage LVDT / RVDT	Channel 1
3	GND Supply voltage	11	+ Signal LVDT / RVDT	Channel 1
Galvanic Isolation		12	– Signal LVDT / RVDT	Channel 1
4	Analogue output GND	13	Analogue output GND	
5	Analogue output GND	14	+ Supply voltage LVDT / RVDT	Channel 2
6	Analogue output 1	15	– Supply voltage LVDT / RVDT	Channel 2
7	Analogue output 2	16	+ Signal LVDT / RVDT	Channel 2
8	Analogue output GND	17	– Signal LVDT / RVDT	Channel 2
		18	Analogue output GND	

Ordering Information

MC-2K-IP...	Dual Channel LVDT/RVDT Amplifier in aluminium die-cast enclosure	
...-12E-...	Supply voltage: 10 ... 18 VDC	
...-24E-...	Supply voltage: 18 ... 30 VDC	
...-010-...	Analogue output: 0 ... 10 V,	zero point at 5 V
...-B10-...	Analogue output: ± 10 V,	zero point at 0 V
...-420-...	Analogue output: 4 ... 20 mA,	zero point at 12 mA
...none	Oscillator voltage / frequency 2,2 VAC/4,8 kHz	
...-10K	Oscillator voltage / frequency 2,2 VAC/10 kHz	

Customized Requirements

Technical modification according customized requirement are available on request. Moreover we deliver customized special solutions for a lot of measuring tasks in the sections pressure, force, distance, and tilt measuring using our measuring transducers. Do not hesitate to contact us.

We reserve the right to do technical changes without prior notice.

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