

ACT20M ACT20M-CI-CO-S

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
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 Germany
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 www.weidmueller.com

Product image, Similar to illustration



ACT20M: The slim solution

- Safe and space-saving (6 mm) isolation and conversion
- Quick installation of the power supply unit using the CH20M mounting rail bus
- Easy configuration via DIP switch or FDT/DTM software
- Extensive approvals such as ATEX, IECEx, GL, DNV
- High interference resistance

General ordering data

Type	ACT20M-CI-CO-S
Order No.	1175980000
Version	Signal converter/insulator, Signal converter/insulator, Input : 4-20 mA, Output : 4-20 mA
GTIN (EAN)	4032248970131
Qty.	1 pc(s).

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Technical data**Dimensions and weights**

Width	6.1 mm	Width (inches)	0.24 inch
Height	112.5 mm	Height (inches)	4.429 inch
Depth	114.3 mm	Depth (inches)	4.5 inch
Net weight	87 g		

Temperatures

Humidity	40 °C / 93 % rel. humidity, no condensation	Operating temperature, max.	70 °C
Operating temperature, min.	-25 °C	Storage temperature, max.	85 °C
Storage temperature, min.	-40 °C	Operating temperature	-25 °C...70 °C
Ambient temperature	-25 °C...+70 °C	Storage temperature	-40 °C...85 °C

Probability of failure

MTBF	284 Years
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Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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Rated data UL

UL certificate	E337701.pdf
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Input

Number of inputs	1	Sensor	Current source, Sensor with own supply, 4-wire sensor
Input current	0...20 mA, 4...20mA	Voltage drop, current input	< 1.5 V
Input resistance, current	70 Ω		

Output

Number of outputs	1	Output current	0...20 mA, 4...20 mA
Cut-off frequency (-3 dB)	100 Hz	Load impedance current	≤ 600 Ω, @ max 23mA

General data

Accuracy	< 0.05 % of measuring range	Configuration	none
Galvanic isolation	3-way isolator	Power consumption, max.	0.65 W
Power consumption, typ.	0.46 W	Rail	TS 35
Step response time	≤ 7 ms	Temperature coefficient	≤ 0.01 % / °C
Voltage supply	24 V DC ± 30 %		

Insulation coordination

EMC standards	IEC 61326-1, NE 21	Galvanic isolation	3-way isolator
Insulation voltage	2.5 kV _{eff} / 1 min.	Pollution severity	2
Rated voltage	300 V _{eff}	Surge voltage category	II

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Technical data**Data for Ex applications (ATEX)**

Marking	II 3 G Ex nA IIC T4 Gc
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Connection data

Type of connection	Screw connection	Tightening torque, min.	0.4 Nm
Tightening torque, max.	0.6 Nm	Clamping range, rated connection	2.5 mm ²
Clamping range, min.	0.5 mm ²	Clamping range, max.	2.5 mm ²
Wire connection cross section AWG, min.	AWG 30	Wire connection cross section AWG, max.	AWG 14

Classifications

ETIM 6.0	EC002653	ETIM 7.0	EC002653
eClass 9.0	27-21-01-20	eClass 9.1	27-21-01-20
eClass 10.0	27-21-01-20		

Product information

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The non-adjustable DC isolating amplifier ACT20M-CI-CO-S isolates analogue standard current signals. An analogue input current signal is linearly converted to an analogue output current signal and is galvanically isolated. The power supply is galvanically isolated from the input and output (3-way isolation) by means of direct wiring or the Weidmüller rail bus.

The non-adjustable DC isolation amplifier ACT20M CI-2CO-S offers the same functionality, but has 2 galvanically isolated outputs (4-way isolation).

Approvals

Approvals



ROHS	Conform
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Downloads

Approval/Certificate/Document of Conformity	DNV-GL certificate EAC certificate FM certificate IECEX certificate ATEX certificate Declaration of Conformity
Brochure/Catalogue	CAT 4.1 ELECTR 16/17 EN
Engineering Data	EPLAN, WSCAD, Zuken E3.S
Engineering Data	STEP
User Documentation	Instruction sheet

Creation date May 2, 2020 10:25:19 AM CEST

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

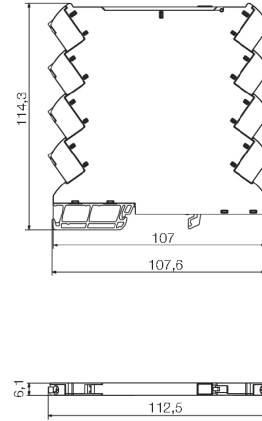
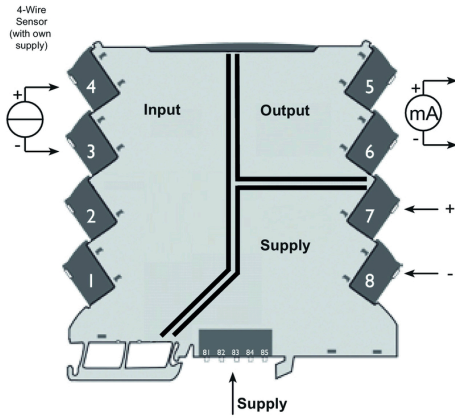
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Drawings

Connection diagram



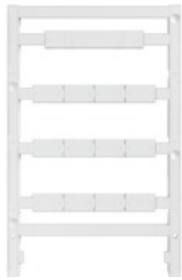
Power supply via the rail bus

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Accessories

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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	SET CH20M BUS 250MM TS ...	Version
Order No.	1335140000	OMNIMATE Housing - series CH20M, Length: 250 mm, Width: 25.1
GTIN (EAN)	4050118138375	mm
Qty.	1 pc(s).	
Type	MF 5/7.5 MC NE WS	Version
Order No.	1877680000	MultiFit, Terminal marker, 5 x 7.5 mm, Pitch in mm (P): 7.50 Adels
GTIN (EAN)	4032248468270	RKW, Phoenix, white
Qty.	320 pc(s).	
Type	ACT20-FEED-IN-BASIC-S	Version
Order No.	1282490000	ACT20M, Supply module, Screw connection
GTIN (EAN)	4050118072730	
Qty.	1 pc(s).	