

ACT20P-PRO-FI-AO-DO-S**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Product image, Similar to illustration****ACT20P: The flexible solution**

- Precise and highly functional signal converters
- Release levers simplify handling

General ordering data

Version	Frequency signal converter, Limit value monitoring, Frequency, PWM, analogue V / mA, Transistor (Alarm)
Order No.	2447940000
Type	ACT20P-PRO-FI-AO-DO-S
GTIN (EAN)	4050118462111
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Depth	113.7 mm	Depth (inches)	4.476 inch
Height	117.2 mm	Height (inches)	4.614 inch
Width	12.5 mm	Width (inches)	0.492 inch
Net weight	999 g		

Temperatures

Storage temperature	-40 °C...85 °C	Operating temperature	-40 °C...60 °C
Humidity	0...95 % (no condensation)		

Probability of failure

SIL in compliance with IEC 61508	None
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Input

Input frequency	0,01 Hz...200 kHz, Threshold current (NAMUR): ≥ 1.65 mA, Hysteresis level: ≥ 0.2 mA	Input voltage	Threshold voltage (NPN / PNP Sensor): 3 V...43.5 V (configurable), Hysteresis level: ≥ 0.5 V
Number of inputs	1	PWM measurement, gate time	20 ms ... 20 s
PWM measurement, step response time	20 ms ... 20 s + 20 ms	Pulse duty factor	0--100% push/pull or push, parameterisable
Sensor	NPN / PNP transistor (trigger level low: ≤ 4 V high: ≥ 7 V), NAMUR sensor, according to EN60947-5-6, switch with or without RS, RP, 2-wire transmitter (without own power supply), 3 wire NPN/PNP-transistor, frequency generator, PDM	Sensor supply	18 V ± 15 %, 8.2 V ± 15 % (@ NAMUR sensor)
Type	frequency or PWM		

Output (digital)

Alarm function	configurable, Top and bottom limit values, window range, Short circuit at input, Alarm delay: 0...10 s, Hysteresis adjustable	Number of digital outputs	1
Rated switching current	100 mA	Rated switching voltage	24 VDC ± 30 %
Type	NPN-Transistor, Switching frequency 5 kHz		

Output (analogue)

Load resistance current	$\leq 600 \Omega$	Load resistance voltage	> 1 k Ω (60 VAC $< U_{in}$ < 230 VAC), > 5 k Ω (24 VAC $< U_{in}$ < 60 VAC)
Number of analogue outputs	1	Output current	-20...+20 mA, ± 10 mA, 0(4)...20 mA
Output voltage	0...5 V, 0(1)...5 V, 0(2)...10 V, -5...+5 V, -10...+10 V	Signal output	direct or inverted
Transmit function	linear, \sqrt{X} , X^1 , $X^{1.5}$, X^2 , $X^{2.5}$, 1-X, direct or inverted, -5...+5 % of output span (TRIM)	Type (analogue output)	Voltage and current output (configurable)

Creation date May 3, 2024 8:30:03 AM CEST

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Technical data

General data

Accuracy	$\leq \pm 0.1\%$ of span	Configuration	with push-buttons and display
Galvanic isolation	4-way isolator;	Long-term drift	$\leq \pm 0.05\%$ of the measurement range / year
Power consumption	$\leq 2.6\text{ W}$	Rail	TS 35
Step response time	40 ms + period	Temperature coefficient	$\leq 0.02\%$ / °C, $\leq 100\text{ ppm/K}$ of final value
Voltage supply	24...230 V DC $\pm 15\%$, 24...230 V AC $\pm 15\%$ @48...62 Hz		

Insulation coordination

EMC standards	EN 61326-1	Galvanic isolation	4-way isolator;
Impulse withstand voltage	5 kV (1.2/50 μs)	Insulation voltage	4 kV _{eff} / 1 min.
Pollution severity	2	Rated voltage	600 V
Surge voltage category	II		

