

ACT20P-VMR-1PH-H-P

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

www.weidmueller.com



ACT20P: The flexible solution

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

General ordering data

Version	Limit value monitoring, Input : 1 phase, Output : 2 x relays
Order No.	7760054359
Type	ACT20P-VMR-1PH-H-P
GTIN (EAN)	4050118559736
Qty.	1 items

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Technical data

Approvals

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ROHS Conform

UL File Number Search [UL Website](#)

Certificate No. (cURus) E469563

Dimensions and weights

Depth	114.3 mm	Depth (inches)	4.5 inch
Height	117 mm	Height (inches)	4.6063 inch
Width	22.5 mm	Width (inches)	0.8858 inch
Net weight	140 g		

Temperatures

Storage temperature	-40 °C...85 °C	Operating temperature	-20 °C...60 °C
Humidity at operating temperature	0...95 % (no condensation)	Humidity	5...85 % rel. humidity, no condensation

Probability of failure

SIL in compliance with IEC 61508 None

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

Number inputs	1	Input voltage	Channel 1: (U1-E): 110V AC/DC, Channel 2: (U2-E): 240V AC/DC, Channel 3 1: (U3-E): 400V AC/DC
Input resistance, voltage	1 MΩ±5%		

Output

Number of outputs 2

Output (digital)

Rated switching current	5 A	Number of digital outputs	2
Max. switching voltage, AC	250 V	Max. switching voltage, DC	30 V
Hysteresis	5% of final value	Type	2 x 1 - or 1 x 2 changeover contact relay, Relay polarity can be inverted
Switch-on delay	0...10 s, configurable	Alarm function	Top and bottom limit values, window range, Holding function can be activated, Alarm delay: 0...10 s

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Switching thresholds	Adjustable, MIN = 50... 100 % x URated input voltage (undervoltage alarm), MAX = 70...120 % x URated input voltage (overvoltage alarm)
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General data

Repeat accuracy	2 % *URated voltage	Accuracy	3 % *URated voltage
Protection degree	IP20	Supply voltage	24...240 VUC ±10%
Long-term drift	0.1 % / 10.000 h	Step response time	<220 ms (10...90 %)
Mounting rail	TS 35	Power consumption	≤ 100 mA @ 24 VDC, ≤ 120mA @ 24V AC, <2 W
Temperature coefficient	350 ppm/K	Nominal power consumption	1.5 VA
Configuration	DIP switch and potentiometer	Operating altitude	≤ 2000 m

Insulation coordination

Impulse withstand voltage	Supply/output: 4 kV; input/ output, input/output: 6 kV, 1.2/50 µs	EMC standards	EN 61326-1
Surge voltage category	III	Pollution severity	2
Galvanic isolation	between input / output / supply / relay	Insulation voltage	2.5 kV (input / output), 2 kV input / output/ power supply
Rated voltage	300 VAC (output 1 - output 2), 300 VAC (supply-output), 500 VAC (supply-input; input-output)		

Connection data

Type of connection	PUSH IN, 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 26	Wire connection cross section AWG, max.	AWG 14

Part description

Product description	The ACT20P-VMR-1PH-H is a monitoring relay for DC voltage or single-phase AC voltage. The device has two independent relay outputs which emit an alarm when levels exceed or fall below preset voltage limits. The alarm can also be set to trigger after an adjustable time delay. Features <ul style="list-style-type: none"> • Manual front-sided configuration via DIP switch, potentiometer and rotary switch • Various alarm functions: upper/lower limit value alarm, window alarm • Adjustable start and alarm delay • Front LEDs indicates operation status and malfunction[• 4-way galvanic isolation between input, output 1, output 2 and power supplyswitch
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Classifications

ETIM 8.0	EC002654	ETIM 9.0	EC002654
ETIM 10.0	EC002654	ECLASS 14.0	27-21-01-22
ECLASS 15.0	27-21-01-22		

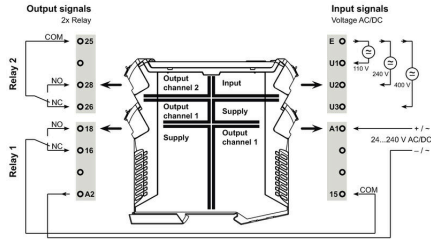
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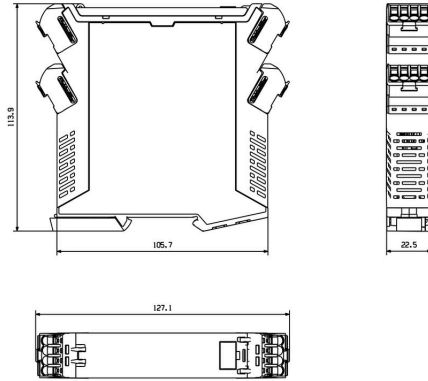
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Drawings

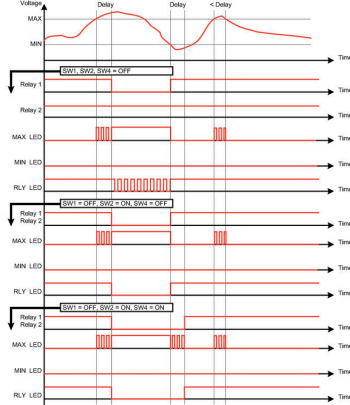
Connection diagram



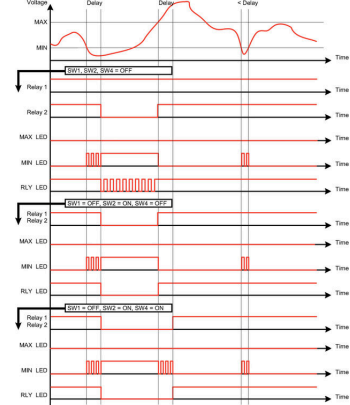
Dimensioned drawing



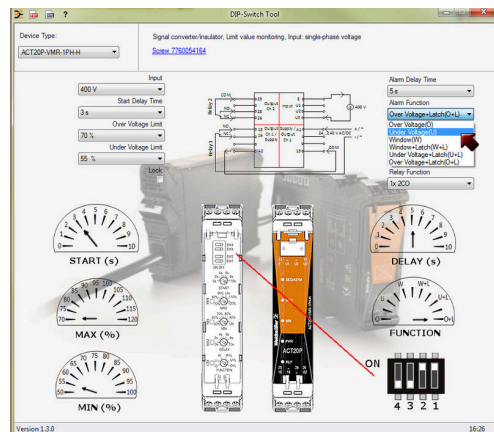
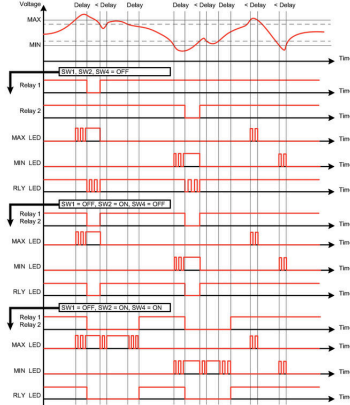
Overvoltage alarm (O)



Undervoltage alarm (U)



Window alarm (W)



example for DIP switch setting (with ACT20 tool)

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