

ACT20D-LED-UI-AO-4RC-AC-DC

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com



Devices in this series display universal analogue process values.

Depending on the version, the devices convert/isolate the signals into an analogue current signal and have additional limit value relays which switch further signals.

Features:

- Several sensor variants can be processed.
- An auxiliary power supply is required.
- Even in unfavourable lighting conditions, the display value is clearly visible.

General ordering data

Version	Display, Input : I/U universal, Temperature, Output : Display, analogue V / mA, 4 x Relay
Order No.	2920060000
Type	ACT20D-LED-UI-AO-4RC-AC-DC
GTIN (EAN)	4099986580350
Qty.	1 items

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Technical data

Approvals

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ROHS Conform

Dimensions and weights

Depth	120 mm	Depth (inches)	4.7244 inch
Height	48.8 mm	Height (inches)	1.9213 inch
Width	96.6 mm	Width (inches)	3.8031 inch
Net weight	315 g		

Temperatures

Storage temperature		Operating temperature	-20 °C...60 °C
Humidity	5...95 % rel. humidity, no condensation		

Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	6c, 7a, 7cI
REACH SVHC	Lead 7439-92-1, Potassium perfluorobutane sulfonate 29420-49-3
SCIP	f4905d12-f516-4eb5-90a8-8c87685bc956

Display

Display range	-1999...9999	Display value	current measured value, Percentage or real value display, Switching status
Format	14 segment (numbers + letters), Scrolling text in 8 languages in case of error (e.g. sensor wire breakage, input overrange...)	Type	red LED, 4-character display, Digit size: 13.8 mm
Cycle time	2.2 times / s	Decimal point	18888, 1.8888, 18.888, 188.88, 1888.8
Scaling	Variable	Dimmable	Yes

General data

Type of connection	Tension clamp connection with actuator	Accuracy	<0.1 % of measuring range
Type of mounting	Frontpanel mounting, Front mounting	Protection degree	IP65
DIN Rail compatibility	No	Supply voltage	21.6...253 VAC, (50...60 Hz) or 19.2...300 VDC
Power consumption	≤ 3.5 W	Temperature coefficient	≤0,01% of measurement range°C
Configuration	Front push-button		

Input

cold junction compensation	internal	Sensor	2-wire transmitter (without own power supply), 4-wire sensor (with own
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power supply), RTD (2,3-wire): Pt100, Pt200, Pt1000, Ni120, Cu10, Thermocouples: B / C / E / J / K / L / N / R / S / T / W3 / W5, Resistance measurement, Potentiometer: 10 Ω... 10 kΩ

Number inputs	1
Type	'active','connected control must be passive'
Potentiometer	10 Ω... 10 kΩ
Input voltage	0...1 V DC, 0,2...1 V DC, 0...10 V DC, 2...10 V DC
Input current	0...20 mA, 4...20 mA
Response time	configurable 0.4...60 s (mA / V input), configurable 1...60 s (temperature input)

Input resistance	20 Ω
Line resistance in measuring circuit	50 Ω
Sensor supply	> 15 V DC at 20 mA
Temperature input range	E: (-100...+1000 °C), J: (-100...+1200 °C), K: (-180...+1372 °C), L: (-200...+900 °C), N: -180...+1300 °C, R: (-50...+1760 °C), S: (-50...+1760 °C), T: (-200...+400 °C), U: (-200...+600 °C), W3: (0...+2300 °C), W5: (0...+2300 °C), LR: (-200...+800 °C), PT100 / 200 / 1000: -200 °C...+850 °C
Input resistance, voltage	> 10 MΩ

Output

Type	active
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Output (digital)

Rated switching voltage	24...250 V AC	Rated switching current	2 A
Number of digital outputs	4	Max. switching voltage, AC	250 V
Max. switching voltage, DC	30 V	Hysteresis	0... 100 %
Switch-off delay	0...3600 s	Switching capacity	500 VA
Type	4 x 1 CO contact (hard gold-plated)	Switch-on delay	0...3600 s
Alarm function	Under voltage, Over voltage, Under-current, Surge current, Surge voltage, Under-temperature, Over-temperature, Sensor error	Type of switch function	direct or inverted
Switching thresholds	10...100% of %*UN		

