

ACT20P ACT20P-VMR-1PH-H

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Product image



ACT20P: The flexible solution

- Precise and highly functional signal converters
- Simple configuration via display (Pro DCDC II), FDT/DTM software or DIP switch
- Release levers simplify handling
- More space in the control cabinet, from 12.5 mm wide for two channels

General ordering data

| | |
|------------|---|
| Type | ACT20P-VMR-1PH-H |
| Order No. | 7760054164 |
| Version | Limit value monitoring, Input: single-phase voltage, Relay output |
| GTIN (EAN) | 6944 169689079 |
| Qty. | 1 pc(s). |

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Technical data**Dimensions and weights**

| | | | |
|------------|----------|-----------------|------------|
| Width | 22.5 mm | Width (inches) | 0.886 inch |
| Height | 117 mm | Height (inches) | 4.606 inch |
| Depth | 114.3 mm | Depth (inches) | 4.5 inch |
| Net weight | 198.7 g | | |

Temperatures

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

Environmental Product Compliance

| | |
|------------|----------------|
| REACH SVHC | Lead 7439-92-1 |
|------------|----------------|

Input

| | | | |
|-------------------------|---|---------------------------|----------------------------------|
| Number of inputs | 1 | Type | 1 x single phase (live, neutral) |
| 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% |
| Input measurement range | 50...120% U _{rated} voltage | Input frequency | 40...60 Hz, DC |

General data

| | | | |
|-------------------------|---|-------------------------|--|
| Accuracy | 3% *U _{rated} voltage | Configuration | DIP switch and potentiometer |
| Galvanic isolation | 3-way isolator, between input/output/supply | Measurement calibration | max: 70...120% *U _{rated} voltage, min: 50...100% *U _{rated} voltage |
| Power consumption | ≤ 100 mA @ 24 VDC, ≤ 120mA @ 24V AC | Rail | TS 35 |
| Repeat accuracy | 2% *U _{rated} voltage | Step response time | < 220 ms (10...90 %) |
| Temperature coefficient | 350 ppm/K | Voltage supply | 24...240 VUC ±10% |

Insulation coordination

| | | | |
|---------------------------|--|--------------------|--|
| EMC standards | IEC 61326-1 | Galvanic isolation | 3-way isolator, between input/output/supply |
| Impulse withstand voltage | Supply/output: 4 kV; input/output, supply/input: 6 kV, 1.2/50 μs | Insulation voltage | 2.5 kV (input/output), 2 kV input/output/power supply |
| Pollution severity | 2 | Rated voltage | 300 VAC (output 1 - output 2), 300 VAC (supply-output), 500 VAC (supply-input; input-output) |
| Surge voltage category | III | | |

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Technical data**Output (digital)**

| | | | |
|----------------------------|---|----------------------------|------|
| Alarm function | Surge voltage, Undervoltage, Voltage window, Holding function can be activated, Alarm delay: 0...10 s | Number of digital outputs | 2 |
| Type | 2 x 1 - or 1 x 2 changeover contact relay, Relay polarity can be inverted | Max. switching voltage, DC | 30 V |
| Max. switching voltage, AC | 250 V | Rated switching current | 5 A |

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 30 | Wire connection cross section AWG, max. | AWG 14 |

Classifications

| | | | |
|------------|-------------|------------|-------------|
| ETIM 6.0 | EC002654 | eClass 6.2 | 27-37-18-01 |
| eClass 9.0 | 27-21-01-22 | eClass 9.1 | 27-21-01-22 |

Product information

| | |
|---------------------|--|
| Product information | <p>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.</p> <p>Features</p> <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 |
|---------------------|--|

Approvals

Approvals



ROHS

Conform

Downloads

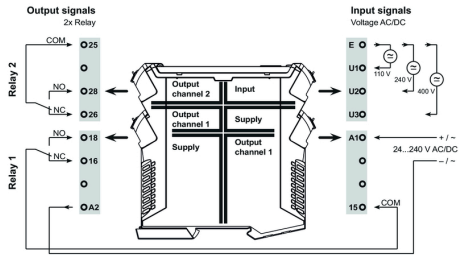
| | |
|---|---|
| Approval/Certificate/Document of Conformity | Declaration of Conformity |
| Engineering Data | STEP |
| Software | DIP switch configuration tool |
| User Documentation | Instruction sheet |

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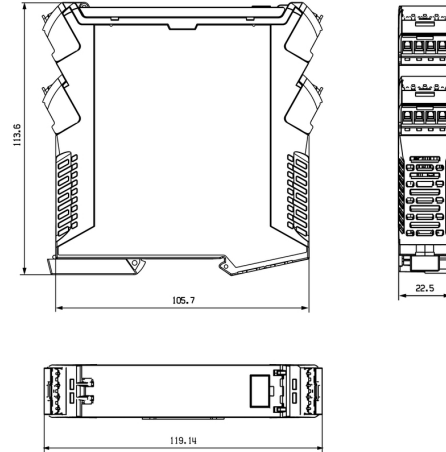
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Drawings

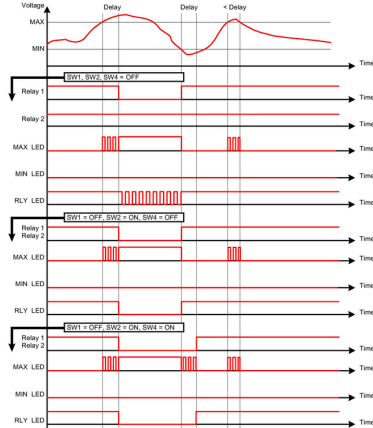
Connection diagram



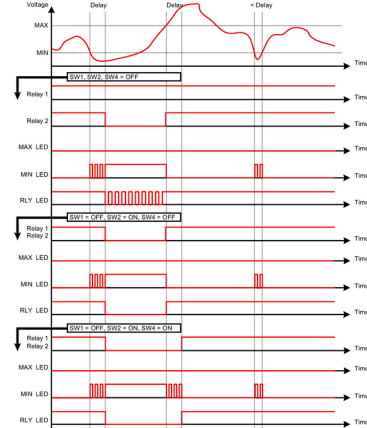
Dimensioned drawing



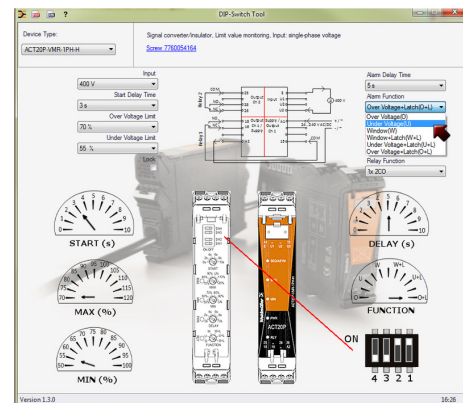
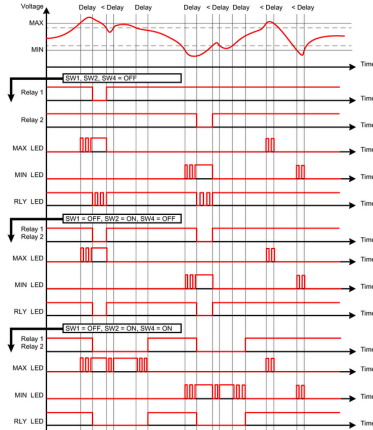
Overvoltage alarm (O)



Undervoltage alarm (U)



Window alarm (W)



example for DIP switch setting (with ACT20 tool)