Safety-related basic specifications

Safety category	No
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Connection data

Type of connection	Screw connection
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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

Important note

Product information	<p>Universal, electrically-isolated signal converters for measuring frequencies with auxiliary power supply and optional limit-value monitoring.</p> <p>Similar frequency signals from 2-/3-wire PNP/NPN- or Namur initiators can be processed on the input side.</p> <p>Frequency converters can be used to measure speeds for drives and motors. They can also be used for counting and checking the flow of incoming goods in industrial shipping and handling applications.</p>
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Approvals

Approvals



ROHS	Conform
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Catalogue status 20.04.2024 / We reserve the right to make technical changes.

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Technical data

Downloads

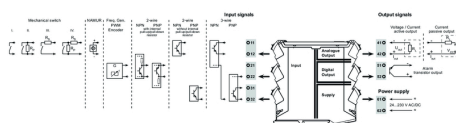
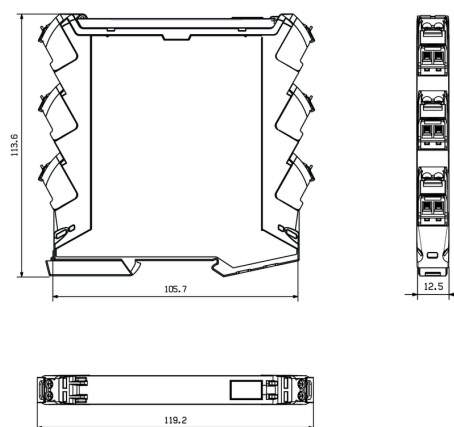
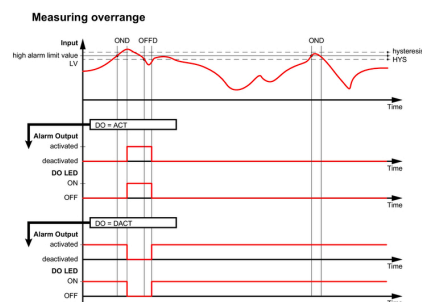
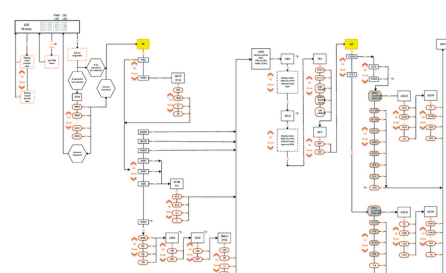
Approval/Certificate/Document of Conformity	UL certification
	DNV certification
	Bureau Veritas certification
	IECEX certification
	Declaration of Conformity
Engineering Data	CAD data – STEP
User Documentation	Configuration manual
	Instruction sheet
Catalogues	Catalogues in PDF-format

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Drawings
Connection diagram

Dimensioned drawing

Flow diagram part


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www.weidmueller.com**Accessories****Blank**

ESG is the tried-and-tested marker in MultiCard format for use on many well-known electrical devices. The result is high-quality device marking with a high-contrast appearance.

Various types are available for devices from manufacturers like Siemens, ABB, Beckhoff etc.

Advantages at a glance:

- Tags for universal usage, self-adhesive or clip-on tags, depending on type
- For aligned equipment, e.g. circuit breakers, we supply ESG markers for clipping onto tag rails
- Individual laser-quality printing according to specifications

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	ESG 6.6/11 BHZ 5.00/02	Version
Order No.	1082490000	ESG, Device markers x 11 mm, PA 66, Colour: white
GTIN (EAN)	4032248845330	
Qty.	200 pc(s).	

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General ordering data

Type	ESG 8/13.5/43.3 SAI AU	Version
Order No.	1912130000	ESG, Device markers x 13.5 mm, PA 66, Colour: Transparent
GTIN (EAN)	4032248541164	
Qty.	5 pc(s).	

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Drawings

