

# Data sheet

## KMAi-E08

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P/N  
110659

EAN 4250184122920

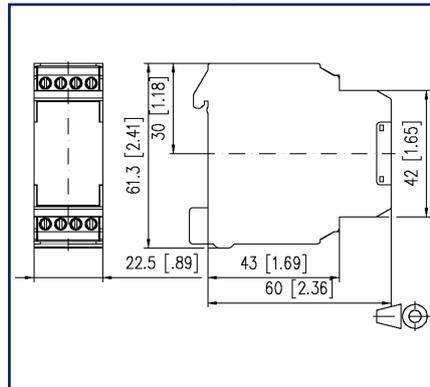
2025/08/20

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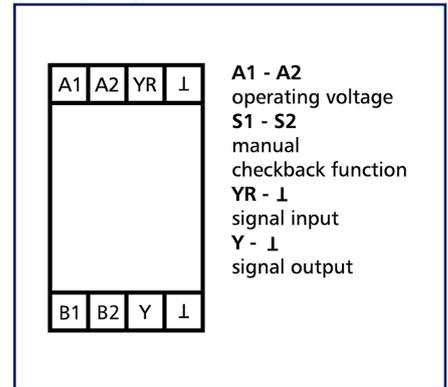
### Illustrations



Dimensional drawing



Wiring diagram



See enlarged drawings at the end of document

### Product specification

The analog encoder is used for manual control variable settings for example for mixing valves, valve positions, temperature values etc. The module can be controlled in two operating modes that are set by means of the two level switch (HAND, AUTO) on the front. The switch position is confirmed via the two external control contacts B1 and B2. Switch position HAND (manual mode)The control variable can be set with the potentiometer on the front. The output signal 0 to 20 mA is available at contact Y. The current flow at input YR is not interrupted. Switch position AUTO. The input current (YR) is transmitted to the control variable output Y with a tolerance of  $\pm 5\%$  (full scale value).

- Setpoint generator
- Manual control level with checkback function
- LED brightness proportional to control variable

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**Technical Data**

**Supply**

Operating voltage	24 V AC/DC -15% ... +20%
Power consumption AC (max.)	50 mA
Power consumption DC (max.)	30 mA

**Manual control level**

Mechanical life	3x10 <sup>4</sup> switchings
Switching capacity (max.)	24 V AC/DC / 1 A

**Inputs**

Current input (YR)	0 ... 20 mA DC
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**Outputs**

Current output (Y)	0 ... 20 mA DC
Output current (max.) switch position "MANU"	0 - 20 mA DC (10 V max.)
Switch AUTO/ON	shortcircuit proof
Indicator	red LED

**Housing**

Dimensions	
Dimension (W x H x D)	22.5 mm x 61.3 mm x 60 mm
Dimension (W x H x D)	0.886 in. x 2.413 in. x 2.362 in.
Weight	70 g
Mounting style	Standard rail TH35
Mounting position	any
Apposition	without distance
Connection type	Screw type terminal blocks

**Terminal blocks**

Wire cross section solid	0.34 mm <sup>2</sup> - 2.5 mm <sup>2</sup> / AWG 22-12
Wire cross section multi	0.34 mm <sup>2</sup> - 2.5 mm <sup>2</sup> / AWG 22-12
Wire cross section with wire ferrule	0.34 mm <sup>2</sup> - 2.5 mm <sup>2</sup> / AWG 22-12
Screw torque (max.)	0.5 Nm
Stripping length (min.)	8 mm

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**Technical Data**

**Material**

Material - Housing	Polyamid 6.6 V0
Color	gray
Material - Terminal block	Polyamid 6.6 V0

**Protection category according to IEC 60529**

Protection category - housing (acc. to IEC 60529)	IP40
Protection category - terminal blocks (acc. to IEC 60529)	IP20

**Climatic Data**

Operating	
Temperature - Operating °C	-10 °C - 50 °C
Temperature - Operating °F	14 °F - 122 °F
Relative humidity	max. 85 % non-condensing
Storage	
Temperature - Storage °C	-25 °C - 70 °C
Temperature - Storage °F	-13 °F - 158 °F

**Power loss**

Power loss (typical) during 24 V DC operation	610 mW
Power loss (typical) during 24 V AC operation	790 mW

