

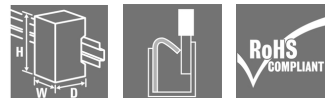
ACT20P-CMT-30-AO-RC-P**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**ACT20P: The flexible solution**

- Precise and highly functional signal converters
- Release levers simplify handling

General ordering data

Version	Current-measuring transducer, Limit value monitoring, Input : 0...20/25/30 A, Analogue output, Relay output
Order No.	1510320000
Type	ACT20P-CMT-30-AO-RC-P
GTIN (EAN)	4050118319569
Qty.	1 pc(s).

Creation date September 16, 2022 6:44:07 AM CEST

Catalogue status 09.09.2022 / We reserve the right to make technical changes.

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Technical data

Dimensions and weights

Depth	114 mm	Depth (inches)	4.488 inch
Height	127.1 mm	Height (inches)	5.004 inch
Width	22.8 mm	Width (inches)	0.898 inch
Net weight	204 g		

Temperatures

Storage temperature	-40 °C...85 °C	Operating temperature	-25 °C...60 °C
Humidity	5...95 %, no condensation		

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1	SCIP	2f6dd957-421a-46db-a0c2-cf1609156924
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Input

Input frequency		Input measurement range	configurable, 0... 20/25/30 A AC (RMS) or DC, max. peak current $10 \times I_{Input(1s)}$, max. continuous current $2 \times I_{Input}$
	AC: 15...700 Hz (true root mean square)		
Input signal	Current-carrying cable in feed-through hole	Number of inputs	1

Output

Type	active, connected control must be passive
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Output (digital)

Alarm function	Surge current, Under-current, Alarm delay: 0...10 s, Hysteresis 5% / 10%	Max. switching voltage, AC	250 V
Max. switching voltage, DC	24 V	Number of digital outputs	1
Rated switching current	6 A	Type	Relay, 1 CO contact, normal / inverse adjustment

Output (analogue)

Load resistance current	$\leq 600 \Omega$	Load resistance voltage	$\geq 10 k\Omega$
Number of analogue outputs	1	Output current	Adjustable, 0...20 mA, 4...20 mA, -20...+20 mA
Output voltage	Adjustable, 0...10 V, 2...10 V, 0...5 V, 1...5 V, -5...+5 V, -10...+10 V	Transmit function	direct or inverted
Type (analogue output)	'active', 'connected control must be passive'		

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General data

Accuracy	< 0.75 % FSR	Configuration	DIP switch and potentiometer
Galvanic isolation	4-way isolator, between input / output / supply / relay	Power consumption, max.	2.2 W
Rail	TS 35	Step response time	≤ 300 ms (RMS), ≤ 60 ms (AA)
Temperature coefficient	typ. 0.04 % / K, max. 0.09 % / K	Type of connection	PUSH IN
Voltage supply	16,8 V...31,2 V		

Insulation coordination

EMC standards	IEC 61326-1, IEC 61010-2-201	Galvanic isolation	4-way isolator, between input / output / supply / relay
Impulse withstand voltage	6.4 kV (1.2/50 μs)	Insulation voltage	4 kV _{eff} / 1 min.
Pollution severity	2	Rated voltage	300 V AC _{rms}
Surge voltage category	III	Test voltage	4 kV

Connection data

Type of connection	PUSH IN	Tightening torque, min.	0.4 Nm
Tightening torque, max.	0.6 Nm	Clamping range, rated connection	2.5 mm ²
Clamping range, min.	0.5 mm ²	Clamping range, max.	2.5 mm ²
Wire connection cross section AWG, min.	AWG 26	Wire connection cross section AWG, max.	AWG 14
Wire cross-section, solid, min.	0.2 mm ²	Wire cross-section, solid, max.	2.5 mm ²
Wire connection cross section, finely stranded, min.	0.2 mm ²	Wire connection cross section, finely stranded, max.	2.5 mm ²
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min.	0.2 mm ²	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	2.5 mm ²

Classifications

ETIM 6.0	EC002475	ETIM 7.0	EC002475
ETIM 8.0	EC002475	ECLASS 9.0	27-21-01-23
ECLASS 9.1	27-21-01-23	ECLASS 10.0	27-21-01-23
ECLASS 11.0	27-21-01-23	ECLASS 12.0	27-21-01-23

Important note

Product information	<p>The ACT20P-CMT-XX-(AO)-RC-P series of devices measure and monitor AC and DC currents of up to 60 A. The real effective value method used allows for precise measurement, even for distorted current curve shapes. The devices feature integrated limit value monitoring with an adjustable switching threshold, delay and hysteresis, as well as a relay output.</p> <p>Features</p> <ul style="list-style-type: none"> • Real effective value measurement (True RMS) or arithmetic averaging (AA) measurement and contactless through-hole technology • Limit value monitoring for overcurrent or undercurrent • Relay output by means of the open-circuit / closed-circuit principle • Adjustable trigger delay for filtering current peaks • Operational status and error display on a front panel LED and output signalling according to NE43, NE44, NE107 • Galvanic four-way insulation for secure isolation according to IEC/EN 61010-2-201
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Technical data**Approvals**

