

**ACT20P**  
**ACT20P-CMT-30-AO-RC-S**

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
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www.weidmueller.com

**Similar to illustration**



**ACT20P: The flexible solution**

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

**General ordering data**

Type	ACT20P-CMT-30-AO-RC-S
Order No.	<a href="#">1510540000</a>
Version	Current-measuring transducer, Limit value monitoring, Signal converter/isolator, Current monitoring, Analogue output, Screw connection, Input measurement range: configurable, 0... 20/25/30 A AC (RMS) or DC
GTIN (EAN)	4050118319590
Qty.	1 pc(s).

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

Width	22.5 mm	Width (inches)	0.886 inch
Height	119.2 mm	Height (inches)	4.693 inch
Depth	113.6 mm	Depth (inches)	4.472 inch
Net weight	158 g		

**Temperatures**

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

**Probability of failure**

MTTF	158 Years
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**Environmental Product Compliance**

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

Number of inputs	1	Input signal	Current-carrying cable in feed-through hole, Diameter 10.5 mm
Input measurement range	configurable, 0...20/25/30 A AC (RMS) or DC	Input frequency	AC: 15...700 Hz (true root mean square), AC: 50 Hz (arithmetic average)

**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	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		

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**Technical data****Output (analogue)**

Load resistance current	≤ 600 Ω	Load resistance voltage	≥ 10 kΩ
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)	Voltage and current output (configurable)		

**Output (digital)**

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

**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

**Ratings IECEx/ATEX/cUL**

Certificate no. (cULus)	E141197
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**Classifications**

ETIM 6.0	EC002475	ETIM 7.0	EC002475
eClass 9.0	27-21-01-23	eClass 9.1	27-21-01-23
eClass 10.0	27-21-01-23		

**Product information**

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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**Data sheet**

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**Technical data**

**Approvals**

Approvals



ROHS Conform

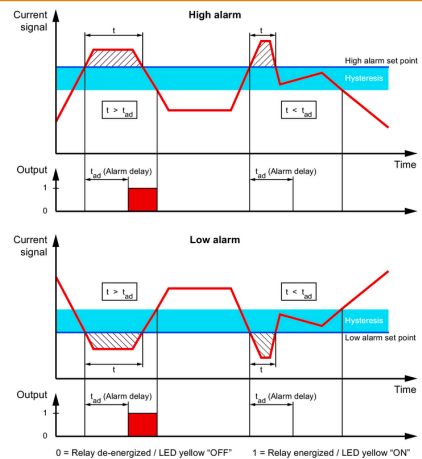
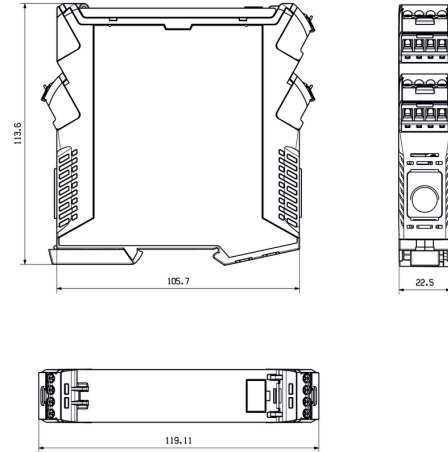
**Downloads**

Approval/Certificate/Document of Conformity	<a href="#">DNV GL certification</a> <a href="#">Declaration of Conformity</a>
Brochure/Catalogue	<a href="#">CAT 4.1 ELECTR 16/17 EN</a>
Engineering Data	<a href="#">EPLAN_WSCAD</a>
Engineering Data	<a href="#">STEP</a>
Software	<a href="#">DIP switch configuration tool</a>
User Documentation	<a href="#">Instruction sheet</a>

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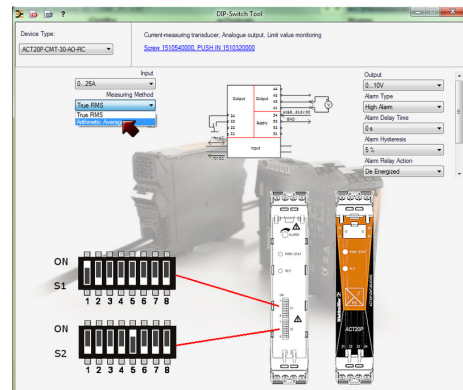
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Dimensioned drawing



Configuration

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



example for DIP switch setting (with ACT20 tool)

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Drawings

