

## ACT20C

### ACT20C-CMT-10-AO-RC-S

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

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Germany

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### Product image



The ACT20C series was especially developed for applications with continuous processes. It enables the continuous monitoring of diagnostic, device and process information ("condition monitoring").

Several ACT20C components form a station which consists of an ACT20C Ethernet gateway, communicative ACT20C signal converters and an ACT20C bus termination terminal.

### General ordering data

Type	ACT20C-CMT-10-AO-RC-S
Order No.	<a href="#">1510240000</a>
Version	Current-measuring transducer, Input : 0...5/10 A, Output : 0(4)-20 mA, 0-10 V, Relay
GTIN (EAN)	4050118319460
Qty.	1 pc(s).

Creation date May 4, 2020 2:29:26 AM CEST

Catalogue status 17.04.2020 / We reserve the right to make technical changes.

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**Technical data**
**Dimensions and weights**

Width	22.5 mm	Width (inches)	0.886 inch
Height	117.2 mm	Height (inches)	4.614 inch
Depth	113.6 mm	Depth (inches)	4.472 inch
Weight	180 g	Net weight	154 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
Ambient temperature	-25 °C...+60 °C	Storage temperature	-40 °C...85 °C

**Probability of failure**

MTTF	130 Years
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**Environmental Product Compliance**

REACH SVHC	Lead 7439-92-1
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**communication**

Configuration	With FDT/DTM software, via gateway (ACT20C-GTW-100-MTCP-S), Addressing via DIP switches	Interface	Communication via CH20M rail bus with gateway (ACT20C-GTW-100-MTCP-S)
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**Input**

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		

**General data**

Accuracy	< 0.75 % FSR	Configuration	With FDT/DTM software, via gateway (ACT20C-GTW-100-MTCP-S), Addressing via DIP switches
Galvanic isolation	4-way isolator, between input/output/supply/relay	Power consumption, max.	2.2 W
Rail	TS 35	Step response time	< 300 ms
Temperature coefficient	typ. 0.04 % / K, max. 0.09 % / K	Voltage supply	via the system bus

**Insulation coordination**

EMC standards	IEC 61326-1	Galvanic isolation	4-way isolator, between input/output/supply/relay
Impulse withstand voltage	6.4 kV (1.2/50 µs)	Pollution severity	2
Rated voltage	300 V AC <sub>rms</sub>	Surge voltage category	III

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**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)**

Type	Relay, 1 CO contact, Process alarms (4x) with hysteresis, with alarm delay (configurable) 0...180 s	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.	0.5 Nm
Tightening torque, max.	3.5 Lb In	Clamping range, rated connection	1.5 mm <sup>2</sup>
Clamping range, min.	0.5 mm <sup>2</sup>	Clamping range, max.	2.5 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 30	Wire connection cross section AWG, max.	AWG 14
Wire cross-section, solid, min.	0.5 mm <sup>2</sup>	Wire cross-section, solid, max.	2.5 mm <sup>2</sup>

**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 ACT20C-CMT-XX-AO-RC-S current measuring transducers from the ACT20C series measure and monitor DC and AC currents of up to 60 A. The True RMS method used allows for precise measurement, even in case of distorted current waveforms. The devices feature integrated limit value monitoring with an adjustable switching threshold, delay and hysteresis, as well as a relay output.</p> <p>Properties</p> <ul style="list-style-type: none"> <li>• True RMS value measurement or arithmetic averaging (AA) measurement and contactless through-hole technology</li> <li>• Limit value monitoring for overcurrent or undercurrent</li> <li>• Relay output by means of the open-circuit / closed-circuit principle</li> <li>• Infinitely variable trigger delay</li> <li>• Operational status and error display on a front panel LED and output signalling according to NE43, NE44, NE107</li> <li>• Galvanic four-way insulation for secure isolation according to IEC/EN 61010-2-201:2013</li> </ul>
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**Approvals**

Approvals



ROHS

Conform

**Data sheet****ACT20C**  
**ACT20C-CMT-10-AO-RC-S****Weidmüller Interface GmbH & Co. KG**  
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Approval/Certificate/Document of Conformity	<a href="#">DNV GL certification</a> <a href="#">Declaration of Conformity</a>
Brochure/Catalogue	<a href="#">CAT 4.1 ELECTR 16/17 EN</a>
Engineering Data	<a href="#">EPLAN, WSCAD</a>
Engineering Data	<a href="#">STEP</a>
Software	<a href="#">WI-Manager, DTM-Library for online installation V.1.2.0</a>
User Documentation	<a href="#">instruction sheet</a> <a href="#">Manual</a>