Output (analogue)

Signal output	direct or inverted	Type (analogue output)	'active','connected control must be passive'
Output behaviour on failure downscale	3.5 mA	Output behaviour on failure upscale	23 mA
Number analogue outputs	1	Load resistance current	≤ 800 Ω

Insulation coordination

EMC standards	EN 61326-1	Pollution severity	2
Galvanic isolation	between input/output/supply/relay	Insulation voltage	2.3 kVAC (Test) / 250 VAC (operating state)

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Connection data

Wire connection method	Clamping yoke, pluggable	Type of connection	Tension clamp connection with actuator
Wire connection cross section AWG, min.	AWG 30	Wire connection cross section AWG, max.	AWG 12
Wire connection cross section, finely stranded, min.	0.13 mm ²	Wire connection cross section, finely stranded, max.	2.8 mm ²

Part description

Product description	The device is a built-in device used to digitally display process values such as current, voltage, resistance, temperature and potentiometer signals in real-time. The device is designed for switch panel installation in a visible area. The device may only be used indoors.
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Classifications

ETIM 8.0	EC000677	ETIM 9.0	EC000677
ETIM 10.0	EC000677	ECLASS 14.0	27-14-31-10
ECLASS 15.0	27-14-31-10		

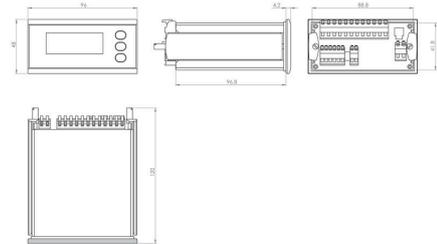
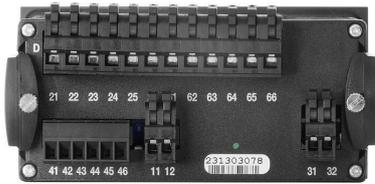
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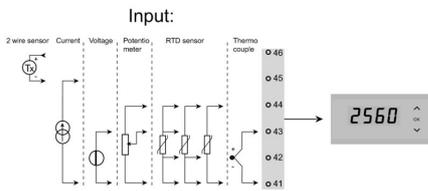
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Drawings

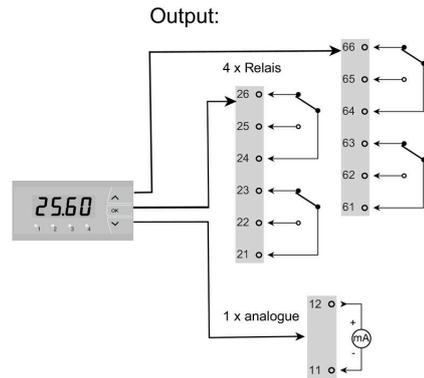
Dimensioned drawing



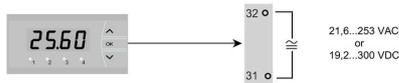
Wiring diagram



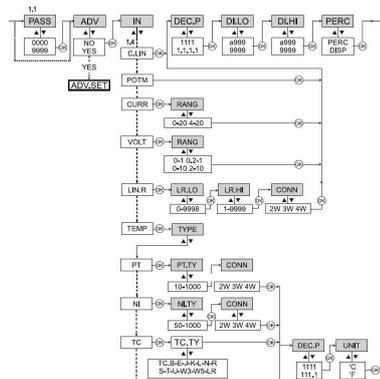
Wiring diagram



Supply



part of setting menu



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Accessories

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Process value indicators with LED display - ACT20D



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General ordering data

Type	PROTECTIVE COVER	Version
Order No.	2964330000	Display, Hood, Input : Protective cover for ACT20D-... Process value indicator, Output : Potentiometer, Temperature, thermocouple
GTIN (EAN)	4099986768086	
Qty.	1 ST	