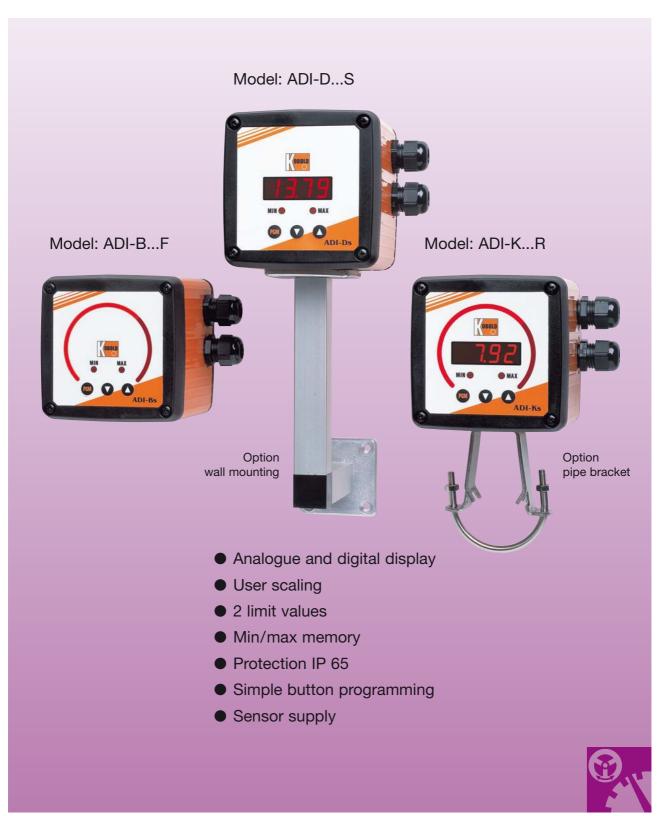


Universal Indicating Unit in Field Housing

for all Inputs (Frequency, Current, Voltage)





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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 μ -processor. Display scaling, switching point setting, memory function and linearization may be selected with three programming buttons.

The device has the following functions as standard:

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

Besides the standard functions the device can also be fitted with the following options

- 2 limit contacts
- Sensor supply

Technical Details

Bar graph: arrangement of 57 LEDs: round, 270°

0-100% of full scale value

Accuracy: 1.8%

Measurement

inputs: 0(4)-20 mA (Ri<200 Ω), 0-10 V_{DC}, 0-5 V_{DC} (Ri>50 k Ω)

or

frequency input 0.5-2000 Hz (PNP/NPN/Namur/TTL)

Sensor supply

(Option): 12 V_{DC}, 30 mA

 $24 V_{DC}/50 \text{ mA}$ and 5 V/15 mA

Display time: 0.1 - 10 s, programmable

Data back-up: memory minimum 40 years,

1 million programming cycles

Power supply: 230, 115, 48, 24 $V_{AC} \pm 10\%$, 50-60 Hz,

 $24 V_{DC}, \pm 20 \%$

Limit values

(option): 2 relay changeover contacts

max. 115/230 V_{AC} / 5 A (resistive load)

max. $30 V_{DC} / 5 A$ or 2 open-collector outputs $5-50 V_{DC} / I_{total} = 50 \text{ mA}$

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

-20 to +80 °C storage temperature

Dimensions: 116 x 116 x 123 mm (WxHxD)

Case material: aluminium (powder coated), PA 66

Protection: IP 65

Mounting: wall and pipe mounting

Connection: pluggable terminal block (internal)

Weight: approximately 1600 g

Order Details (Example: ADI-B V 0 0 0 F)

Model	Description	Input	Supply (electr. isolated)	Output	Sensor supply	Contacts	Housing
ADI-B	Indicating unit 96 x 96 mm with bar graph 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 _{AC} 1 = 48 V _{AC} 2 = 24 V _{AC} 3 = 24 V _{DC} 4 = 115 V _{AC}	0= without	0 = without U = 5 V _{DC} V = 12 V _{DC} W=24 V _{DC}	0= without2= 2 change-over contacts6= 2 Open Collector	F= field housing S= field housing with wall mounting; finely rotatable R= field housing with pipe mounting; for 2" piping



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 unit is fitted with a user programmable 31/2 segment digital display.

The input signals are digitized and processed in a state-ofthe-art µ-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 device has the following functions as standard:

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

Besides the standard functions the device can also be fitted with the following options

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

Technical Details

Bar graph: arrangement of 57 LEDs: round, 270°,

0-100% of full scale value

31/2-stellige, 14 mm high red Digital displaye:

LED display.

programmable decimal-point setting

bar graph 1.8% Accuracy:

digital display: < 0.2%, 52 ppm/°C

Measurement inputs:

• 0(4) - 20 mA (Ri < 200 Ω), $0-10 \text{ V}_{DC}, 0-5 \text{ V}_{DC} \text{ (Ri} > 50 \text{ k}\Omega)$

frequency input 0.5-2000 Hz (PNP/NPN/Namur/TTL) two frequency inputs with

direction sensing to 2 kHz (PNP/NPN/Namur/TTL)

