Data sheet

ACT20P-CMT-60-AO-RC-S

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...40/50/60 A, Analogue output, Relay output, Current-carrying cable in feed-through hole
Order No.	1510440000
Type	ACT20P-CMT-60-AO-RC-S
GTIN (EAN)	4050118319620
Qty.	1 items

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Technical data

Approvals

Approvals	
ROHS	Conform
UL File Number Search	UL Website
Certificate no. (cULus)	E141197

Dimensions and weights

Depth	113.6 mm	Depth (inches)	4.4724 inch
Height	119.2 mm	Height (inches)	4.6929 inch
Width	22.5 mm	Width (inches)	0.8858 inch
Net weight	158 g		

Temperatures

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

Probability of failure

MTTF	158 a

Environmental Product Compliance

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

Input

Number inputs	1	Input frequency	AC: 15...700 Hz (true root mean square)
Input measurement range	configurable, 0... 40/50/60 A AC or DC, max. peak current 10 × IInput (1 s), For DC current measurement (AA): Current direction display at the output (-/+ analog value)	Input signal	Current-carrying cable in feed-through hole
Overload behaviour	Max. peak current: 10 × IInput for 1s		

Output

Type	active, connected control must be passive

Output (digital)

Rated switching current	6 A	Continuous current	2 × I Input
Number of digital outputs	1	Max. switching voltage, AC	250 V

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Max. switching voltage, DC	24 V	Type	Relay, 1 CO contact, normal / inverse adjustment
Alarm function	Surge current, Under-current, Alarm delay: 0...10 s, Hysteresis 5% / 10%		

Output (analogue)

Transmit function	direct or inverted	Output voltage	Adjustable, 0...10 V, 2...10 V, 0...5 V, 1...5 V, -5...+5 V, -10...+10 V
Load resistance voltage	≥ 10 kΩ	Number analogue outputs	1
Load resistance current	≤ 600 Ω	Output current	Adjustable, 0...20 mA, 4...20 mA, -20...+20 mA

General data

Accuracy	<0.75 % FSR, <1.5 % FSR with measurement range 50/60 A AC	Protection degree	IP20
Supply voltage	16,8 V...31,2 V	Step response time	≤ 300 ms (RMS), ≤ 60 ms (AA)
Mounting rail	TS 35	Temperature coefficient	0.01%/K @ 0...40 A, 0.10%/K @ 40...55 A, 0.30%/K @ 55...60 A
Configuration	DIP switch and potentiometer	Power consumption, max.	2.2 W
Power consumption, typ.	0.9 W		

Insulation coordination

Impulse withstand voltage	6.4 kV (1.2/50 µs)	EMC standards	EN 61326-1
Test voltage	4 kV	Surge voltage category	III
Pollution severity	2	Galvanic isolation	4-way isolator;, between input / output / supply / relay
Insulation voltage	4 kVeff / 1 min.	Rated voltage	300 V ACrms

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 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 12

Part description

Product description	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.. 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

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Classifications

ETIM 8.0	EC002475	ETIM 9.0	EC002475
ETIM 10.0	EC002475	ECLASS 14.0	27-21-01-23
ECLASS 15.0	27-21-01-23		

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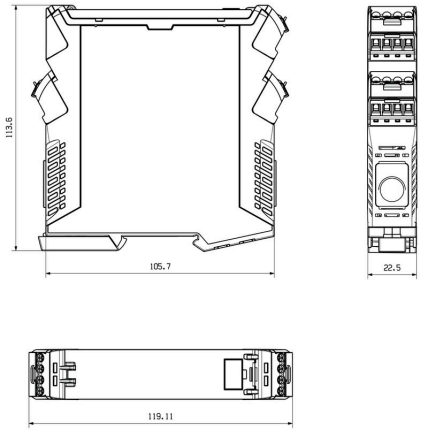
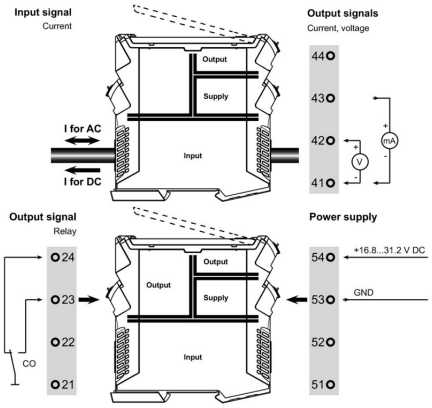
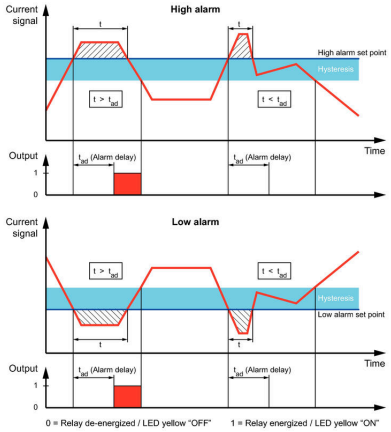
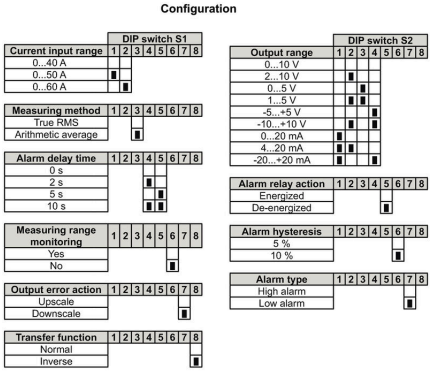
Drawings

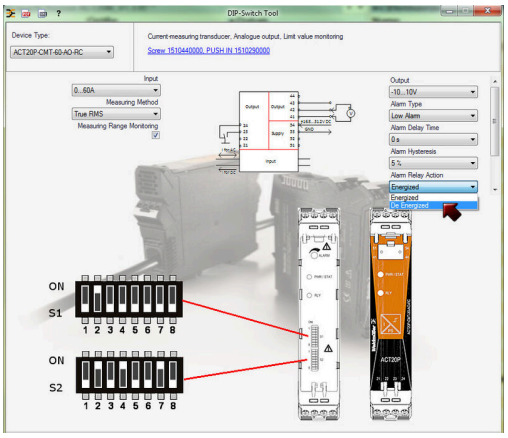
Dimensioned drawing











example for DIP switch setting (with ACT20 tool)