ACT20P-CMT-30-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...20/25/30 A, Analogue output, Relay output, Current-carrying cable in feed-through hole
Order No.	1510320000
Type	ACT20P-CMT-30-AO-RC-P
GTIN (EAN)	4050118319569
Qty.	1 pc(s).

Creation date August 19, 2024 6:10:09 AM CEST

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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	22.8 mm	Width (inches)	0.898 inch
Net weight	204 g		

Temperatures

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

Input

Input frequency	AC: 15...700 Hz (true root mean square)	Input measurement range	configurable, 0... 20/25/30 A AC (RMS) or DC, max. peak current 10 × I_{Input} (1 s), For DC current measurement (AA): Current direction display at the output (-/+ analog value)
Input signal	Current-carrying cable in feed-through hole	Number of inputs	1
Overload behaviour	Max. peak current: 10 × IInput for 1s		

Output

Load impedance current	≤ 600 Ω	Type	active, connected control must be passive

Output (digital)

Alarm function	Surge current, Under-current, Alarm limit setting: 2 - 105 %, Hysteresis 5% / 10%, Alarm delay: 0...10 s	Continuous current	2 × I Input
Max. switching frequency	20 Hz	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	Transmit function	direct or inverted
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
Protection degree	IP20	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	EN 61326-1	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	Tightening torque, min.	0.4 Nm
Tightening torque, max.	0.6 Nm	Clamping range, rated connection	2.5 mm²
Clamping range, min.	0.5 mm²	Clamping range, max.	2.5 mm²
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
ETIM 8.0	EC002475	ETIM 9.0	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	ECLASS 13.0	27-21-01-23
ECLASS 14.0	27-21-01-23		

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
SCIP	2f6dd957-421a-46db-a0c2-cf1609156924
RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	6c, 7a, 7cl

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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	UL Website
Certificate no. (cULus)	E141197

Downloads

Approval/Certificate/Document of Conformity	Certification DNV GL Declaration of Conformity
Engineering Data	CAD data – STEP
Software	DIP switch configuration tool
User Documentation	Instruction sheet
Catalogues	Catalogues in PDF-format

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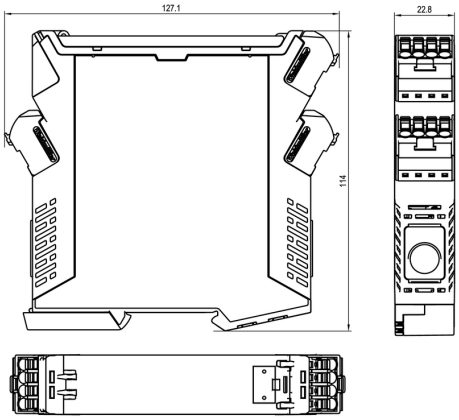
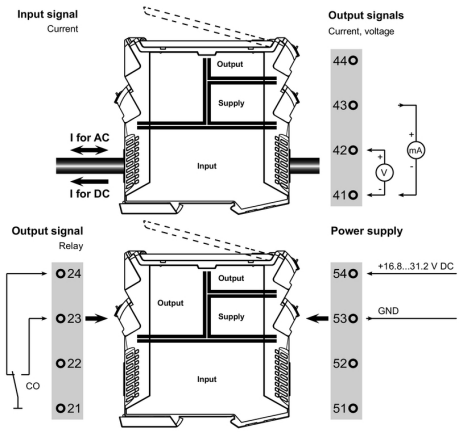
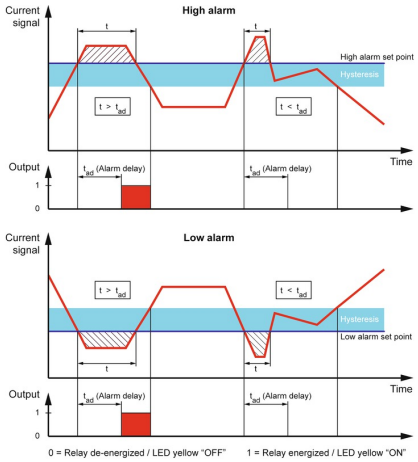
Drawings

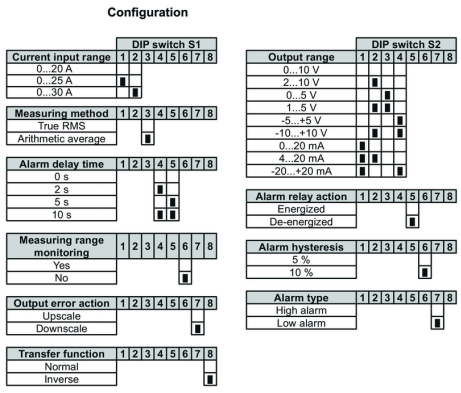
Dimensioned drawing

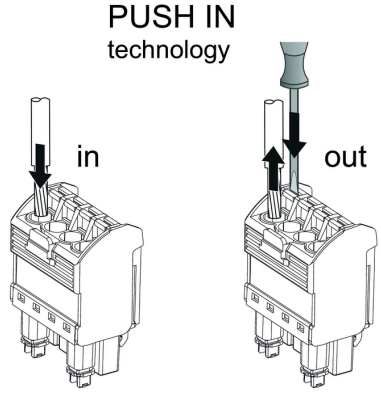












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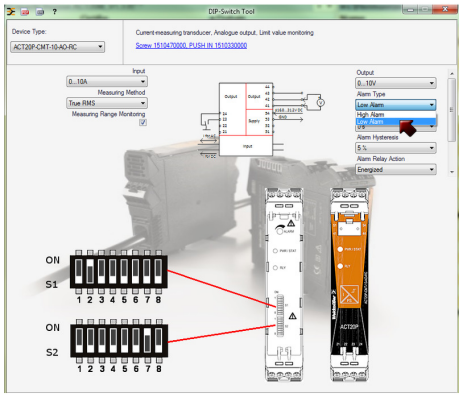

example for DIP switch setting (with ACT20 tool)