

# Universal Indicating Unit

for all Inputs  
(Frequency, Current, Voltage)

Model: ADI-1...S

ADI-1

Model: ADI-1...



Option  
wall mounting

Model: ADI-1...R



Option  
pipe mounting  
bracket

- Panel mounting and field housing
- Bargraph and digital display
- User scaling
- 2 limit values
- Min/max memory
- Protection IP 65
- Simple button programming
- Sensor supply
- Totaliser



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## Description

The KOBOLD indication unit is used for displaying and processing of process values. Frequencies or standard current/voltage signals may be processed as input signals. Most output signals from transducers can thus be displayed. The indication is displayed via a 5 digit display and a 55 point bargraph. All internal process parameters in different configurations can thus be displayed.



All programming is done with 4 front buttons in three different programming modes. 4 internal alarm parameters can be freely assigned to the 2 limit switches, on the optional analogue output, or on the display elements. Using the corresponding totaliser and alarm correlation basic dosing functions can be realised. Various alarm and control functions can be triggered by the digital control input or by pressing a button.

### The device has the following functions as standard:

- 4-button programming, user scaling
- MIN/MAX memory, HOLD function
- Sensor linearisation, attenuation function, logic function
- Digital control input, free allocable
- 2 change-over contacts
- Totaliser

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

- Analogue output 0(4) - 20 mA, 0 - 10 V<sub>DC</sub>
- Sensor supply

### Technical Details

Bargraph: arrangement of 55 LEDs: round, 270°, free scaleable, standard: 0 - 100 %

Digital display: 5-digits, 14 mm high red LED display, programmable decimal-point setting

Display range: -19999...+19999

Display time: 0.1-10 s, programmable

Measuring error: ±0,1 % of measuring range; ±1 digit (Norm signal) 0.05 % of measuring range; ±1 digit (frequency signal)

Temperature drift: 50 ppm/K

Measurement inputs: ● Norm signals: ("V") -12...+12 V<sub>DC</sub> at Ri = approx. 200 kΩ -22...+24 mA<sub>DC</sub> at Ri = approx. 100 Ω 1...24 mA<sub>DC</sub> at Ri = approx. 100 Ω Pre-calibrated ranges: 0...10 V; 0...20 mA; 4...20 mA or ● frequency input ("F"): 0.01 Hz...99.999 kHz

Sensor supply: ● option "W" 24 V<sub>DC</sub> ± 10 %, max. 50 mA ● option "V" 12 V<sub>DC</sub> ± 5 %, max. 20 mA ● option "U" 5 V<sub>DC</sub> ± 5 %, max. 20 mA

Digital input: max. 30 V<sub>DC</sub>, > 10 V HIGH; < 2.4 V LOW, Ri approx. 5 kΩ

Power supply: ● Version "0" 100...240 V<sub>AC</sub> ± 10 %, 50/60 Hz, max. 15 VA 100...240 V<sub>DC</sub>, max. 15 W ● version "3" 18...30 V<sub>AC</sub>, 50/60 Hz, max. 15 VA 10...40 V<sub>DC</sub>, 15 W

Limit values: 2 relay changeover contacts max. 250 V<sub>AC</sub>/5 A (resistive load) max. 30 V<sub>DC</sub>/5 A

Analogue output: 0-20 mA, 4-20 mA (load < 360 Ω) (Option) and 0-10 V<sub>DC</sub>, (load > 10 kΩ)

Output errors: 0.1% of full scale

Storage temperature: -20...+80 °C

Ambiant temperature: 0...+50 °C

Housing material: Noryl, glass fibre coated

Protection: front IP65, terminal IP00

Connection: pluggable terminal block cable cross-section 2.5 mm<sup>2</sup>

Weight: approx. 700 g

### Order Details (Example: ADI-1 V 0 0 0 20 0)

Model	Description	Input	Supply (galvanically isolated)	Output	Sensor supply	Contacts	Housing	Special
ADI-1..	Indicating unit 96 x 96 mm with bargraph display, linearisation, min/max memory 2 change-over contacts	V = 0-20 mA, 4-20 mA 0-5 V, 0-10 V F = Frequency input 0.01-100 kHz	0 = 100...240 V <sub>AC/DC</sub> 3 = 18...30 V <sub>AC</sub> 10...40 V <sub>DC</sub>	0 = without 4 = 0(4)-20 mA 0-10V	0 = without U = 5 V <sub>DC</sub> V = 12 V <sub>DC</sub> W = 24 V <sub>DC</sub>	2 = 2 change-over contacts	0 = installation housing	0 = without Y = special (please specify in clear text)

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All programming is done with 4 front buttons in three different programming modes. 4 internal alarm parameters can be freely assigned to the 2 limit switches, on the optional analogue output, or on the display elements. Using the corresponding totaliser and alarm correlation basic dosing functions can be realised. Various alarm and control functions can be triggered by the digital control input or by pressing a button.

### The device has the following functions as standard:

- 4-button programming, user scaling
- MIN/MAX memory, HOLD function
- Sensor linearisation, attenuation function, logic function
- Digital control input, free allocable
- 2 change-over contacts
- Totaliser

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

- Analogue output 0(4) - 20 mA, 0 - 10 V<sub>DC</sub>
- Sensor supply

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- frequency input ("F"): 0.01 Hz...99.999 kHz

Sensor supply:

- option "W" 24 V<sub>DC</sub> ± 10 %, 50 mA max.
- option "V" 12 V<sub>DC</sub> ± 5 %, 20 mA max.
- option "U" 5 V<sub>DC</sub> ± 5 %, 20 mA max.

