ACT20P-CMT-10-AO-RC-P

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Similar to illustration

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.	1510330000
Type	ACT20P-CMT-10-AO-RC-P
GTIN (EAN)	4050118319378
Qty.	1 pc(s).

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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
Net weight	158 g	Width	22.8 mm
Width (inches)	0.898 inch		

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

Input

Input frequency	AC: 15...700 Hz (true root mean square)	Input measurement range	configurable, 0...5/10 A AC (RMS) or DC, max. peak current 10 × I_{Input} (1 s), max. peak current 2 × I_{Input} (1 s) @ 5/10 A DC
Input signal	Current-carrying cable in feed-through hole, Diameter 10.5 mm	Number of inputs	1

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

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	PUSH IN
Voltage supply	16,8 V...31,2 V		

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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	Wire connection cross section AWG, min.	AWG 26
Wire connection cross section AWG, max.	AWG 14	Wire cross-section, solid, min.	0.2 mm²
Wire cross-section, solid, max.	2.5 mm²	Wire connection cross section, finely stranded, min.	0.2 mm²
Wire connection cross section, finely stranded, max.	2.5 mm²	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min.	0.2 mm²
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	2.5 mm²		

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	ECLASS 11.0	27-21-01-23

Important note

Product information

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..

Features

- 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

Approvals

Approvals

Approvals	CULUS;
ROHS	Conform
UL File Number Search	E141197

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Technical data

Downloads

Approval/Certificate/Document of Conformity	Declaration of Conformity
Engineering Data	STEP
Software	DIP switch configuration tool
User Documentation	Instruction sheet

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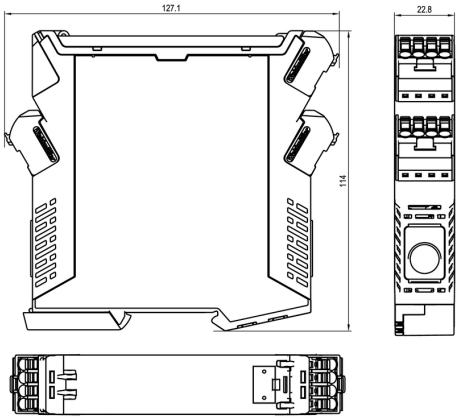
Drawings

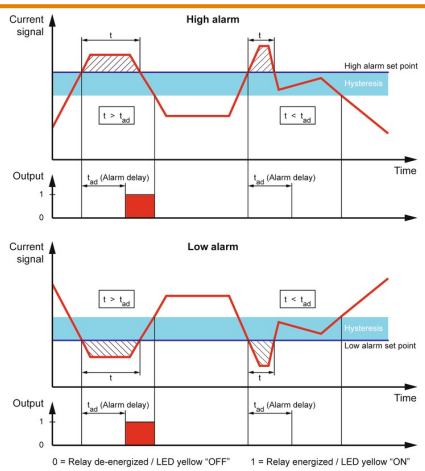
Dimensioned drawing

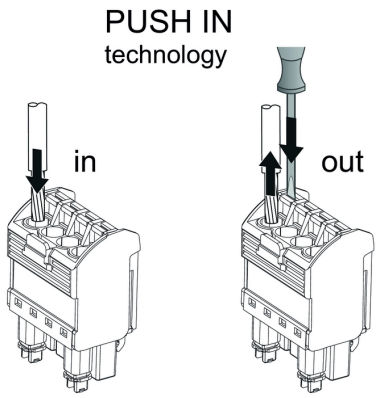


Configuration

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

DIP switch S2	1	2	3	4	5	6	7	8
Output range								
0...10 V		■						
2...10 V	■	■						
0...5 V			■					
1...5 V	■		■					
-5...+5 V				■				
-10...+10 V	■			■				
0...20 mA		■						
4...20 mA	■	■						
-20...+20 mA								
Alarm relay action								
Energized								
De-energized							■	
Alarm hysteresis								
5 %								
10 %							■	
Alarm type								
High alarm								
Low alarm							■	





