

ACT20M-CI-CO-ILP-S

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

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

Version	Passive isolator, Input current loop feed, 1-channel, Input : 0(4)-20 mA, Output : 0(4)-20 mA
Order No.	1176070000
Type	ACT20M-CI-CO-ILP-S
GTIN (EAN)	4032248970148
Qty.	1 items

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Technical data

Approvals

Approvals



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

Dimensions and weights

Depth	114.3 mm	Depth (inches)	4.5 inch
Height	112.5 mm	Height (inches)	4.4291 inch
Width	6.1 mm	Width (inches)	0.2402 inch
Net weight	80 g		

Temperatures

Storage temperature	-40 °C...85 °C	Operating temperature	-25 °C...70 °C
Humidity at operating temperature	0...95 % (no condensation)	Humidity	40 °C / 93 % rel. humidity, no condensation

Probability of failure

SIL in compliance with IEC 61508	None	MTBF	699 a
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Environmental Product Compliance

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

Input

Sensor	Current source	Number inputs	1
Input voltage	> 3 V @ 20 mA	Input current	0...20 mA, 4...20mA
Voltage drop, current input	1.25 V + 0.015 V _{out} @25°C		

Output

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

General data

Accuracy	<0.1 % of measuring range	Protection degree	IP20
Supply voltage	Loop powered, via 4...20 mA input	Step response time	≤ 5 ms, ≤ 0,5 ms

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Mounting rail	TS 35	Power consumption	30 mW
Temperature coefficient	≤ 0.01 % / °C	Nominal power consumption	0.05 VA
Configuration	none	Operating altitude	≤ 2000 m

Insulation coordination

EMC standards	EN 61326-1	Surge voltage category	II
Pollution severity	2	Galvanic isolation	2-way isolator
Insulation voltage	2.5 kVeff / 1 min.	Rated voltage	300 Veff

Data for Ex applications (ATEX)

Marking	II 3 G Ex nA IIC T4 Gc	IECEx - gas labelling	Ex nA IIC T4 Gc, Standard: IEC 60079-0-15
Installation location	Device installed in safe area, zone 2		

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	EN 61326-1	Standards	IEC 61010-1
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Part description

Product description The ACT20M-CI-CO-ILP-S passive isolator isolates standard analogue current signals. An analogue input current signal is linearly converted to an analogue output current signal and is galvanically isolated. Power is supplied through the input measuring circuit (input loop-powered).

Classifications

ETIM 8.0	EC002653	ETIM 9.0	EC002653
ETIM 10.0	EC002653	ECLASS 14.0	27-21-01-20
ECLASS 15.0	27-21-01-20		

Tender specification sheets

Long specification	Standard signal passive isolator 1-channel passive isolator in 6.1 mm width input-loop powered, for transmitting and isolating analogue DC current signals 0/4...20 mA. Add-on housing for TS35 rail mounting Dimensions: L/W/H 114.3/ 6.1/ 112.5 mm Screw connection / Nominal cross-section 2.5 mm ² Protection degree: IP 20	Short specification	Standard signal passive isolator 1-channel signal passive isolator in 6.1 mm width with input current loop feed, for transmitting and isolating analogue DC current signals from 0/4 to 20 mA
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Input
0/4...20 mA
Output
0/4...20 mA
Load resistance <
600 Ohm
Transmission error
< 0,1 % v. E.
Limit frequency 100 Hz
Auxiliary
power
0/4...20 mA input current
loop
Power loss approx. 0.9 W
Ambient
temperature range
-25 °C...+70 °C
Isolation
EN 61010-1, 2-way
isolation up to 2.5 kV AC/
DC
Test
voltage
2.5 kV input against
output against auxiliary
power
Rated
voltage
300 V AC/DC at
overvoltage category II and
pollution degree 2
Approvals cULus, FM Div2,
ATEX Zone2, DNV, GL
Type
ACT20M-CI-CO-ILP-S

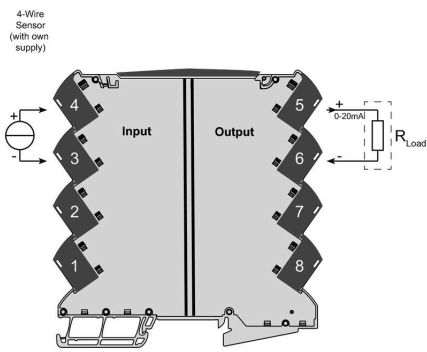
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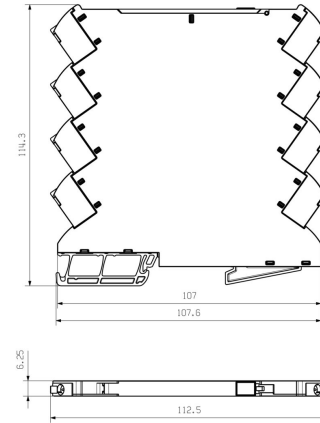
Drawings

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Connection diagram



Dimensional drawing



ACT20M-CI-CO-ILP-S

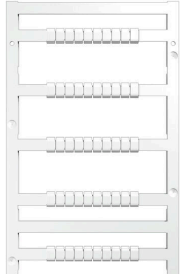
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Accessories

Blank



MultiFit is the Weidmüller marker system used for other makes of terminals. Similar to the Weidmüller Dekafix, the markers of the MultiFit family are available ready-for-use with standard printing.

We recommend to carry out a test with sample markers on the terminals used when using MultiFit for the first time.

- One marker, suitable for different makes of terminals.
- Ready-to-use markers with standard printing
- Blank markers for printing with the PrintJet CONNECT or Plotter
- Delivery of individually printed markers according to customer CAE data or specifications
- One marking system for all applications

For custom printing: Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

General ordering data

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 ST		