

ACT20P ACT20P-CMT-10-AO-RC-S

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Product image



ACT20P: The flexible solution

- Precise and highly functional signal converters
- Release levers simplify handling

General ordering data

Type	ACT20P-CMT-10-AO-RC-S
Order No.	1510470000
Version	Current-measuring transducer, Limit value monitoring, Signal converter/isolator, Current monitoring, Analogue output, Screw connection, Input measurement range: configurable, 0...5/10 A AC (RMS) or DC
GTIN (EAN)	4050118319583
Qty.	1 pc(s).

Creation date May 4, 2020 2:27:27 AM CEST

ACT20P
ACT20P-CMT-10-AO-RC-S

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Technical data**Dimensions and weights**

Width	22.5 mm	Width (inches)	0.886 inch
Height	119.2 mm	Height (inches)	4.693 inch
Depth	113.6 mm	Depth (inches)	4.472 inch
Net weight	211 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
Storage temperature	-40 °C...85 °C		

Probability of failure

MTTF	130 Years
------	-----------

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
------------	----------------

Input

Number of inputs	1	Input signal	Current-carrying cable in feed-through hole, Diameter 10.5 mm
Input measurement range	configurable, 0...5/10 A AC (RMS) or DC	Input frequency	AC: 15...700 Hz (true root mean square), AC: 50 Hz (arithmetic average)

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	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	6.4 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		

**ACT20P
ACT20P-CMT-10-AO-RC-S**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

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, Hysteresis 5% / 10%	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	6 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 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 12

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		

Product information

Product information	<p>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.</p> <p>Features</p> <ul style="list-style-type: none"> • 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



ROHS

Conform

Data sheet**ACT20P**
ACT20P-CMT-10-AO-RC-S**Weidmüller Interface GmbH & Co. KG**
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com**Technical data****Downloads**

Approval/Certificate/Document of Conformity	DNV GL certification Declaration of Conformity
Brochure/Catalogue	CAT 4.1 ELECTR 16/17 EN
Engineering Data	EPLAN, WSCAD
Engineering Data	STEP
Software	DIP switch configuration tool
User Documentation	Instruction sheet

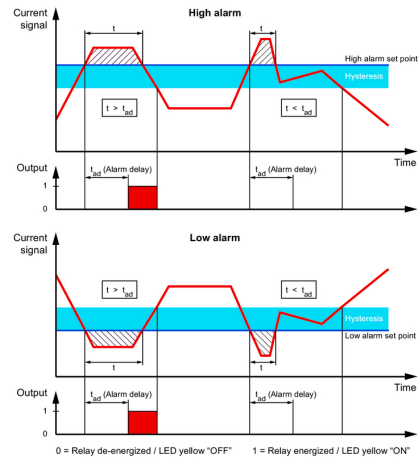
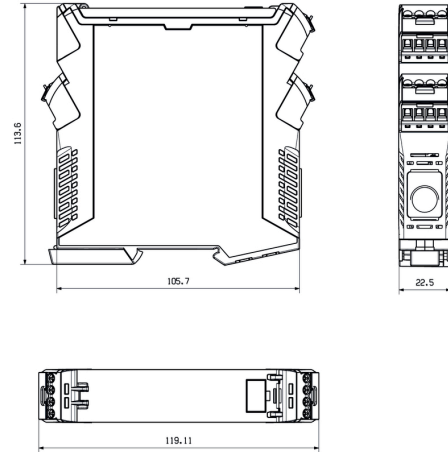
Data sheet

ACT20P
ACT20P-CMT-10-AO-RC-S

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

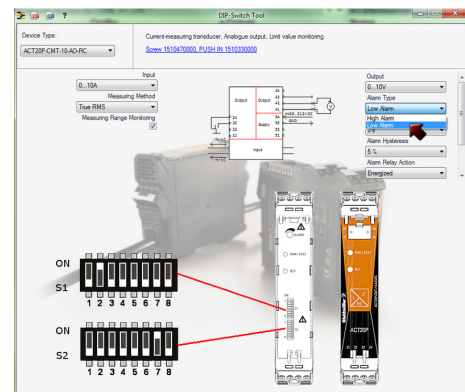
Drawings

Dimensioned drawing



Configuration

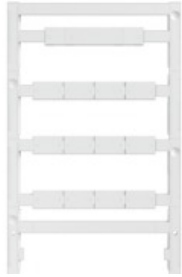
DIP switch S1		DIP switch S2	
Current input range	1 2 3 4 5 6 7 8	Output range	1 2 3 4 5 6 7 8
0...5 A	<input type="checkbox"/>	0...10 V	<input type="checkbox"/>
0...10 A	<input checked="" type="checkbox"/>	2...10 V	<input checked="" type="checkbox"/>
Measuring method	1 2 3 4 5 6 7 8	0...5 V	<input checked=""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



example for DIP switch setting (with ACT20 tool)

**ACT20P
ACT20P-CMT-10-AO-RC-S**

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Accessories
Accessories


Accessories for the analogue signal processing products:

- End plates: for components with terminal-block design
- Retaining clips: for mounting IP6X signal isolators and displays
- Calibration devices: for calibrating and setting analogue signal converters
- MICRO interface: for direct transmission to a controller thus minimizing the wiring overhead
- markers
- Programming adapter: for configuring PC-configurable modules
- Cross-connector
- Power supply modules / power supplies
- Optional connection terminals and cold-junction compensation terminals

General ordering data

Type	ESG 8/13.5/43.3 SAI AU	Version
Order No.	1912130000	ESG, Device markers x 13.5 mm, PA 66, Colour: Transparent
GTIN (EAN)	4032248541164	
Qty.	5 pc(s).	

Accessories for network-compatible current measuring transducers


Accessories for the analogue signal processing products:

- End plates: for components with terminal-block design
- Retaining clips: for mounting IP6X signal isolators and displays
- Calibration devices: for calibrating and setting analogue signal converters
- MICRO interface: for direct transmission to a controller thus minimizing the wiring overhead
- markers
- Programming adapter: for configuring PC-configurable modules
- Cross-connector
- Power supply modules / power supplies
- Optional connection terminals and cold-junction compensation terminals

General ordering data

Type	ESG 6.6/20 BHZ 5.00/04	Version
Order No.	1082540000	ESG, Device markers x 20 mm, PA 66, Colour: white
GTIN (EAN)	4032248845439	
Qty.	200 pc(s).	

ACT20P
ACT20P-CMT-10-AO-RC-S

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Drawings

