

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

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**Product image****ACT20P: The flexible solution**

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

**General ordering data**

|            |  |
|------------|--|
| Version    | Limit value monitoring, Input: 3-phase voltage, Relay output |
| Order No.  | <a href="#">7760054165</a>                                   |
| Type       | ACT20P-VMR-3PH-ILP-H-S                                       |
| GTIN (EAN) | 6944 169689086   |
| Qty.       | 1 pièce(s)   |

## ACT20P-VMR-3PH-ILP-H-S

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Caractéristiques techniques

## 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 | -20 °C...65 °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 |
|----------------------------------|------|

## 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

|                   |   |
|-------------------|---|
| Number of outputs | 2 |
|-------------------|---|

## 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   |
| Switch-on delay            | 0...10 s, configurable  | Switching thresholds       | Adjustable, MIN = 50...<br>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, yes, between input / output / supply | Long-term drift         | 0.1 % / 10.000 h             |
| Power consumption  | $\leq 3VA$ , $<2 W$  | Protection degree       | IP20                         |
| Rail               | TS 35  | Repeat accuracy         | 2 % * $U_{rated}$ voltage    |
| Step response time | $\leq 100$ ms  | Temperature coefficient | 350 ppm/K                    |
| Voltage supply     | supplied from voltage measurement inputs                                   |                         |                              |

Date de création 26 novembre 2024 14:08:14 CET

Niveau du catalogue 26.11.2024 / Toutes modifications techniques réservées

2

## ACT20P-VMR-3PH-ILP-H-S

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Caractéristiques techniques

### Insulation coordination

|                           |  |                    |  |
|---------------------------|--|--------------------|--|
| EMC standards             | EN 61326-1   | Galvanic isolation | 2-way isolator, between input/output, yes, between input/output/supply |
| 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 <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 26              | Wire connection cross section AWG, max. | AWG 12              |

### Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC002654    | ETIM 7.0    | EC002654    |
| ETIM 8.0    | EC002654    | ETIM 9.0    | 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 | ECLASS 13.0 | 27-21-01-22 |
| ECLASS 14.0 | 27-21-01-22 |             |             |

### 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 |

### 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"> <li>• Supply from the input measuring circuit</li> <li>• Manual front-sided configuration via DIP switch, potentiometer and rotary switch</li> <li>• Various alarm functions: phase asymmetry, phase loss, phase sequence errors, phase angle errors, alarm delay, upper/lower limit value alarm, window alarm</li> <li>• Front LEDs indicates operation status and malfunction.</li> <li>• 3-way galvanic isolation between input, output 1 and output 2.</li> </ul> |
|---------------------|---|

**Fiche de données**

**ACT20P-VMR-3PH-ILP-H-S**

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

www.weidmueller.com

**Caractéristiques techniques**

**Approvals**

Approvals



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

**Downloads**

|   |   |
|---|---|
| Approval/Certificate/Document of Conformity | <a href="#">Declaration of Conformity</a>     |
| Engineering Data                            | <a href="#">CAD data – STEP</a>               |
| Software                                    | <a href="#">DIP switch configuration tool</a> |
| User Documentation                          | <a href="#">Instruction sheet</a>             |
| Catalogues                                  | <a href="#">Catalogues in PDF-format</a>      |

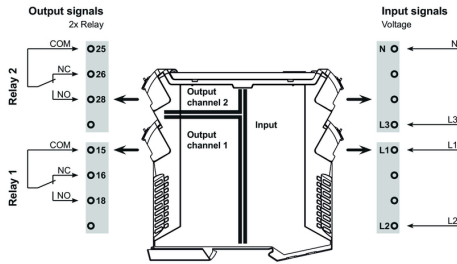
**ACT20P-VMR-3PH-ILP-H-S**

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

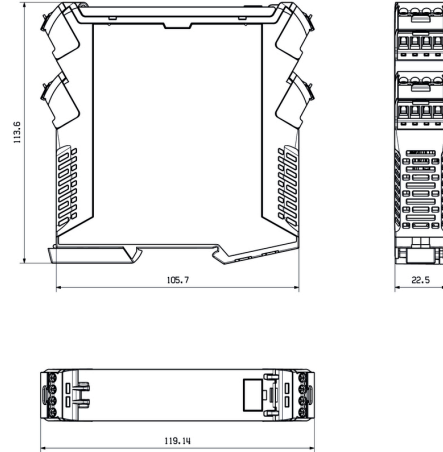
www.weidmueller.com

**Dessins**

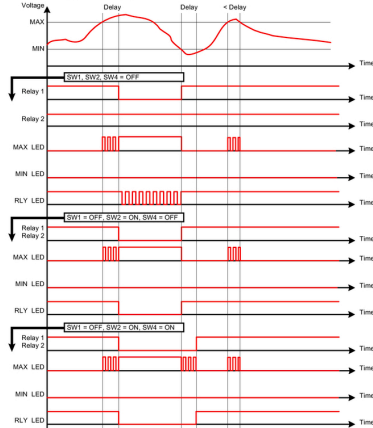
**Connection diagram**



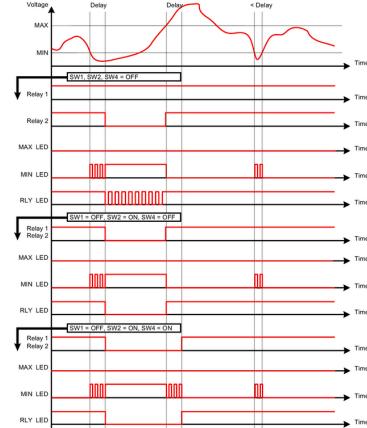
**Dimensioned drawing**



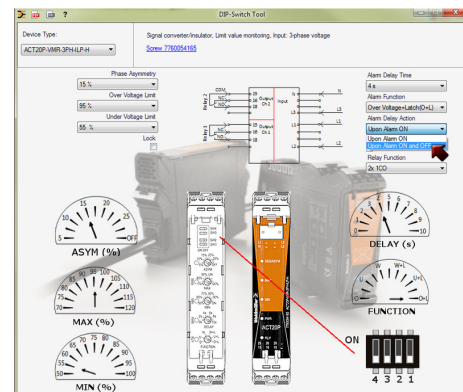
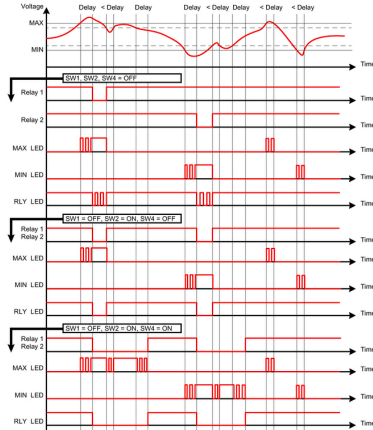
**Overvoltage alarm (O)**



**Undervoltage alarm (U)**



**Window alarm (W)**



example for DIP switch setting (with ACT20 tool)