

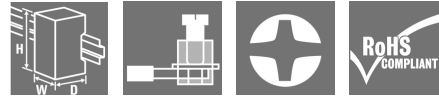
ACT20P-VMR-3PH-ILP-H-S**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image**General ordering data**

Version	Limit value monitoring, Input: 3-phase voltage, Relay output, 180...500 V AC, 2 x relays
Order No.	7760054165
Type	ACT20P-VMR-3PH-ILP-H-S
GTIN (EAN)	6944 169689086
Qty.	1 pc(s).

Creation date March 10, 2023 8:35:20 AM CET

Catalogue status 03.03.2023 / 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	117 mm	Height (inches)	4.606 inch
Width	22.5 mm	Width (inches)	0.886 inch
Net weight	233 g		

Temperatures

Storage temperature	-40 °C...85 °C	Operating temperature	-25 °C...60 °C
Operating temperature, min.	-25 °C	Operating temperature, max.	60 °C
Humidity	5...85 % rel. humidity, no condensation		

Probability of failure

SIL in compliance with IEC 61508	None
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Input

Input frequency	40...60 Hz	Input measurement range	200...480 VAC
Input resistance, voltage	$\geq 1,8M\Omega$	Input voltage	180...500 VAC
Number of inputs	1	Type	3-phase or 3-phase plus zero conductor, AC voltage

Output (digital)

Alarm function	Top and bottom limit values, window range, Holding function can be activated, Phase error, Phase sequence, Asymmetry, Alarm delay: 0...10 s	Hysteresis	5 % @ Phase asymmetry
Max. switching voltage, AC	250 V	Max. switching voltage, DC	30 V
Number of digital outputs	2	Rated switching current	5 A
Switching thresholds	Adjustable, MIN = 50...100 % x U_{Rated} input voltage (undervoltage alarm), MAX = 70...120 % x U_{Rated} input voltage (overvoltage alarm)	Type	2 x 1 - or 1 x 2 changeover contact relay, Relay polarity can be inverted

General data

Accuracy	3 % * U_{rated} voltage	Configuration	DIP switch and potentiometer
Galvanic isolation	2-way isolator, between input/output	Long-term drift	0.1 % / 10.000 h
Measurement calibration	max: 70...120% * U_{rated} voltage, min: 50...100% * U_{rated} voltage	Power consumption	$\leq 3VA$
Rail	TS 35	Repeat accuracy	2 % * U_{rated} voltage
Step response time	≤ 100 ms	Switch-on delay	0...10 s, configurable
Temperature coefficient	350 ppm/K	Type of connection	Screw connection
Unbalanced	Hysteresis: 5%, Phase imbalance in range of adjustment: 5...25%, OFF	Voltage supply	supplied from voltage measurement inputs

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Technical data**Insulation coordination**

EMC standards	EN 61326-1	Galvanic isolation	2-way isolator, between input/output
Impulse withstand voltage	6 kV (input - output), 4 kV (output 1 - output 2), 1.2/50 µs	Insulation voltage	2.5 kV (input / output)
Pollution severity	2	Rated voltage	600 VAC (input - output), 300 VAC (output 1 - output 2)
Surge voltage category	III	Test voltage	0.5 kV

Connection data

Type of connection	Screw connection	Tightening torque, min.	0.4 Nm
Tightening torque, max.	0.6 Nm	Clamping range, rated connection	1.5 mm ²
Clamping range, min.	0.5 mm ²	Clamping range, max.	2.5 mm ²
Wire connection cross section AWG, min.	AWG 26	Wire connection cross section AWG, max.	AWG 12

Classifications

ETIM 6.0	EC002654	ETIM 7.0	EC002654
ETIM 8.0	EC002654	ECLASS 9.0	27-21-01-22
ECLASS 9.1	27-21-01-22	ECLASS 10.0	27-21-01-22
ECLASS 11.0	27-21-01-22	ECLASS 12.0	27-21-01-22

