Universal Indicating Unit

For all Inputs (Frequency, Current, Voltage)

Model: ADI-D...W

Model: ADI-B...X

Model: ADI-K...R

Option:
Wall
mounting

Option:
Pipe
mounting

- Analogue and digital display
- User scaling
- Two limit values
- Min/max memory
- Protection type IP 65
- Simple button programming
- Sensor supply

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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
- 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 % f. s.
Accuracy:	1.8 %
Measurement inputs:	● 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 supply (option):	12 V_{DC}, 30 mA 24 V_{DC}/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_{AC} ±10 %, 50-60 Hz, 24 V_{DC}, ±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_{ges}=50 mA
Temperature range:	-20 to +80 °C operat. temperature -20 to +80 °C storage temperature
Dimensions:	96 x 96 x 105 mm (WxHxD) incl. screw-type terminal (panel mounting) 116 x 116 x 123 mm (WxHxD) (field housing)
Cut-out-dimensions:	$92^{+0,8}$ x $92^{+0,8}$ mm (panel mounting)
Case material:	Glass-fibre-reinforced Noryl (panel mounting), Aluminium (powder coated)/PA 66 (field housing)
Protection type:	Front panel IP 40, terminals IP 00 (panel mounting), IP 65 (field h.)
Mounting:	Fastening clip form B (DIN 43 835) (panel mounting) wall and pipe mounting (field housing)
Connection:	Pluggable terminal block (panel mounting) cable connection (field housing)
Weight:	approx. 700 g (panel mounting) approx. 1600 g (field housing)

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

Model	Description	Input	Supply (eletrically isolated)	Output	Sensor supply	Contacts	Housing
ADI-B..	Indicating unit 96 x 96 mm with bar graph 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	**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**= without **2**= 2 change-over contacts **6**= 2 open collector	**X**= Panel mounting **F**= Field housing **W**=Field housing with wall mounting; mounted in 90°steps **S**= Field h. with wall mounting; finely rotatable **R**= Field housing with pipe mounting; for 2" piping

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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 unit is fitted with a user programmable 3½ segment digital display.
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 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
- 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 % f. s.
Digital display:	3½-segment, 14 mm high, red LED display, program. decimal-point setting
Accuracy:	Bar graph 1.8 % digital display: < 0.2 %, 52 ppm/°C
Measurem. inputs:	● 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) ● Two frequency inputs with direction sensing up to 2 kHz (PNP/NPN/Namur/TTL)
Sensor supply:	12 V_{DC}, 30 mA
(option)	24 V_{DC}/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_{AC} ±15 %, 50-60 Hz, 24 V_{DC}, ±20 %
Limit values:	2 relay changeover contacts
(option)	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_{ges} = 50 mA
Analogue output:	0-20 mA, 4-20 mA (load < 500 Ω)
(option)	and 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:	96 x 96 x 105 mm (W x H x D) incl. screw-type terminal (panel mounting) 116 x 116 x 123 mm (W x H x D) (field h.)
Cut-out dimensions:	$92^{+0,8}$ x $92^{+0,8}$ mm (panel mounting)
Case material:	Glass-fibre-reinforced Noryl (panel mounting), aluminium (powder coated)/PA 66 (field housing)
Protection type:	front panel IP 40, terminals IP 00 (panel mounting), IP 65 (field housing)
Mounting:	Fastening clip form B (DIN 43 835) (panel mounting) wall and pipe mounting (field housing)
Connection:	Pluggable terminal block (panel mounting), cable connection (field housing)
Weight:	approx. 700 g (panel mounting) approx. 1600 g (field housing)

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

Model	Description	Input	Supply (eletrically isolated)	Output	Sensor supply	Contacts	Housing identical with ADI-B
ADI-K..	Indicating unit 96 x 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 V_{AC} **1**=48 V_{AC} **2**=24 V_{AC} **3**=24 V_{DC} **4**=115 V_{AC}	**0**= without **1**= 0-10 V **2**= 0-20 mA **4**= 4-20 mA **F**= scaleable frequency output	**0**=without **U**=5 V_{DC} **V**=12 V_{DC} **W**=24 V_{DC}	**0**= without **2**= 2 change-over contacts **6**= 2 open collector	**X**=see page 118 **F**=see page 118 **W**=see page 118 **S**=see page 118 **R**=see page 118

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 3½-segment digital display.

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 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
- 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
Accuracy:	Digital display <0.2 % 52 ppm/°C
Measurement inputs:	● 0(4)-20 mA (Ri<200 Ω), 0-10 V_{DC}, 0-5 V_{DC} (Ri>50kΩ) or ● Frequency input 0.5-2000 Hz (PNP/NPN/Namur/TTL)
Sensor 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 min. 40 years, 1 million programming cycles
Supply voltage:	230, 115, 48, 24 V_{AC} ±10%; 50-60 Hz, 24 V_{DC}, ±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_{ges}=50 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 operat. temperature -20 to +80 °C storage temperature
Dimensions:	96 x 96 x 105 mm (WxHxD) incl. screw-type terminal (panel mounting) 116 x 116 x 123 mm (WxHxD) (field housing)
Cut-out dimensions:	$92^{+0,8}$ x $92^{+0,8}$ mm (panel mounting)
Case material:	Glass-fibre-reinforced Noryl (panel mounting) Aluminium (powder coated)/PA 66 (field housing)
Protection type:	Front panel IP40, terminals IP 00 (panel mounting), IP 65 (field housing)
Mounting:	Fastening clip form B (DIN 43 835) (panel mounting) wall and pipe mounting (field housing)
Connection:	Pluggable terminal block (panel mounting), cable connection (field housing)
Weight:	approx. 700 g (panel mounting) approx. 1600 g (field housing)

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

Model	Description	Input	Supply (eletrically isolated)	Output	Sensor supply	Contacts	Housing identical with ADI-B
ADI-D...	Indicating unit 96 x 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	**0**=230 V_{AC} **1**=48 V_{AC} **2**=24 V_{AC} **3**=24 V_{DC} **4**=115 V_{AC}	**0**= without **1**= 0-10 V **2**= 0-20 mA **4**= 4-20 mA	**0**=without **U**=5 V_{DC} **V**=12 V_{DC} **W**=24 V_{DC}	**0**= without **2**= 2 change-over con tacts **6**= 2 open collector	**X**=see page 118 **F**=see page 118 **W**=see page 118 **S**=see page 118 **R**= see page 118

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