Approvals



Approvals	CULUS;
ROHS	Conform
UL File Number Search	UL Website
Certificate no. (cULus)	E141197

Downloads

Approval/Certificate/Document of Conformity	Certification DNV GL Declaration of Conformity
Engineering Data	CAD data – STEP
Engineering Data	EPLAN
Software	Runtime Software – DIP switch configuration tool
User Documentation	Instruction sheet
Catalogues	Catalogues in PDF-format

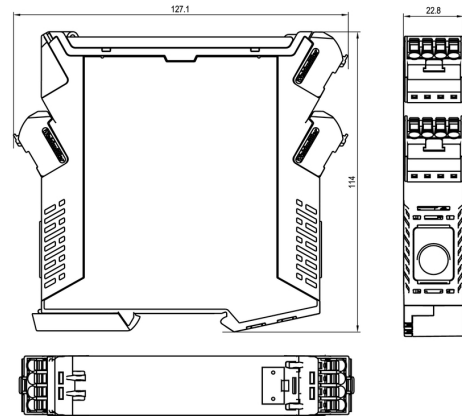
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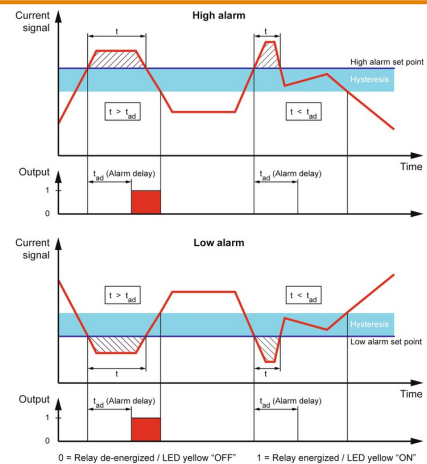
Drawings

Dimensioned drawing

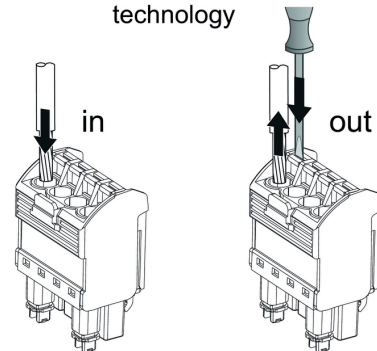


Configuration

DIP switch S1		DIP switch S2	
Current input range	1 2 3 4 5 6 7 8	Output range	1 2 3 4 5 6 7 8
0...20 A	<input type="checkbox"/>	0...10 V	<input type="checkbox"/>
0...25 A	<input type="checkbox"/>	2...10 V	<input type="checkbox"/>
0...30 A	<input type="checkbox"/>	0.5 V	<input type="checkbox"/>
		1...5 V	<input type="checkbox"/>
		-5...+5 V	<input type="checkbox"/>
		-10...+10 V	<input type="checkbox"/>
Measuring method	1 2 3 4 5 6 7 8	0...20 mA	<input type="checkbox"/>
True RMS	<input type="checkbox"/>	-20...+20 mA	<input type="checkbox"/>
Arithmetic average	<input type="checkbox"/>		
Alarm delay time	1 2 3 4 5 6 7 8	Alarm relay action	1 2 3 4 5 6 7 8
0 s	<input type="checkbox"/>	Energized	<input type="checkbox"/>
2 s	<input type="checkbox"/>	De-energized	<input type="checkbox"/>
5 s	<input type="checkbox"/>		
10 s	<input type="checkbox"/>	Alarm hysteresis	1 2 3 4 5 6 7 8
		5 %	<input type="checkbox"/>
		10 %	<input type="checkbox"/>
Measuring range monitoring	1 2 3 4 5 6 7 8	Alarm type	1 2 3 4 5 6 7 8
Yes	<input type="checkbox"/>	High alarm	<input type="checkbox"/>
No	<input type="checkbox"/>	Low alarm	<input type="checkbox"/>
Output error action	1 2 3 4 5 6 7 8		
Upscale	<input type="checkbox"/>		
Downscale	<input type="checkbox"/>		
Transfer function	1 2 3 4 5 6 7 8		
Normal	<input type="checkbox"/>		
Inverse	<input type="checkbox"/>		



PUSH IN technology

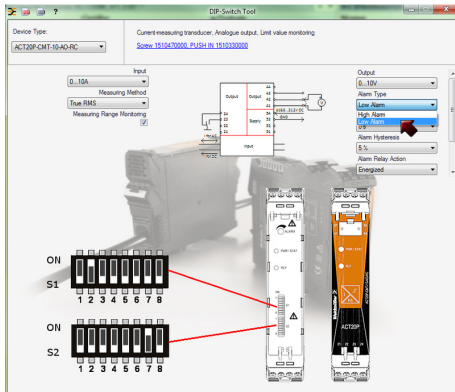


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Drawings



example for DIP switch setting (with ACT20 tool)

example for DIP switch setting (with ACT20 tool)

