



## Universal Control Panel Indicating Unit

for all Inputs (Frequency, Current, Voltage)



measuring  
•  
monitoring  
•  
analysing



Model: ADI-B...



Model: ADI-D...



Model: ADI-K...

- Analogue and digital display
- User scaling
- Two limit values
- Min/max memory
- Protection type IP 40
- Simple button programming
- Sensor supply



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Model:  
ADI...



**Description**

The new modular Kobold indicating unit has been developed to satisfy customer requirements. Frequencies or standard current/voltage signals may be processed as input signals. Most output signals from transducers can thus be displayed. The bar graph shows the percentage instantaneous value of the set full-scale value.



The input signals are digitized and processed in a state-of-the-art  $\mu$ -processor. Display scaling, switching point setting, memory function and linearization may be selected with three programming buttons.

**The indicator is fitted with the following standard functions:**

- User scaling
- MIN/MAX memory
- 3-point sensor linearization

**The following options are also available:**

- Two limit contacts
- Sensor supply

**Technical Details**

- Bar graph: arrangement of 57, 270°  
0-100 % f. s.
- Accuracy: 1.8 %
- Measurement inputs:
  - 0(4)-20 mA ( $R_i < 200 \Omega$ ),  
0-10 V<sub>DC</sub>, 0-5 V<sub>DC</sub> ( $R_i > 50 k\Omega$ )  
or
  - frequency input 0.5-2000 Hz  
(PNP/NPN/Namur/TTL)
- Sensor supply (Option): 12 V<sub>DC</sub>, 30 mA  
24 V<sub>DC</sub> / 50 mA and 5 V/15 mA
- Display time: 0.1-10 s, programmable
- Data back up: memory min. 40 years,  
1 million programming cycles
- Supply voltage: 230, 115, 48, 24 V<sub>AC</sub>  $\pm 10\%$ , 50-60 Hz,  
24 V<sub>DC</sub>,  $\pm 20\%$
- Limit values (Option): 2 relay changeover contacts  
max. 115/230 V<sub>AC</sub> / 5 A (resistive load)  
max. 30 V<sub>DC</sub> / 5 A or  
2 open collector outputs  
5-50 V<sub>DC</sub> / I<sub>total</sub> = 50 mA
- Temperature range: -20...+80°C operating temperature  
-20...+80°C storage temperature
- Dimensions: 96 x 96 x 105 mm (WxHxD)  
incl. screw-type terminal
- Cut-out dimensions: 92<sup>+0.8</sup> x 92<sup>+0.8</sup> mm
- Case material: glass-fibre-reinforced Noryl
- Protection type: front panel IP 40, terminals IP 00
- Mounting: fastening clip form B  
(DIN 43 835)
- Connection: pluggable terminal block
- Weight: approx. 700 g

**Order Details** (Example: ADI-B V 0 0 0 0X)

Model	Description	Input	Supply electr. isolated	Output	Sensor supply	Contacts
ADI-B..	Indicating unit 96 x 96 mm with bar graph sensor linearization min/max memory	V= 0-20 mA, 4-20 mA 0-5 V, 0-10 V F= Frequency input 0.5-2000 Hz	0=230 V <sub>AC</sub> 1=48 V <sub>AC</sub> 2=24 V <sub>AC</sub> 3=24 V <sub>DC</sub> 4=115 V <sub>AC</sub>	0= without	0=without U=5 V <sub>DC</sub> V=12 V <sub>DC</sub> W=24 V <sub>DC</sub>	0X= without 2X= 2 change-over contacts 6X= 2 Open Collector

**Description**

The new modular Kobold indicating unit has been developed to satisfy customer requirements. Frequencies or current/voltage standard signals may be processed as input signals. Most output signals from transducers can thus be displayed.



The bar graph shows the percentage instantaneous value of the set full-scale value. The unit is fitted with a user programmable 3 1/2 segment digital display. The input signals are digitized and processed in a state-of-the-art  $\mu$ -processor. Display scaling, switching point setting, memory function and linearization may be selected with three programming buttons. The indicator is fitted with two switching outputs, an analogue output or a frequency output for further signal processing.

**The indicator is fitted with the following standard functions:**

- User scaling
- MIN/MAX memory
- 8-point sensor linearization

**The following options are also available:**

- Two limit contacts
- Analogue output
- Frequency output
- Sensor supply

**Technical Details**

Bar graph: arrangement of 57 LEDs: round, 270°  
0-100% f. s.

Digital display: 3 1/2 segment, 14 mm high,  
red LED display  
programmable decimal-point setting

Accuracy: bar graph 1.8%  
digital display: < 0.2%, 52 ppm/°C

Measurement inputs:

- 0(4) - 20 mA ( $R_i < 200 \Omega$ ),  
0 - 10 V<sub>DC</sub>, 0 - 5 V<sub>DC</sub> ( $R_i > 50 \text{ k}\Omega$ )  
or
- frequency input 0.5 - 2000 Hz  
(PNP/NPN/Namur/TTL)
- two frequency inputs with  
direction sensing up to 2 kHz  
PNP/NPN/Namur/TTL)

Sensor supply: 12 V<sub>DC</sub>, 30 mA  
(Option) 24 V<sub>DC</sub> / 50 mA and 5 V / 15 mA

Display time: 0.1 - 10 s, programmable

Data back up: memory min. 40 years,  
1 million programming cycles

Voltage supply: 230, 115, 48, 24 V<sub>AC</sub>  $\pm 15\%$ , 50 - 60 Hz,  
24 V<sub>DC</sub>,  $\pm 20\%$