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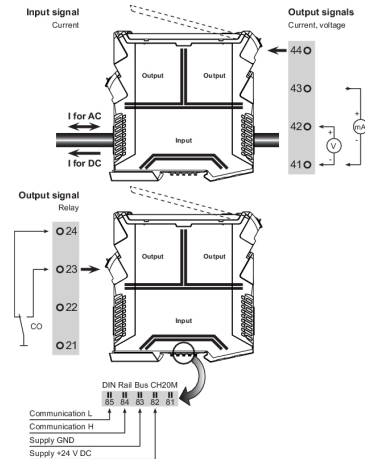
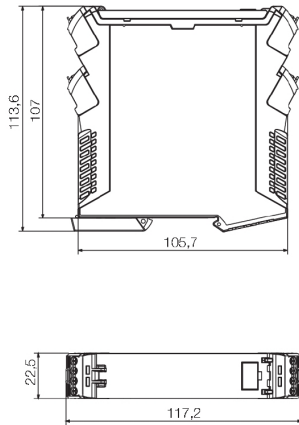
**Data sheet**

**ACT20C  
ACT20C-CMT-10-AO-RC-S**

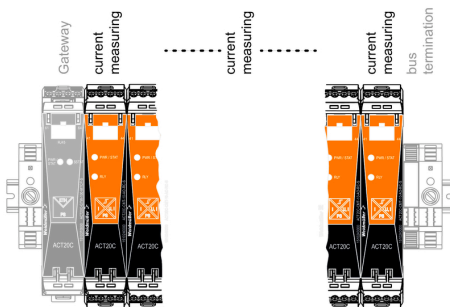
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**Drawings**

**Dimensioned drawing**



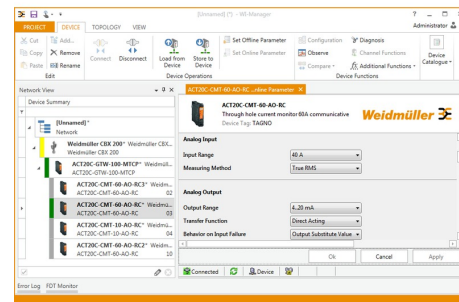
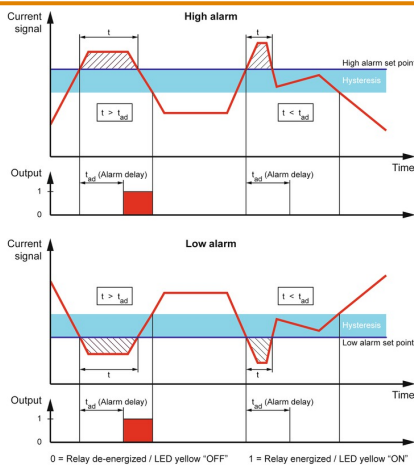
ACT20C-CMT-60-AO-RC-S is part of the ACT20C-Station



**Configuration**

User address	DIP switch S1					
	1	2	3	4	5	6
2						
3						
4						
5						
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7						
8						
...						
16						
...						
32						
33						

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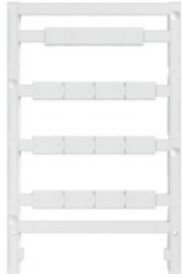


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**Accessories**

**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**

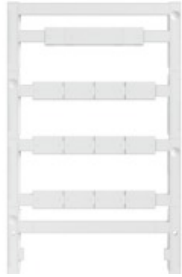
Type	CH20M BUS-AP LI TS 35X7 ...	Version
Order No.	<a href="#">1193160000</a>	OMNIMATE Housing - series CH20M, Length: 40.5 mm, Width: 5.1
GTIN (EAN)	4032248987771	mm
Qty.	50 pc(s).	
Type	SET CH20M BUS 250MM TS ...	Version
Order No.	<a href="#">1335140000</a>	OMNIMATE Housing - series CH20M, Length: 250 mm, Width: 25.1
GTIN (EAN)	4050118138375	mm
Qty.	1 pc(s).	
Type	CH20M BUS-AP RE TS 35X7 ...	Version
Order No.	<a href="#">1193170000</a>	OMNIMATE Housing - series CH20M, Length: 40.5 mm, Width: 5.1
GTIN (EAN)	4032248987924	mm
Qty.	50 pc(s).	

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**Accessories**

**Accessories for network-compatible current measuring transducers**



Accessories for the analogue signal processing products:

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- 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	ACT20C-LBT-10	Version
Order No.	<a href="#">1510340000</a>	Bus termination terminal
GTIN (EAN)	4050118319491	
Qty.	1 pc(s).	