

ACT20D-LED-FI-AO-2RC-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 : Frequency, Output : Display, analogue V / mA
Order No.	2920070000
Type	ACT20D-LED-FI-AO-2RC-AC-DC
GTIN (EAN)	4099986580367
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	295 g		

Temperatures

Storage temperature	-40 °C...80 °C	Operating temperature	-20 °C...60 °C
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Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	6c, 7a, 7cl
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	configurable, 9.999, 99.99, 999.9, 9999
Scaling	Variable	Dimmable	Yes

General data

Type of connection	Tension clamp connection with actuator	Accuracy	absolute accuracy: $\leq \pm 0.1$ % of the measurement 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	$\leq 0.01\%$ of measurement range/°C
Configuration	Front push-button		

Input

Sensor	S0 (trig-level low: ≤ 2.2 mA high: ≥ 9.0 mA), Special current (trig-level: user-defined), Special voltage	Number inputs	1
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(trig-level: user-defined),
TTL (trig-level low: ≤ 0.8
V high: ≥ 2.0 V), Tacho
(trig-level low: ≤ 50 mV
high: $\geq +50$ mV), NAMUR
sensor, according to
EN60947-5-6, NPN / PNP
transistor (trig-level low: ≤ 4
V high: ≥ 7 V), Trigger level
adjustable, Switch

Input frequency	0.001...50 kHz	Type	Adjustable frequencies
Min. pulse duration (reset input)	20 μ s...999,9 s	Sensor supply	5...17 V
Response time	≤ 1 Period + 100 ms		

Output

Type	active
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Output (digital)

Rated switching voltage	24 V AC ... 250 V AC	Rated switching current	2 A
Number of digital outputs	2	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	2 x 1 CO contact (hard gold-plated)	Switch-on delay	0...3600 s
Alarm function	Over / under frequency, Overspeed / underspeed, Holding function can be activated	Type of switch function	direct or inverted
Switching thresholds	All values in display range are configurable		

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	$\leq 800 \Omega$

Insulation coordination

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

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 16
Wire connection cross section, finely stranded, min.	0.13 mm ²	Wire connection cross section, finely stranded, max.	2.8 mm ²

Classifications

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

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ECLASS 15.0

27-14-31-10

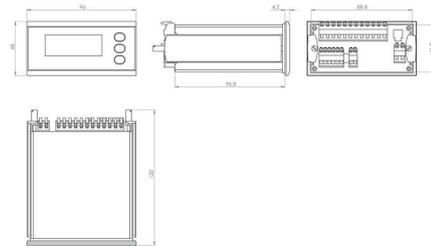
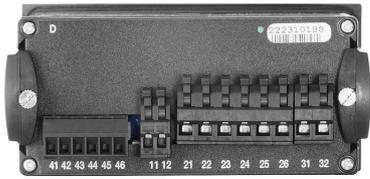
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Drawings

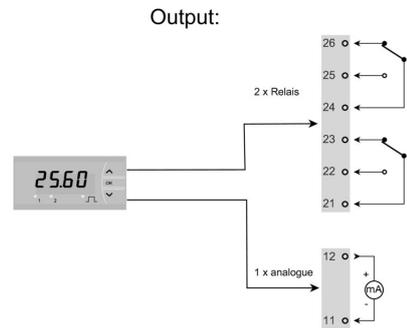
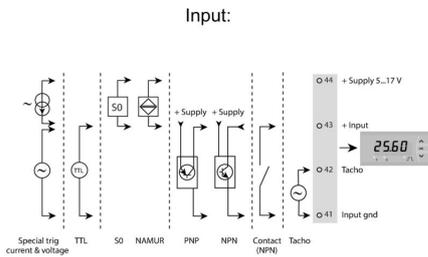
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Dimensioned drawing



Wiring diagram

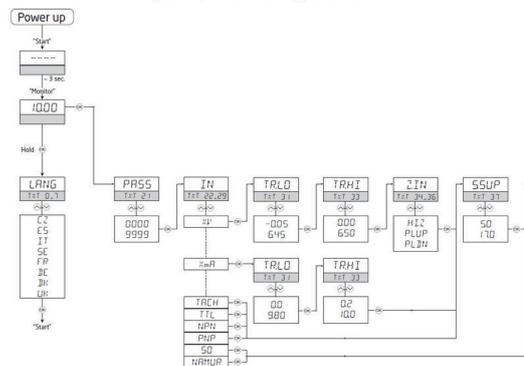
Wiring diagram



Supply



part of the 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	