Limit values: 2 relay changeover contacts  
(option) max. 115/230 V<sub>AC</sub> / 5 A (resistive load)  
max. 30 V<sub>DC</sub> / 5 A  
or  
2 open collector outputs  
5 - 50 V<sub>DC</sub> / I<sub>total</sub> = 50 mA

Analogue output: 0 - 20 mA, 4 - 20 mA (load: 500  $\Omega$ ) and  
(option) 0 - 10 V<sub>DC</sub>, electrically isolated

Frequency output: scaleable, 0 - 1000 Hz  
(option) open collector, electrically isolated

Temperature range: -20 to +80 °C operating temperature  
-20 to +80 °C storage temperature

Dimensions: 96 x 96 x 105 mm (WxHxD)  
incl. screw-type terminal

Cut-out dimensions: 92<sup>+0.8</sup> x 92<sup>+0.8</sup> mm

Case material: glass-fibre-reinforced Noryl

Protection type: front panel IP 40, terminals IP 00

Mounting: fastening clip form B (DIN 43 835)

Connection: pluggable terminal block

Weight: approx. 700 g

**Order Details** (Example: ADI-K V 0 0 0 0X)

Model	Description	Input	Supply electr. isolated	Output	Sensor supply	Contacts
ADI-K..	Indicating unit 96 x 96 mm with bar graph and digital display sensor linearization min/max memory	V= 0-20 mA, 4-20 mA 0-5 V, 0-10 V F= frequency input 0.5-2000 Hz 2= 2 frequency inputs	0= 230 V <sub>AC</sub> 1= 48 V <sub>AC</sub> 2= 24 V <sub>AC</sub> 3= 24 V <sub>DC</sub> 4= 115 V <sub>AC</sub>	0= without 1= 0-10 V 2= 0-20 mA 4= 4-20 mA F= scaleable frequency output	0=without U=5 V <sub>DC</sub> V=12 V <sub>DC</sub> W=24 V <sub>DC</sub>	0X= without 2X=2 change- over contacts 6X=2 open collector



**Description**

The new modular Kobold indicating unit has been developed to satisfy customer requirements. Frequencies or current/voltage standard signals may be processed as input signals. Most output signals from transducers can thus be displayed. The set measuring range is displayed with a user programmable 3 1/2 segment digital display.



The input signals are digitized and processed in a state-of-the-art  $\mu$ -processor. Display scaling, switching point setting, memory function and linearization may be selected with three programming buttons. The indicator may be fitted with two switching outputs or an analogue output for further signal processing.

**The indicator is fitted with the following standard functions:**

- User scaling
- MIN/MAX memory
- 3-point sensor linearization

**The following options are also available:**

- Two limit contacts
- Analogue output
- Sensor supply

**Technical Details**

- Digital display: 3 1/2 segment, 14 mm high, red LED display  
programmable decimal-point setting
- Accuracy: digital display < 0.2% 52ppm/°C
- Measurement inputs:
  - 0(4)-20 mA ( $R_i < 200 \Omega$ ), 0-10 V<sub>DC</sub>, 0-5 V<sub>DC</sub> ( $R_i > 50 \text{ k}\Omega$ ) or
  - frequency input 0.5 - 2000 Hz (PNP/NPN/Namur/TTL)
- Sensor supply (Option): 12 V<sub>DC</sub>, 30 mA  
24 V<sub>DC</sub> / 50 mA and 5V/15 mA
- Display time: 0.1 - 10 s, programmable
- Data back-up: memory min. 40 years, 1 million programming cycles
- Supply voltage: 230, 115, 48, 24 V<sub>AC</sub>  $\pm 10\%$ ; 50-60 Hz, 24 V<sub>DC</sub>,  $\pm 20\%$
- Limit values (Option): 2 relay changeover contacts  
max. 115/230 V<sub>AC</sub> / 5 A (resistive load)  
max. 30 V<sub>DC</sub> / 5 A  
or  
2 open collector outputs  
5-50 V<sub>DC</sub> / I<sub>total</sub> = 50 mA
- Analogue output (Option): 0-20 mA, 4-20 mA (load: 500  $\Omega$ ) and 0-10 V<sub>DC</sub>, electrically isolated
- Temperature range: -20 to +80 °C operating temperature  
-20 to +80 °C storage temperature
- Dimensions: 96 x 96 x 105 mm (WxHxD)  
incl. screw-type terminal
- Cut-out dimensions: 92<sup>+0.8</sup> x 92<sup>+0.8</sup> mm
- Case material: glass-fibre-reinforced Noryl
- Protection type: front panel IP40, terminals IP 00
- Mounting: fastening clip form B (DIN 43 835)
- Connection: pluggable terminal block
- Weight: approx. 700 g

**Order Details** (Example: ADI-D V 0 0 0 0 X)

Model	Description	Input	Supply electr. isolated	Output	Sensor supply	Contacts
ADI-D	Indicating unit 96 x 96 mm with digital display sensor linearization min/max memory	V= 0-20 mA, 4-20 mA 0-5 V, 0-10 V F= Frequency input 0.5-2000 Hz	0=230 V <sub>AC</sub> 1=48 V <sub>AC</sub> 2=24 V <sub>AC</sub> 3=24 V <sub>DC</sub> 4=115 V <sub>AC</sub>	0= without 1= 0-10 V 2= 0-20 mA 4= 4-20 mA	0= without U= 5 V <sub>DC</sub> V= 12 V <sub>DC</sub> W= 24 V <sub>DC</sub>	0X= without 2X= 2 change-over contacts 6X= 2 open collector