Environmental Product Compliance

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

Important note

Product information	<p>ACT20P-VMR-3PH-ILP-H is a three-phase voltage setpoint limit monitor relay (3-phase or 3-phase plus zero conductor). The device is powered by the input measuring circuit. The device incorporates two separate relay outputs which trigger an alarm upon phase asymmetry, phase loss, phase sequence errors and phase angle errors and when exceeding or falling below preset voltage limit values. The alarm can also be set to trigger after an adjustable time delay.</p> <p>Features</p> <ul style="list-style-type: none"> • Supply from the input measuring circuit • Manual front-sided configuration via DIP switch, potentiometer and rotary switch • Various alarm functions: phase asymmetry, phase loss, phase sequence errors, phase angle errors, alarm delay, upper/lower limit value alarm, window alarm • Front LEDs indicates operation status and malfunction. • 3-way galvanic isolation between input, output 1 and output 2.
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Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E469563

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Approval/Certificate/Document of Conformity	Declaration of Conformity
Engineering Data	CAD data – STEP
Software	Runtime Software – DIP switch configuration tool
User Documentation	Instruction sheet
Catalogues	Catalogues in PDF-format

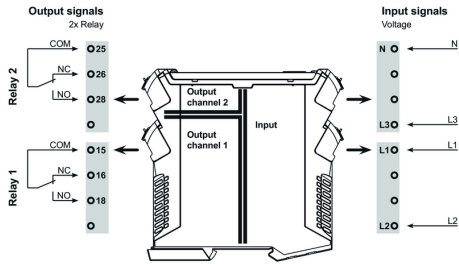
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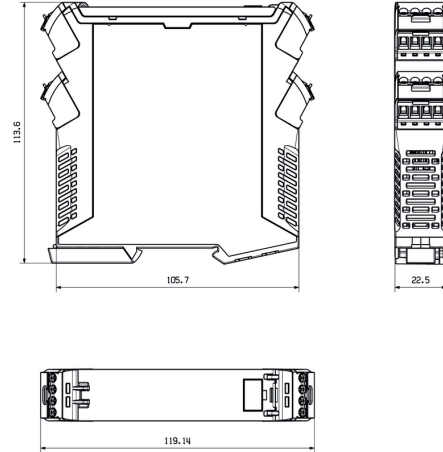
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Drawings

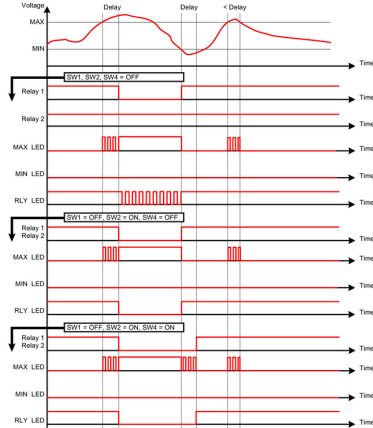
Connection diagram



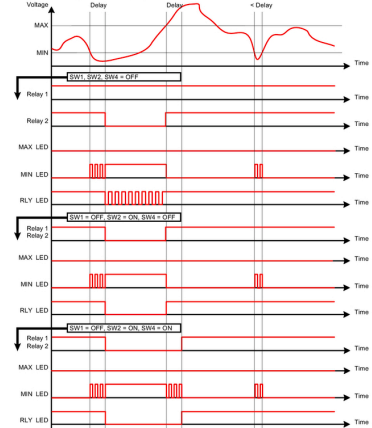
Dimensioned drawing



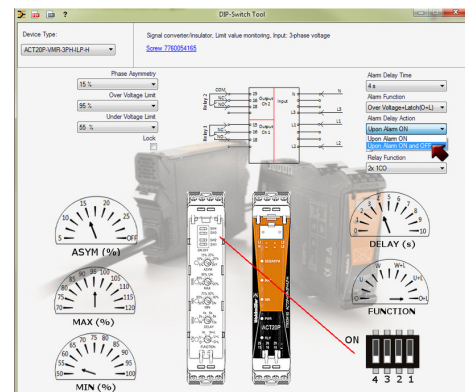
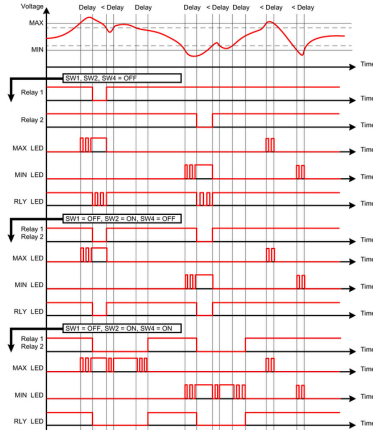
Overvoltage alarm (O)



Undervoltage alarm (U)



Window alarm (W)



example for DIP switch setting (with ACT20 tool)