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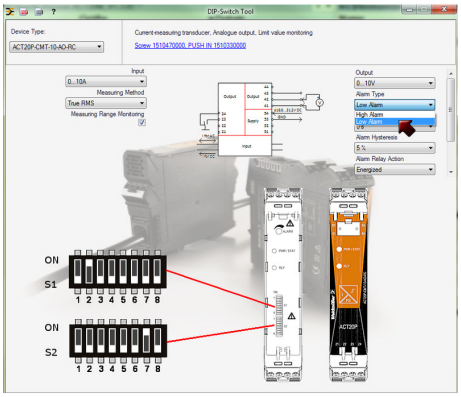
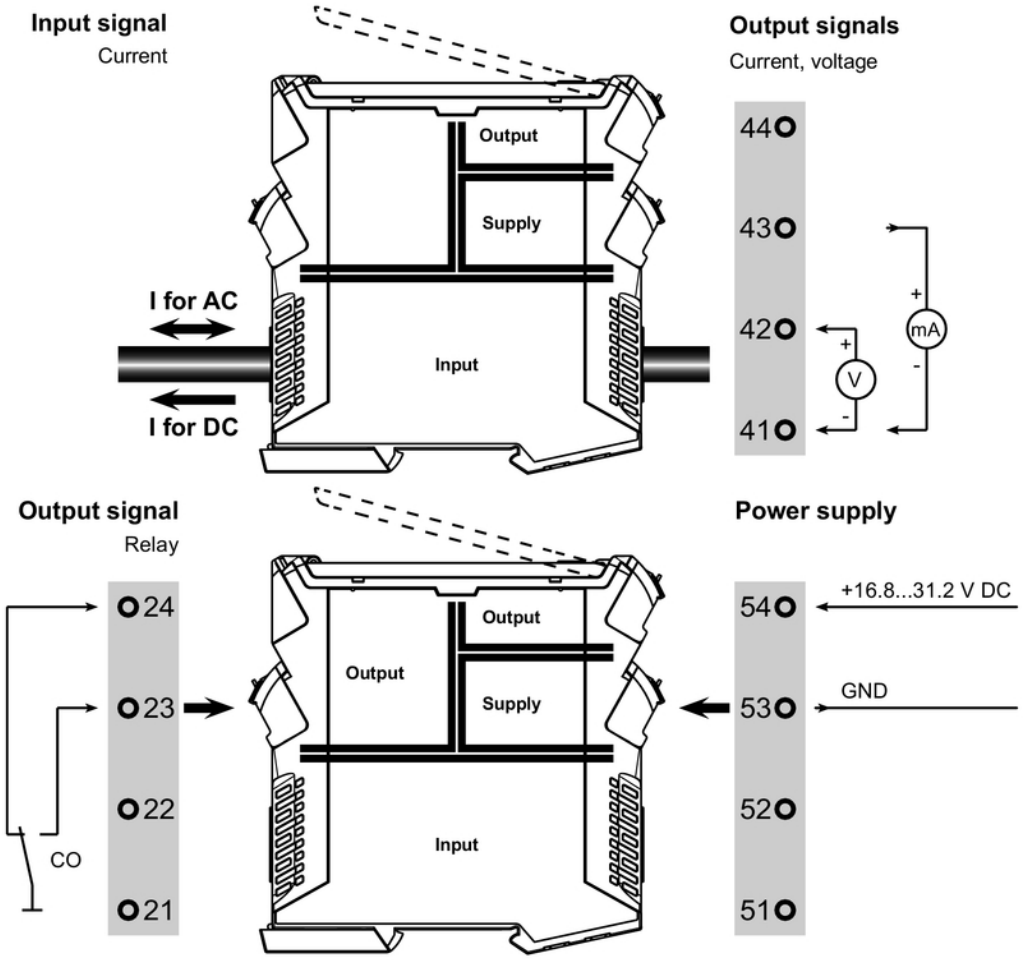


example for DIP switch setting (with ACT20 tool)

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