

**ACT20M-FRQ-AO-S****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**Product image, Similar to illustration**

The universal frequency measuring transducer, which can be configured via software, disconnects and converts input signals (frequency, Namur, NPN, PNP, speedometer, TTL and S0) into an active analogue standard output signal. The power supply is galvanically isolated from the input and output (3-way isolation) by means of direct wiring. The model ACT20M-FRQ-AO-S can be supplied via the Weidmüller DIN rail bus

**General ordering data**

Version	Frequency signal converter, including rail bus supply, Input : Frequency, Output : 0(4)-20 mA, 0(2)-10 V
Order No.	<a href="#">2825020000</a>
Type	ACT20M-FRQ-AO-S
GTIN (EAN)	4064675360834
Qty.	1 pc(s).

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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	999 g		

### Temperatures

Storage temperature	-40 °C...85 °C	Operating temperature	-25 °C...70 °C
Humidity	0...95 % (no condensation)		

### Input

Input frequency	adjustable, 0...100kHz	Number of inputs	1
Sensor	NAMUR sensor, according to EN60947-5-6, NPN / PNP transistor (trig-level low: <math>\leq 4\text{ V}</math> high: <math>\geq 7\text{ V}</math>), TTL (trig-level low: <math>\leq 0.8\text{ V}</math> high: <math>\geq 2.0\text{ V}</math>), Tacho (trig-level low: <math>\leq -50\text{ mV}</math> high: <math>\geq +50\text{ mV}</math>), Special current (trig-level: user-defined), Special voltage (trig-level: user-defined), SO (trig-level low: <math>\leq 2.2\text{ mA}</math> high: <math>\geq 9.0\text{ mA}</math>)	Sensor supply	5...17 V

### Output

Load impedance current	$\leq 600\ \Omega$	Number of outputs	1
Output current	0...20 mA, 4...20 mA, in case of sensor error, down-scale (3.5 mA), upscale (23 mA)	Output signal limit	<28 mA
Output voltage, note	0(2)...10 V, 0(1)...5 V, 0(0,2)...1 V	Type	active, connected control must be passive
load impedance voltage	$\geq 10\text{ k}\Omega$		

### General data

Accuracy	Basic accuracy: 0.0002 Hz	Configuration	DIP switch, With FDT/DTM software
Galvanic isolation	3-way isolator	Power consumption, max.	1.2 W
Power consumption, typ.	0.65 W	Protection degree	IP20
Rail	TS 35	Step response time	$\leq 30\text{ ms}$ , (0...90% / 100...10% of input level)
Temperature coefficient	$\leq 0.01\%$ of measurement range/°C	Voltage supply	24 V DC $\pm 30\%$ at terminal or via CH20M rail bus

### Insulation coordination

EMC standards	IEC 61326-1	Galvanic isolation	3-way isolator
Insulation voltage	2.5 kV <sub>eff</sub> / 1 min.	Pollution severity	2
Rated voltage	250 V, 300 V	Surge voltage category	II

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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 <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	Standards	IEC 61010-1
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**Classifications**

ETIM 6.0	EC002918	ETIM 7.0	EC002918
ETIM 8.0	EC002918	ETIM 9.0	EC002918
ECLASS 9.0	27-21-01-28	ECLASS 9.1	27-21-01-28
ECLASS 10.0	27-21-01-28	ECLASS 11.0	27-21-01-28
ECLASS 12.0	27-21-01-28	ECLASS 13.0	27-21-01-28

**Environmental Product Compliance**

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

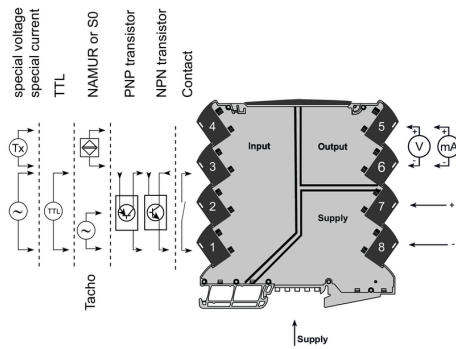
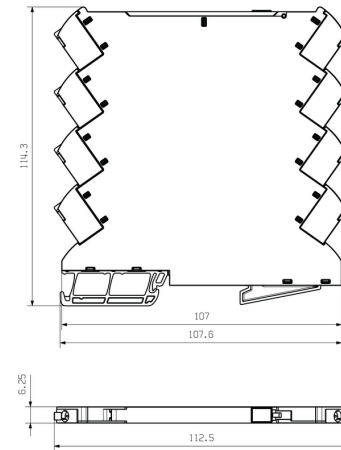
**Downloads**

Approval/Certificate/Document of Conformity	<a href="#">Declaration of Conformity</a>
Engineering Data	<a href="#">CAD data – STEP</a>
Software	<a href="#">WI-Manager, DTM-Library for online installation</a> <a href="#">Release notes for Weidmueller FDT-DTM Software version</a>
User Documentation	<a href="#">Instruction sheet</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>

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**Drawings**
**Connection diagram**

**Dimensional drawing**


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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 pc(s).	

### Configuration interfaces



### General ordering data

Type	CBX200 USB
Order No.	<a href="#">8978580000</a>
GTIN (EAN)	4032248813759
Qty.	1 pc(s).