

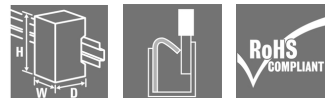
ACT20P-CML-10-AO-RC-P**Weidmüller Interface GmbH & Co. KG**

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...1/5/10 A, Analogue output, Relay output
Order No.	2489910000
Type	ACT20P-CML-10-AO-RC-P
GTIN (EAN)	4050118499940
Qty.	1 pc(s).

Creation date September 17, 2022 11:11:36 PM 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	17.5 mm	Width (inches)	0.689 inch
Net weight	141 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	AC: 15...400 Hz (true root mean square)	Input measurement range	configurable, 0...1/5/10 A AC (RMS) or DC, max. peak current $10 \times I_{Input}$ (1 s),
Input signal	Power cable can be connected to the terminals	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	Max. switching voltage, AC	250 V
Max. switching voltage, DC	24 V	Number of digital outputs	1
Rated switching current	2 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	Transmit function	direct or inverted
Type (analogue output)	Voltage and current output (configurable)		

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Technical data

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	$\leq \pm 100\text{ ppm/K @ -25...+55 }^\circ\text{C}$, $\leq \pm 200\text{ ppm/K @ +55...+70 }^\circ\text{C}$	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 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 device ACT20P-CML-10-AO-RC-P 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"> • Real effective value measurement (True RMS) or arithmetic averaging (AA) measurement • 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
Software	Runtime Software – DIP switch configuration tool
User Documentation	Instruction sheet
Catalogues	Catalogues in PDF-format

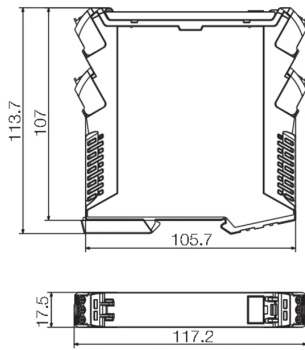
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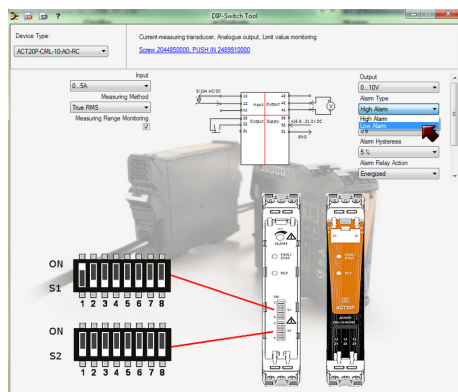
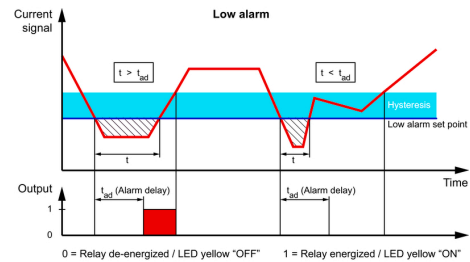
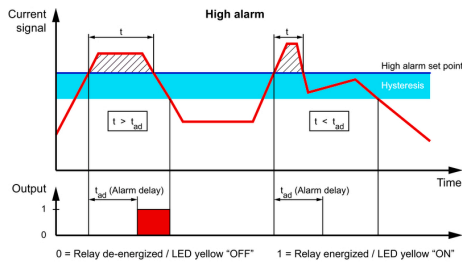
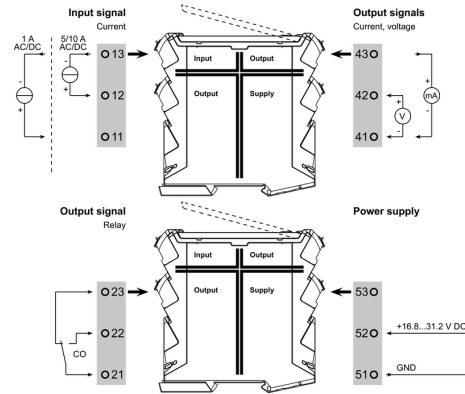
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Drawings

Dimensioned drawing



Connection diagram



Configuration

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

example for DIP switch setting (with ACT20 tool)

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Drawings

