

## ACT20P ACT20P-CML-10-AO-RC-S

**Weidmüller Interface GmbH & Co. KG**  
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### Product image



#### ACT20P: The flexible solution

- Precise and highly functional signal converters
- Simple configuration via display (Pro DCDC II), FDT/DTM software or DIP switch
- Release levers simplify handling
- More space in the control cabinet, from 12.5 mm wide for two channels

#### General ordering data

Type	ACT20P-CML-10-AO-RC-S
Order No.	<a href="#">2044850000</a>
Version	Current-measuring transducer, Limit value monitoring, Signal converter/isolator, Current monitoring, Analogue output, Screw connection, Input measurement range: configurable, 0... 1/5/10 A AC (RMS) or DC
GTIN (EAN)	4050118409680
Qty.	1 pc(s).

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

Width	17.5 mm	Width (inches)	0.689 inch
Height	119.2 mm	Height (inches)	4.693 inch
Depth	113.6 mm	Depth (inches)	4.472 inch
Net weight	141 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
Ambient temperature	-25 °C...+70 °C	Storage temperature	-40 °C...85 °C

**Probability of failure**

MTTF	130 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	Power cable can be connected to the terminals
Input measurement range	configurable, 0...1/5/10 A AC (RMS) or DC	Input frequency	AC: 15...400 Hz (true root mean square), AC: 50 Hz (arithmetic average)

**General data**

Accuracy	$\leq \pm 0.3 \% @ 1 \text{ A} / 5 \text{ A}, \leq \pm 0.6 \% @ 10 \text{ A}$	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	$\leq 300 \text{ ms (RMS)}, \leq 60 \text{ ms (AA)}$
Temperature coefficient	$\leq \pm 100 \text{ ppm/K @ } -25...+55 \text{ °C}, \leq \pm 200 \text{ ppm/K @ } +55...+70 \text{ °C}$	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 kV (1.2/50 $\mu\text{s}$ )	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

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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	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	2 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

**Classifications**

ETIM 6.0	EC002475	eClass 6.2	27-21-09-02
eClass 9.0	27-21-01-23	eClass 9.1	27-21-01-23

**Product information**

Product information	<p>The device ACT20P-CML-10-AO-RC-S measures and monitors AC and DC currents of up to 10 A. The real effective value method used allows for precise measurement, even for distorted current curve shapes. The device features an integrated limit value monitoring function with an adjustable switching threshold, lag 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</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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**Approvals**

Approvals



ROHS

Conform

**Data sheet****ACT20P**  
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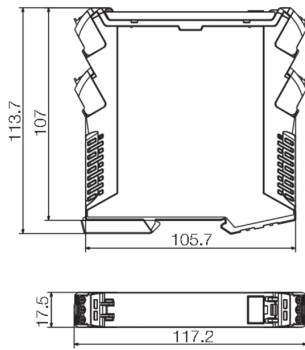
Approval/Certificate/Document of Conformity	<a href="#">DNV GL certification</a> <a href="#">Declaration of Conformity</a>
Engineering Data	<a href="#">EPLAN</a>
Engineering Data	<a href="#">STEP</a>
Software	<a href="#">DIP switch configuration tool</a>
User Documentation	<a href="#">Instruction sheet</a>

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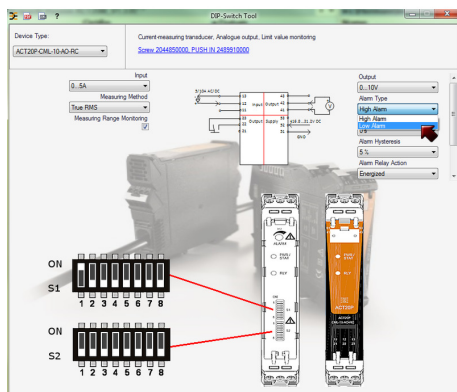
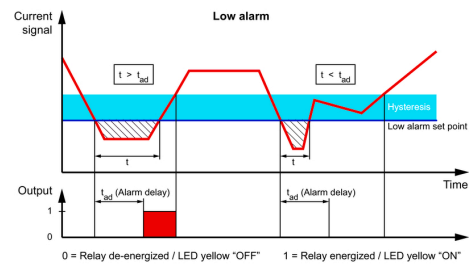
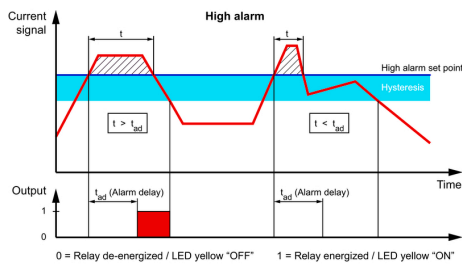
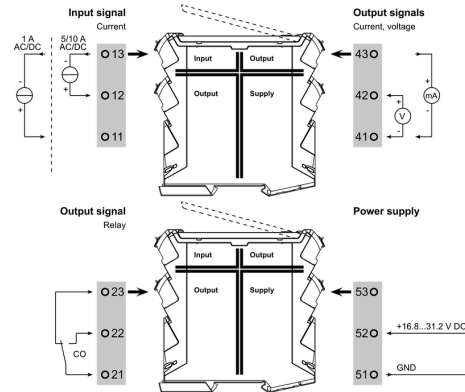
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Drawings

Dimensioned drawing



Connection diagram



example for DIP switch setting (with ACT20 tool)