**Classifications**

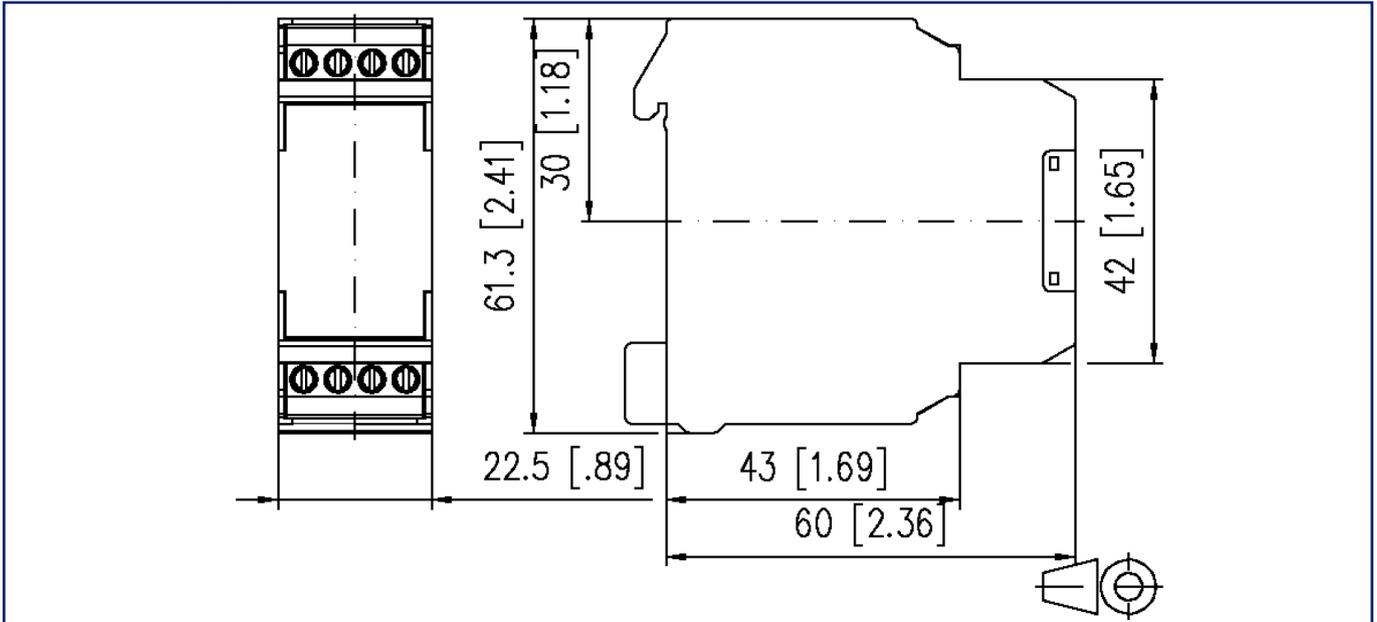
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ETIM 9.0	EC000310
ETIM 10.0	EC000310

**Application note**

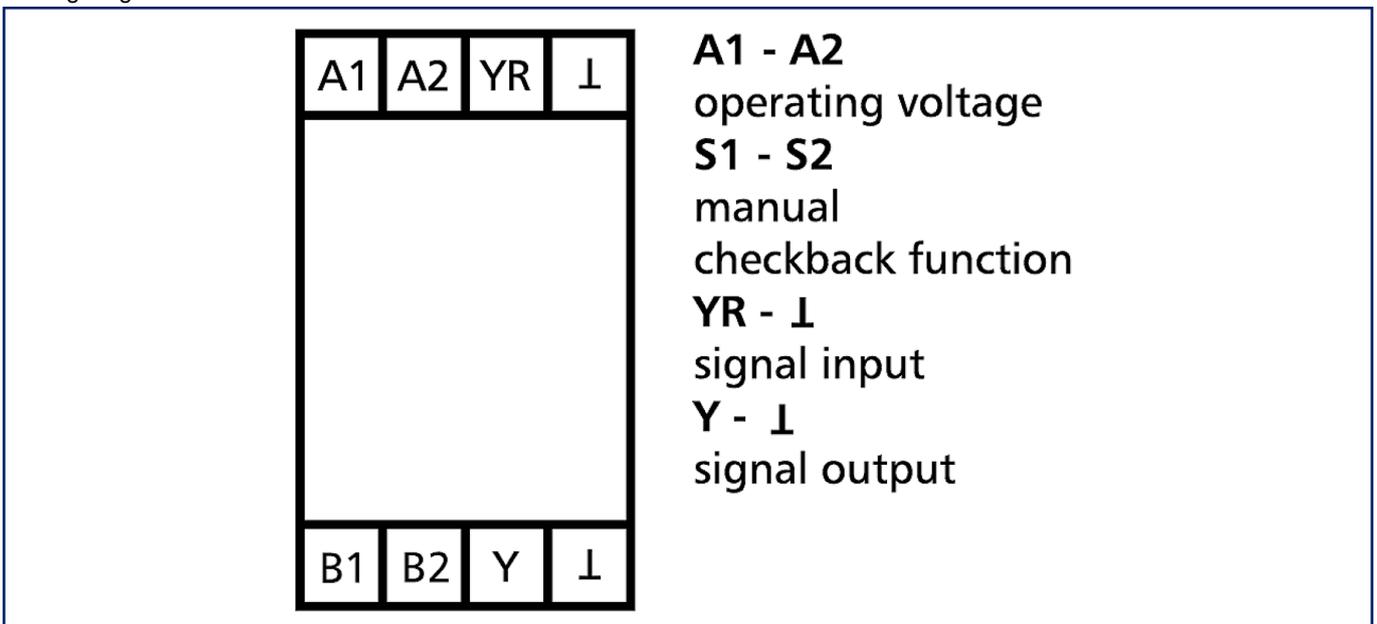
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## Illustrations

Dimensional drawing



Wiring diagram



**Illustrations**

Circuit diagram

