

**ACT20D-LED-UI-AO-4RC-AC-DC****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**Product image**

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, Potentiometer, Output : Display, analogue V / mA, 4 x Relay
Order No.	<a href="#">2920060000</a>
Type	ACT20D-LED-UI-AO-4RC-AC-DC
GTIN (EAN)	4099986580350
Qty.	1 pc(s).

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**Technical data****Dimensions and weights**

Depth	120 mm	Depth (inches)	4.724 inch
Height	48.8 mm	Height (inches)	1.921 inch
Width	96.6 mm	Width (inches)	3.803 inch
Net weight	315 g		

**Temperatures**

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

Cycle time	2.2 times / s	Decimal point	18888, 1.8888, 18.888, 188.88, 1888.8
Dimmable	Yes	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...)
Scaling	Variable	Type	red LED, 4-character display, Digit size: 13.8 mm

**General data**

Accuracy	<0.1 % of measuring range	Configuration	Front push-button
DIN Rail compatibility	No	Power consumption	≤ 3.5 W
Protection degree	IP20, IP65 (in plugged condition), IP65	Temperature coefficient	≤0,01% of measurement range/°C
Type of connection	Tension clamp connection with actuator	Type of mounting	Frontpanel mounting, Front mounting
Voltage supply	21.6...253 VAC, (50...60 Hz) or 19.2...300 VDC		

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## Technical data

### Input

Input current	0...20 mA, 4...20 mA	Input resistance	20 $\Omega$
Input resistance, voltage	> 10 M $\Omega$	Input voltage	0...1 V DC, 0,2...1 V DC, 0...10 V DC, 2...10 V DC
Line resistance in measuring circuit	50 $\Omega$	Number of inputs	1
Potentiometer	10 $\Omega$ ...10 k $\Omega$	Response time	configurable 0.4...60 s (mA / V input), configurable 1...60 s (temperature input)
Sensor	2-wire transmitter (without own power supply), 4-wire sensor (with own 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 $\Omega$ ...10 k $\Omega$	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	Type	'active', 'connected control must be passive'
cold junction compensation	internal		

### Output (digital)

Alarm function	Under voltage, Over voltage, Under-current, Surge current, Surge voltage, Under-temperature, Over-temperature, Sensor error	Contact material	Cu
Hysteresis	0...100 %	Max. switching frequency	15 Hz
Max. switching voltage, AC	250 V	Max. switching voltage, DC	30 V
Number of digital outputs	4	Rated switching current	2 A
Rated switching voltage	24...250 V AC	Status indicator	Green LED
Switch-off delay	0...3600 s	Switch-on delay	0...3600 s
Switching capacity	500 VA	Switching thresholds	10...100% of % $\dot{U}_N$
Type	4 x 1 CO contact (hard gold-plated)	Type of switch function	direct or inverted

### Output (analogue)

Load resistance current	$\leq$ 800 $\Omega$	Number of analogue outputs	1
Output behaviour on failure downscale	3.5 mA	Output behaviour on failure upscale	23 mA
Output current	0...20 mA, 4...20 mA, 20...0 mA, 20...4 mA	Signal output	direct or inverted
Type (analogue output)	'active', 'connected control must be passive'		

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**Technical data****Insulation coordination**

Galvanic isolation	between input / output / supply / relay	Insulation voltage	2.3 kVAC (Test) / 250 VAC (operating state)
Pollution severity	2		

**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 <sup>2</sup>	Wire connection cross section, finely stranded, max.	2.8 mm <sup>2</sup>

**Classifications**

ETIM 6.0	EC000677	ETIM 7.0	EC000677
ETIM 8.0	EC000677	ETIM 9.0	EC000677
ECLASS 9.0	27-14-31-10	ECLASS 9.1	27-21-03-01
ECLASS 10.0	27-14-31-10	ECLASS 11.0	27-14-31-10
ECLASS 12.0	27-14-31-10	ECLASS 13.0	27-14-31-10

**Environmental Product Compliance**

REACH SVHC	Lead 7439-92-1 Potassium perfluorobutane sulfonate 29420-49-3
SCIP	f4905d12-f516-4eb5-90a8-8c87685bc956

**Important note**

Product information	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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**Approvals**

Approvals



ROHS	Conform
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**Downloads**

Approval/Certificate/Document of Conformity	<a href="#">RCM certification</a> <a href="#">DNV certification</a> <a href="#">UL certification</a> <a href="#">Declaration of Conformity</a>
User Documentation	<a href="#">Instruction sheet</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>

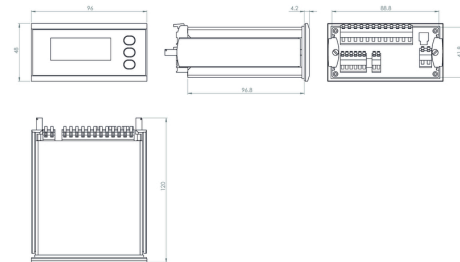
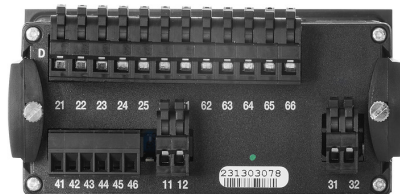
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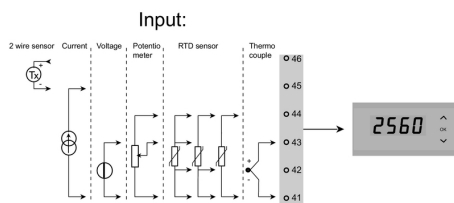
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## Drawings

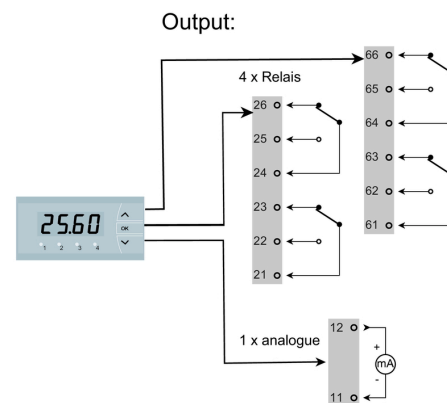
## Dimensioned drawing



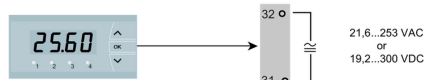
## Wiring diagram



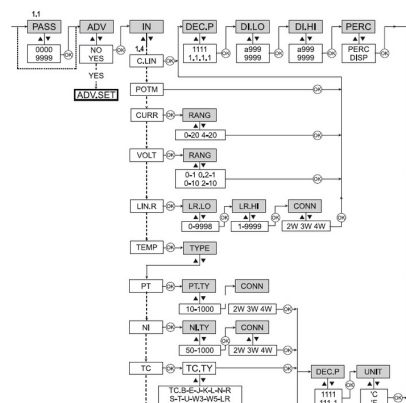
## Wiring diagram



## Supply



## part of setting menu



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[www.weidmueller.com](http://www.weidmueller.com)**Accessories****Process value indicators with LED display - ACT20D**

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- 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**

Type	PROTECTIVE COVER	Version
Order No.	<a href="#">2964330000</a>	Display, Hood
GTIN (EAN)	4099986768086	
Qty.	1 pc(s).	