

ACT20M-CI-CO-S

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image



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

Version	Signal converter/insulator, Input : 0(4)-20 mA, Output : 0(4)-20 mA
Order No.	1175980000
Type	ACT20M-CI-CO-S
GTIN (EAN)	4032248970131
Qty.	1 pc(s).

Creation date February 23, 2023 12:13:55 PM CET

Catalogue status 18.02.2023 / We reserve the right to make technical changes.

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Technical data**Dimensions and weights**

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

Temperatures

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

Probability of failure

SIL in compliance with IEC 61508	None	MTBF	284 Years
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Input

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

Output

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

General data

Accuracy	< 0.05 % of measuring range	Configuration	none
Galvanic isolation	3-way isolator	Long-term drift	0
Power consumption, max.	0.8 W	Power consumption, typ.	0.45 W
Rail	TS 35	Step response time	≤ 7 ms
Temperature coefficient	≤ 0.01 % / °C	Type of connection	Screw connection
Voltage supply	24 V DC ±30 % at terminal or via CH20M rail bus		

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

Data for Ex applications (ATEX)

Installation location	Device installed in safe area, zone 2	Marking	II 3 G Ex nA IIC T4 Gc
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Technical data**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

EMC conformity and approvals

EMC standards	IEC 61326-1, NE 21	Standards	IEC 61010-1
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Classifications

ETIM 6.0	EC002653	ETIM 7.0	EC002653
ETIM 8.0	EC002653	ECLASS 9.0	27-21-01-20
ECLASS 9.1	27-21-01-20	ECLASS 10.0	27-21-01-20
ECLASS 11.0	27-21-01-20	ECLASS 12.0	27-21-01-20

Tender specification sheets

Long specification	Short specification	Standard signal isolating amplifier 1-channel signal isolating amplifier in 6.1 mm width with external power supply, for transmitting and isolating analogue DC current signals from 0/4 to 20 mA
Type ACT20M-CI-CO-S		

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
SCIP	2f6dd957-421a-46db-a0c2-cf1609156924

Important note

Product information	<p>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.</p> <p>The non-adjustable DC isolation amplifier ACT20M CI-2CO-S offers the same functionality, but has 2 galvanically isolated outputs (4-way isolation).</p>
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Technical data

Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate no. (cULus)	E337701

Downloads

Approval/Certificate/Document of Conformity	DNV-GL certificate FM certificate IECEX certificate ATEX certificate Declaration of Conformity
Engineering Data	CAD data – STEP
Engineering Data	WSCAD, Zuken E3.S
User Documentation	Instruction sheet
Catalogues	Catalogues in PDF-format
Brochures	

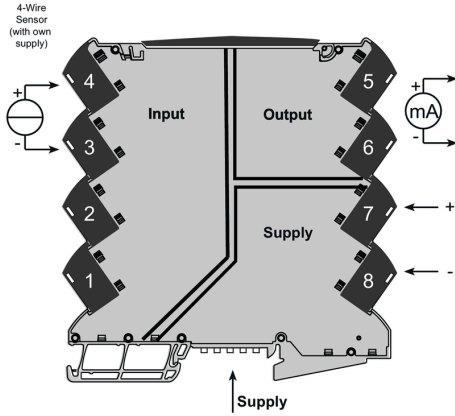
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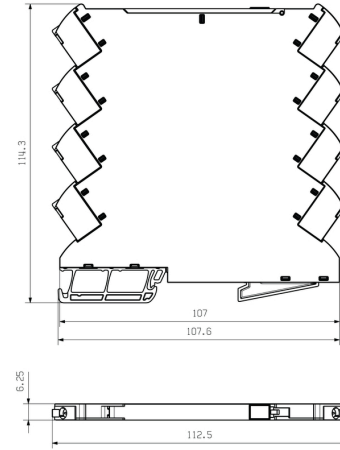
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Drawings

Connection diagram



Dimensional drawing



Power supply via the rail bus