



Incremental Display Module MOD 13

Display with programmable outputs for Incremental Encoder

MOD 13 - a programmable multifunctional display module for incremental encoders with output channel push-pull or RS422 line driver. Display parameters are fully programmable. MOD 13 has the usual standardfunction of a display modul, but additional two control outputs, which can be programmed separately as comparator, cam switch or pulse switch. Easy programming by four front-panel keys.

Case

for panel mounting

Dimensions 111 x 144 x 72 mm

8-digit 7-segment red LED display, 14 mm high

Weight max. 0,5 kg

Signal inputs

for operation of incremental encoders

- Input-signals
 - 6 channels AA + BB/90° + MM RS422 line driver
 - or
 - 3 channels A + B/90° +M with 5 V or 24 V voltage level
- Input frequency up to 150 kHz
- Optically insulated by optocoupler

Display parameter

- Fully programmable
- Scale factor
- Decimal point
- Zero offset

Technical data

- Supply Voltage 10 .. 35 VDC
- Supply Voltage output 5 VDC, max. 350 mA
- Power Consumption max. 150 mA (without load)
- Operation temperature 0 .. 50° Celsius

Programmable control outputs

- Programmable separately as comparator, cam switch or pulse switch
- Switching threshold adjustable for complete indicating range
- Switching hysteresis adjustable
- Optocoupler with NPN-Transistor, Open Emitter with PTC
- Supply Voltage max. 35 VDC
- Output current max. 50 mA
- Output voltage min. supply voltage -2 V

- Optically insulated by optocoupler

Protection class

Front IP 50, with protective cover IP54,
rear IP 20

Technical data

Technical Data

Supply voltage	+10 .. 35 VDC
Power consumption	max. 150 mA
Supply voltage output for incremental encoder	5 V max. 150 mA
Cycle time	5 ms
Display range	-9999999 ... 99999999
Display	rote 7-Segment-LED-Anzeige 8-stellig mit 14 mm Ziffernhöhe <i>8-digit 7-segment red LED display, 14 mm high</i>
Data memory	EEPROM
Operating temperature	0 ... +50°C
Connections	Klemmleiste / <i>Terminal block</i> max. 1,5 mm ²
Weight	< 0,5 kg
Protection class	Frontplatte / <i>front</i> : IP 50 mit Schutzgehäuse / <i>with protective cover</i> : IP 54 Rückseite / <i>rear</i> : IP 20

Incremental input

Number of input signals	6 = AA + BB/90° + MM
Input circuit	RS422
Input voltage	max. 35 V
Input frequency	max. 150 kHz
Input resistance	3 kOhm, $U_{in} = 24$ V 350 Ohm, $U_{in} = 5$ V
Pulse width signal M	min. 2 μ s

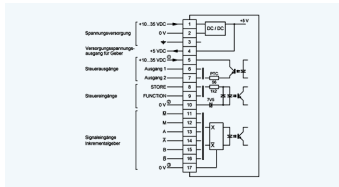
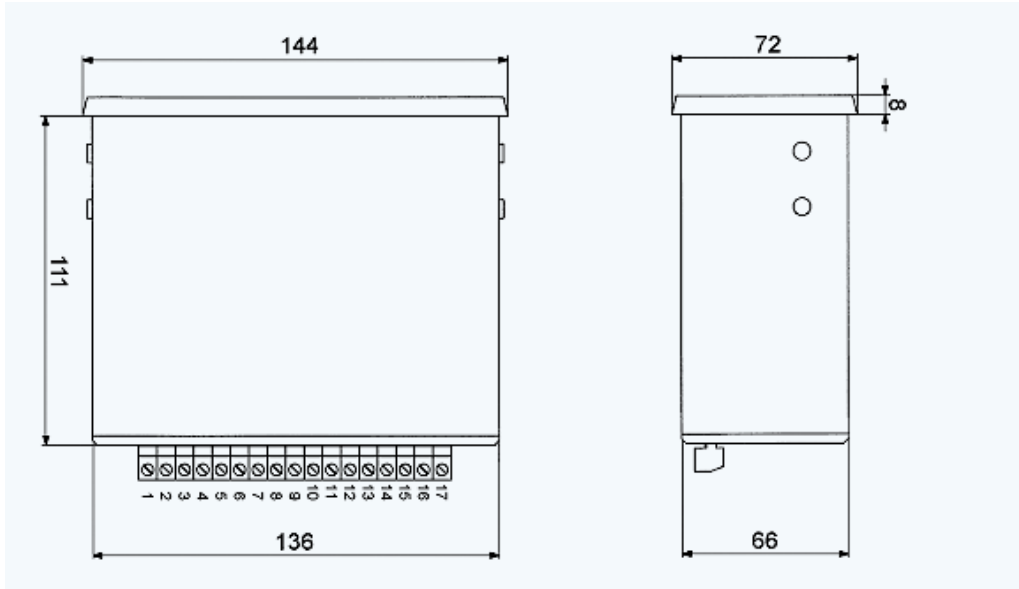
Control inputs

Circuit	Optokoppler
Input level Low	0 ... +5 VDC
Input level High	+10 ... 35 VDC
Input resistance	1,8 kOhm, $U_{in} = 24$ VDC

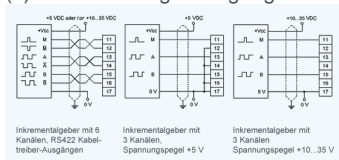
Control outputs

Circuit	Optokoppler mit NPN-Transistor Open Emitter mit PTC
Supply voltage	max. +35 VDC
Output voltage	min. $V_{cc} - 3,5$ V, $I_{out} = 50$ mA min. $V_{cc} - 2,0$ V, $I_{out} = 20$ mA
Output current	max. 50 mA

Outline drawing



- (1) Versorgungsspannung für die Ausgangsstufen
- (2) 0 V für die Eingangsstufen
- (3) 0 V für die Signaleingänge



Version ZE 608-203 · Subject to change

INDUcoder® · INDUcoder Messtechnik GmbH, Kaiserstraße 316, 47178 Duisburg, Deutschland
 Tel: (0203) 57047-0, Fax: (0203) 57047-20, E-Mail: info@inducoder.de, Internet:
www.inducoder.de