Digital input: max. 30 V<sub>DC</sub>, > 10 V HIGH; < 2.4 V LOW, Ri approx. 5 kΩ

Power supply:

- version "0" 100...240 V<sub>AC</sub> ± 10 %, 50/60 Hz, max. 15 VA 100...240 V<sub>DC</sub>, max. 15 W
- version "3" 18...30 V<sub>AC</sub>, 50/60 Hz, max. 15 VA 10...40 V<sub>DC</sub>, 15 W

Limit values: 2 relay changeover contacts max. 250 V<sub>AC</sub>/5 A (resistive load) max. 30 V<sub>DC</sub>/5 A

Analogue output: 0-20 mA, 4-20 mA (load < 360 Ω) (Option) und 0-10 V<sub>DC</sub>, (load > 10 kΩ)

Output errors: 0,1 % of full scale

Storage temperature: -20...+80 °C

Ambiant temperature: supply ("0"): -20...+60 °C supply ("3"): -20...+80 °C

Housing material: aluminum (powder coated), PA 66

Protection: IP65

Mounting: wall and pipe mounting

Connection: pluggable terminal block (internal) cable glands: PG 13,5

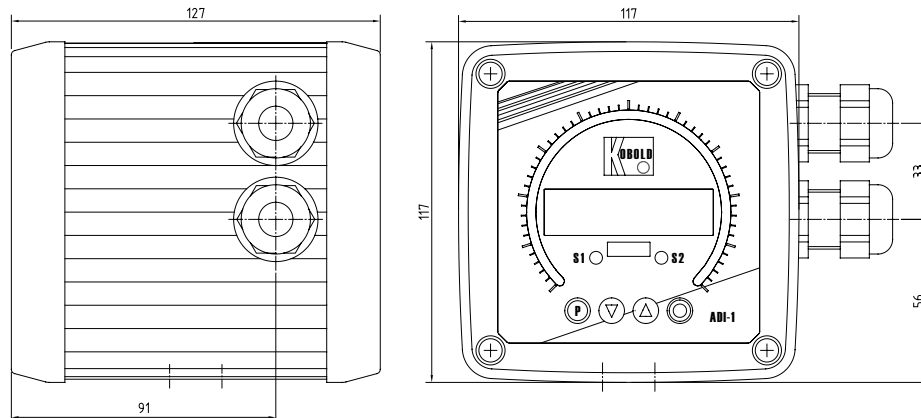
Weight: approx. 1500 g

### Order Details (Example: ADI-1 V 0 0 0 2 F 0)

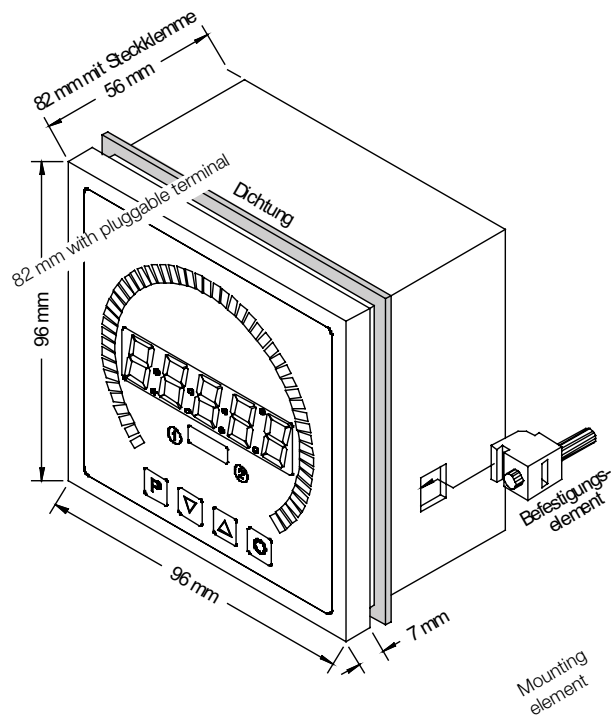
Model	Description	Input	Supply (electr. isolated))	Output	Sensor supply	Contacts	Housing	Special
ADI-1..	Indicating unit with bargraph display, linearisation, min/max memory 2 change-over contacts	V = 0-20 mA, 4-20 mA 0-5 V, 0-10 V F = Frequency input 0,01-100 kHz	0 = 100...240 V <sub>AC/DC</sub> 3 = 18...30 V <sub>AC</sub> 10...40 V <sub>DC</sub>	0 = without 4 = 0(4) - 20 mA 0 - 10V	0 = without U = 5 V <sub>DC</sub> V = 12 V <sub>DC</sub> W = 24 V <sub>DC</sub>	2 = 2 change-over contacts	F = field housing S = field housing with wall mounting; finely rotatable R = field housing with pipe mounting; for 2" piping	0 = without Y = special (please specify in clear text)

## Dimensions

### Field Housing



### Panel Mounting



### Zubehör

Zubehör	Typ	Bild
2" pipe mount kit for ADI, stainless steel	ERS-ADI-209038	
Wall mounting for aluminium field housing for type ADI, continuously adjustable	ERS-ADI-209035	