

**ACT20M-RTCI-CO-OLP-P**

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

www.weidmueller.com

Product not yet available,  
 preliminary product data.

**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	Passive isolator, With galvanic isolation, Input : Temperature, PT 100, thermocouple, Output : 4-20 mA
Order No.	<a href="#">2825250000</a>
Type	ACT20M-RTCI-CO-OLP-P
GTIN (EAN)	4064675361060
Qty.	1 items

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## Technical data

## Dimensions and weights

Depth	114.3 mm	Depth (inches)	4.5 inch
Height	112.5 mm	Height (inches)	4.4291 inch
Width	6.1 mm	Width (inches)	0.2402 inch
Net weight	0 g		

## Temperatures

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

## 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	PT100 (2-/3-/4- wire), Thermocouples: J, K	Number inputs	1
Line resistance in measuring circuit	50 Ω @ RTD (Pt100), 10 kΩ @ TC (J, K)	Temperature input range	Configurable, PT100: -200...+850 °C, min. measurement range 10°C (RTD), J: (-100...+1200 °C), K: (-180...+1372 °C), min. measurement range 50°C (TC)
Influence of the sensor cable resistance	<0.002 Ω/Ω		

## Output

Number of outputs	1	Load impedance current	≤ 600 Ω
Wire break detection	Configurable, 3.5 mA / 23 mA / none	Type	passive, connected control must be active
Output current	configurable, 4...20 mA, 20...4 mA	Supply voltage (output)	16,8 V...31,2 V

## General data

Accuracy	absolute accuracy: <±0.05 % of the measurement range, RTD (PT100) Basic accuracy: <±0.1 °C of the measurement range, TC (J,K) Basic accuracy: <±0.5 °C of the measurement range	Protection degree	IP20
Supply voltage	Output loop powered, 6... 35 V	Cold-junction compensation error	±(2.0 °C + 0.4 °C x Δt) Δt = inside temperature - ambient temperature
Step response time	Configurable, ≤ 30 ms, <300 ms	Mounting rail	TS 35
Temperature coefficient	RTD (PT100) ≤0.01 % of the measurement range°C or 0.02 °C/°C, TC (J,K) 0.1 °C/°C	Nominal power consumption	0.5 VA

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## Technical data

Configuration	DIP switch	Operating altitude	≤ 2000 m
Power consumption, max.	0.8 W	Power consumption, typ.	0.5 W

### Insulation coordination

EMC standards	IEC 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

### Connection data

Type of connection	PUSH IN	Clamping range, rated connection	2.5 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

### EMC conformity and approvals

EMC standards	IEC 61326-1
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### Part description

**Product description** The ACT20M-RTCI-CO-OLP-S passive configurable temperature transducer isolates and converts analogue signals. An analogue RTD (Type Pt100) or TC (Type J, K) input signal is linearly converted into an analogue output signal and galvanically isolated. Power is supplied through the output measurement circuit (output- loop powered).

### Classifications

ETIM 8.0	EC002919	ETIM 9.0	EC002919
ETIM 10.0	EC002919	ECLASS 14.0	27-21-01-29
ECLASS 15.0	27-21-01-29		

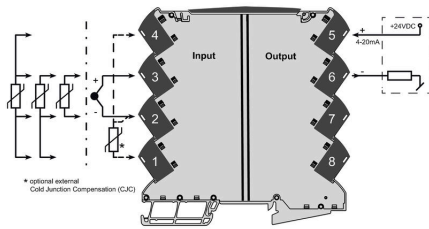
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Drawings

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Connection diagram



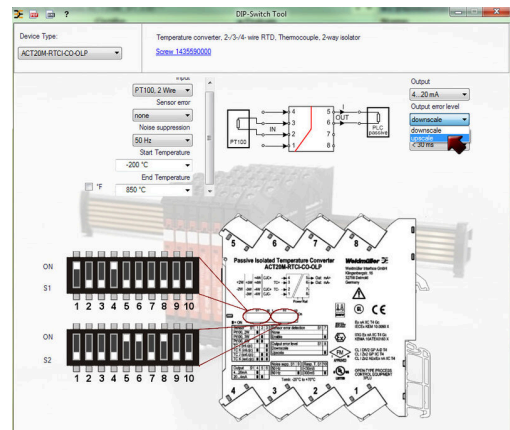
Dimensional drawing



DIP switch setting

RTD & TC element type	PT100, 2-wire, 500 Ω				PT100, 3-wire, 500 Ω				PT100, 4-wire, 500 Ω				K (external CJC)				K (external CJC)			
	Min.	S2	Max.	S2	Min.	S2	Max.	S2	Min.	S2	Max.	S2	Min.	S2	Max.	S2	Min.	S2	Max.	S2
None	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Output	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sensor error detection	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Output error level	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noise suppression	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Response time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

example for DIP switch setting  
 (with ACT20M tool software)



example for DIP switch setting  
 (with ACT20M tool software)



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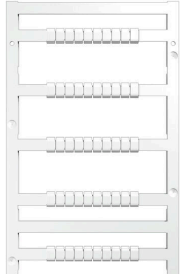
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## Accessories

### 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.	<a href="#">1877680000</a>		MultiFit, Terminal marker, 5 x 7.5 mm, Pitch in mm (P): 7.50 Adels
GTIN (EAN)	4032248468270		RKW, Phoenix, white
Qty.	320 ST		