Sensor power

supply (option): 12 V_{DC}, 30 mA

 $24 V_{DC} / 50 \text{ mA}$ and 5 V / 15 mA

Display time: 0.1-10 s, programmable Data back-up: memory minimum 40 years,

1 million programming cycles

Power supply: 230, 115, 48, 24 V_{AC}±15%, 50-60 Hz,

 $24 V_{DC}$, $\pm 20 \%$

Limit values: 2 relay changeover contacts

(option) max. 115/230 V_{AC}/5 A (resistive load)

max. $30 V_{DC} / 5 A$

2 open-collector outputs

 $5-50 V_{DC} / I_{total} = 50 \text{ mA}$ 0-20 mA, 4-20 mA (load <500 Ω) and Analogue output:

(Option) $0-10\ V_{DC}$, electrically isolated

Frequency output: scalable, 0-1000 Hz

(option) open collector, electrically isolated

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

-20 to +80°C storage temperature

Dimensions: 116 x 116 x 123 mm (WxHxD) Case material: aluminium (powder coated), PA 66

Protection: IP 65

Mounting: wall and pipe mounting

Connection: pluggable terminal block (internal)

Weight: approximately 1600 g

Order Details (Example: ADI-K V 0 0 0 0 F)

Model	Description	Input	Supply (electr. isolated)	Output	Sensor supply	Contacts	Housing
ADI-K	Indicating unit 96×96 mm with bar graph and digital display, 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	$0 = 230 \text{ V}_{AC}$ $1 = 48 \text{ V}_{AC}$ $2 = 24 \text{ V}_{AC}$ $3 = 24 \text{ V}_{DC}$ $4 = 115 \text{ V}_{AC}$	0=without 1=0-10 V 2=0-20 mA 4=4-20 mA F=scalable frequency- output	$0 = \text{without}$ $\mathbf{U} = 5 \text{ V}_{DC}$ $\mathbf{V} = 12 \text{ V}_{DC}$ $\mathbf{W} = 24 \text{ V}_{DC}$	0= without 2= 2 change- over contacts 6= 2 Open Collector	F = S = R = see order details ADI-B



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 set measuring range is displayed with a user pro-grammable 31/2-segment digital display.



The input signals are digitized and processed in a state-of-the-art $\mu\text{-processor}.$ 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 device has the following functions as standard:

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

Besides the standard functions the device can also be fitted with the following options

- 2 limit contacts
- Analogue output
- Sensor supply

Technical Details

Digital display: 3½-segment, 14 mm high red

LED display,

programmable decimal-point setting digital display < 0.2 % 52 ppm/°C

Accuracy:
Measurement

inputs: 0(4)-20 m

 \circ 0(4)-20 mA (Ri < 200 Ω), 0-10 V_{DC}, 0-5 V_{DC} (Ri > 50 kΩ)

or

frequency input 0.5-2000 Hz (PNP/NPN/Namur/TTL)

Sensor power

supply (option): 12 V_{DC}, 30 mA

24 V_{DC} / 50 mA and 5V/15 mA

Display time: 0.1-10 s, programmable

Data back-up: memory minimum 40 years,

1 million programming cycles

Power supply: 230, 115, 48, 24 $V_{AC} \pm 10\%$; 50-60 Hz,

 $24 V_{DC}$, $\pm 20 \%$

Limit values

(option): 2 relay changeover contacts

max. 115/230 V_{AC}/5 A (resistive load)

max. $30 V_{DC} / 5 A$

or

2 open-collector outputs $5-50 \text{ V}_{DC} / \text{ I}_{\text{total}} = 50 \text{ mA}$

Analogue output

(option):

0-20 mA, 4-20 mA (load < 500 Ω) and

0-10 V_{DC}, electrically isolated

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

-20 to +80°C storage temperature

Dimensions: 116 x 116 x 126 mm (WxHxD)

Case material: aluminium (powder coated), PA 66

Protection: IP 65

Mounting: wall and pipe mounting

Connection: pluggable terminal block (internal)

Weight: approximately 1600 g

Order Details (Example: ADI-D V 0 0 0 F)

Model	Description	Input	Supply (electr. isolated)	Output	Sensor supply	Contacts	Housing
ADI-D	Indicating unit 96 x 96 mm with digital display, linearization min/max memory	V= 0-20 mA, 4-20 mA 0-5 V, 0-10 V F= Frequency input 0.5-2000 Hz	$\begin{aligned} 0 &= 230 \ V_{AC} \\ 1 &= 48 \ V_{AC} \\ 2 &= 24 \ V_{AC} \\ 3 &= 24 \ V_{DC} \\ 4 &= 115 \ V_{AC} \end{aligned}$	0 = without 1 = 0-10 V 2 = 0-20 mA 4 = 4-20 mA	$0 = \text{without}$ $\mathbf{U} = 5 \text{ V}_{DC}$ $\mathbf{V} = 12 \text{ V}_{DC}$ $\mathbf{W} = 24 \text{ V}_{DC}$	0= without 2= 2 change- over contacts 6= 2 Open Collector	F = S = R = see order details ADI-BF