

**ACT20P-CMT-10-AO-RC-S****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**Product image****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...5/10 A, Analogue output, Relay output
Order No.	<a href="#">1510470000</a>
Type	ACT20P-CMT-10-AO-RC-S
GTIN (EAN)	4050118319583
Qty.	1 pc(s).

Creation date 07 February 2022 05:07:58 CET

Catalogue status 03.02.2022 / We reserve the right to make technical changes.

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## Technical data

### Dimensions and weights

Depth	113.6 mm	Depth (inches)	4.472 inch
Height	119.2 mm	Height (inches)	4.693 inch
Width	22.5 mm	Width (inches)	0.886 inch
Net weight	211 g		

### Temperatures

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

### Probability of failure

MTTF	130 Years
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### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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### Input

Input frequency		Input measurement range	configurable, 0...5/10 A AC (RMS) or DC, max. peak current $10 \times I_{Input}$ (1 s), max. peak current $2 \times I_{Input}$ (1 s) @ 5/10 A DC
	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	$\geq 10 \text{ k}\Omega$
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	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	≤ ±100 ppm/K @ -25...+55 °C, ≤ ±200 ppm/K @ +55...+70 °C	Type of connection	Screw connection
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 <sub>eff</sub> / 1 min.
Pollution severity	2	Rated voltage	300 V AC <sub>rms</sub>
Surge voltage category	III	Test voltage	4 kV

### Connection data

Type of connection	Screw connection	Tightening torque, min.	0.4 Nm
Tightening torque, max.	0.6 Nm	Clamping range, rated connection	1.5 mm <sup>2</sup>
Clamping range, min.	0.5 mm <sup>2</sup>	Clamping range, max.	2.5 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 26	Wire connection cross section AWG, max.	AWG 12

### 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		

### Important note

Product information	<p>The ACT20P-CMT-XX-(AO)-RC-S 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"> <li>• Real effective value measurement (True RMS) or arithmetic averaging (AA) measurement and contactless through-hole technology</li> <li>• Limit value monitoring for overcurrent or undercurrent</li> <li>• Relay output by means of the open-circuit / closed-circuit principle</li> <li>• Adjustable trigger delay for filtering current peaks</li> <li>• Operational status and error display on a front panel LED and output signalling according to NE43, NE44, NE107</li> <li>• Galvanic four-way insulation for secure isolation according to IEC/EN 61010-2-201</li> </ul>
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**Technical data**

**Approvals**

Approvals



ROHS	Conform
UL File Number Search	E141197

**Downloads**

Approval/Certificate/Document of Conformity	<a href="#">Certification DNV GL</a> <a href="#">Declaration of Conformity</a>
Engineering Data	<a href="#">CAD data – STEP</a>
Engineering Data	<a href="#">EPLAN, WSCAD</a>
Software	<a href="#">Software – DIP switch configuration tool</a>
User Documentation	<a href="#">Instruction sheet</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	

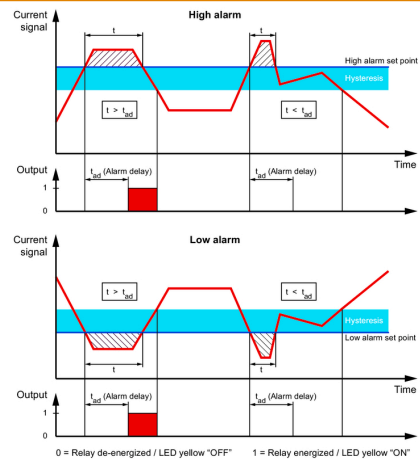
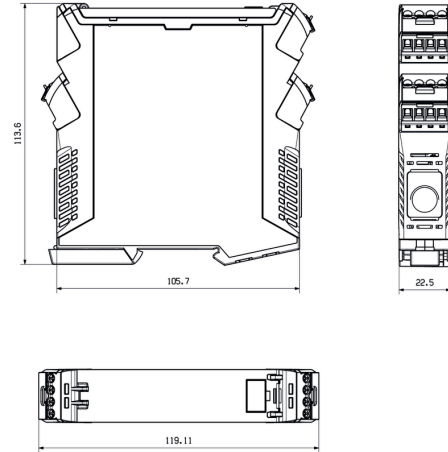
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**Drawings**

**Dimensioned drawing**

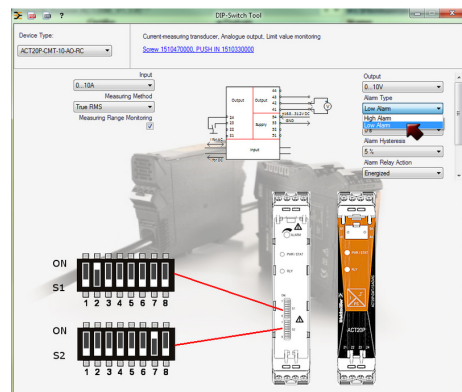


**Configuration**

		DIP switch S1							
		1	2	3	4	5	6	7	8
Current input range	0...5 A								
	0...10 A								<input checked="" type="checkbox"/>
Measuring method	True RMS								<input checked="" type="checkbox"/>
	Arithmetic average								<input type="checkbox"/>
Alarm delay time	0 s								
	2 s								<input checked="" type="checkbox"/>
	5 s								<input checked="" type="checkbox"/>
	10 s								<input checked="" type="checkbox"/>
Measuring range monitoring	Yes								<input checked="" type="checkbox"/>
	No								<input type="checkbox"/>
Output error action	Upscale								<input checked="" type="checkbox"/>
	Downscale								<input type="checkbox"/>
Transfer function	Normal								<input checked="" type="checkbox"/>
	Inverse								<input type="checkbox"/>

		DIP switch S2								
		1	2	3	4	5	6	7	8	
Output range	0...10 V									
	2...10 V								<input checked="" type="checkbox"/>	
	0...5 V								<input checked="" type="checkbox"/>	
	1...5 V								<input checked="" type="checkbox"/>	
	-5...+5 V								<input checked="" type="checkbox"/>	
	-10...+10 V								<input checked="" type="checkbox"/>	
Alarm relay action	Energized								<input checked="" type="checkbox"/>	
	De-energized								<input type="checkbox"/>	
	Alarm hysteresis	5 %								<input checked="" type="checkbox"/>
		10 %								<input type="checkbox"/>
Alarm type	High alarm								<input checked="" type="checkbox"/>	
	Low alarm								<input type="checkbox"/>	



example for DIP switch setting (with ACT20 tool)

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