

**PSSR 230VAC/1PH AC 25A****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**Product image**

Similar to illustration

- Load circuit: 1-phase 12...275 V AC / 25 A or 24...510 V AC / 35 A
- Zero-cross switch or instantaneous-switching
- Ready-to-use: snap on - connect - ready
- Wear-free and silent switching
- High capacity for handling surge currents ( $I^2t$ ) up to 6000 A<sup>2</sup>s (10 ms)
- Plug-in current-monitoring module

**General ordering data**

|            |                                                                                                                                                                                                      |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Version    | Power Solid-State Relais, Solid state contactor,<br>Rated control voltage: 160...240 V AC/DC , Rated<br>switching voltage: 12...275 V AC, Continuous<br>current: 17 A (AC51) at 40 °C, 3.5 A (AC 53) |
| Order No.  | <a href="#">1406220000</a>                                                                                                                                                                           |
| Type       | PSSR 230VAC/1PH AC 25A                                                                                                                                                                               |
| GTIN (EAN) | 4050118206838                                                                                                                                                                                        |
| Qty.       | 1 pc(s).                                                                                                                                                                                             |

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Catalogue status 09.09.2022 / We reserve the right to make technical changes.

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**Technical data****Dimensions and weights**

|            |          |                 |            |
|------------|----------|-----------------|------------|
| Depth      | 115.9 mm | Depth (inches)  | 4.563 inch |
| Height     | 98 mm    | Height (inches) | 3.858 inch |
| Width      | 22.5 mm  | Width (inches)  | 0.886 inch |
| Net weight | 250 g    |                 |            |

**Temperatures**

|                     |                                    |                       |                 |
|---------------------|------------------------------------|-----------------------|-----------------|
| Storage temperature | -55 °C...125 °C                    | Operating temperature | -55 °C...100 °C |
| Humidity            | 40...85 % (indoor) no condensation |                       |                 |

**Environmental Product Compliance**

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

**Rated data UL**

|                         |         |
|-------------------------|---------|
| Certificate No. (cURus) | E223474 |
|-------------------------|---------|

**Control side**

|                       |                   |                                |                                  |
|-----------------------|-------------------|--------------------------------|----------------------------------|
| Rated control voltage | 160...240 V AC/DC | Nominal control current        | 4.4...6.7 mA                     |
| Power rating          | ≤ 1.6 VA          | Pull-in/drop-out voltage, typ. | 160 V / 5 V AC<br>160 V / 5 V DC |
| Status indicator      | LED yellow        | Protective circuit             | Rectifier                        |

**Load side**

|                                               |                                          |                                               |                                        |
|-----------------------------------------------|------------------------------------------|-----------------------------------------------|----------------------------------------|
| Rated switching voltage                       | 12...275 V AC                            | Continuous current                            | 17 A (AC51) at 40 °C;<br>3.5 A (AC 53) |
| Max. switching current                        | 25 A                                     | Load category                                 | AC 51, AC 53                           |
| Inrush current                                | 140 A (10 ms)                            | Pulse load, max. current                      | 250 A (10 ms), non-recurrent           |
| Load limit integral ( $I^2t$ ) <10 ms         | 340 A <sup>2</sup> s                     | Switch-on delay                               | ≤ 30 ms                                |
| Switch-off delay                              | ≤ 30 ms                                  | Voltage drop at max. load                     | ≤ 1.25 V                               |
| Leakage current                               | ≤ 1 mA                                   | Min. switching current                        | 5 mA                                   |
| Short-circuit-proof                           | No                                       | Protective circuit, load side                 | Varistor                               |
| Contact type                                  | 1 NO contact (Triac (zero-cross switch)) | Output voltage frequency range                | 50...60 Hz                             |
| max. switching frequency (AC control voltage) | 4 Hz                                     | max. switching frequency (DC control voltage) | 4 Hz                                   |

**General data**

|         |                                                                  |      |       |
|---------|------------------------------------------------------------------|------|-------|
| Version | Single-phase with mounted heat sink (zero-voltage switch output) | Rail | TS 35 |
| Colour  | black                                                            |      |       |

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## Technical data

## Insulation coordination

|                                            |                     |                                                  |                     |
|--------------------------------------------|---------------------|--------------------------------------------------|---------------------|
| Insulation coordination according to       | EN 60947-4-3:2014   | Pollution severity                               | 2                   |
| Surge voltage category                     | III                 | Dielectric strength for control side - load side | 4 kV <sub>eff</sub> |
| Dielectric strength of load side - housing | 4 kV <sub>eff</sub> | Impulse withstand voltage                        | 4 kV (1.2/50 µs)    |
| Protection degree                          | IP20                |                                                  |                     |

## Further details of approvals / standards

|           |                                     |                         |         |
|-----------|-------------------------------------|-------------------------|---------|
| Standards | EN 60947-4-3, EN 60950, IEC 60335-1 | Certificate No. (cURus) | E223474 |
|-----------|-------------------------------------|-------------------------|---------|

## Connection data (control side)

|                                                     |                      |                                                     |                     |
|-----------------------------------------------------|----------------------|-----------------------------------------------------|---------------------|
| Wire connection method (control side)               | Screw connection     | Nom. rated connection clamping range (control side) | 1.5 mm <sup>2</sup> |
| Min. rated connection clamping range (control side) | 0.13 mm <sup>2</sup> | Max. rated connection clamping range (control side) | 3.3 mm <sup>2</sup> |
| Min. tightening torque (control side)               | 0.4 Nm               | Max. tightening torque (control side)               | 0.5 Nm              |
| Blade size (control side)                           | 0.6 x 3.5 mm         |                                                     |                     |

## Connection data (load side)

|                                                  |                               |                                                  |                   |
|--------------------------------------------------|-------------------------------|--------------------------------------------------|-------------------|
| Wire connection method (load side)               | Screw connection              | Nom. rated connection clamping range (load side) | 6 mm <sup>2</sup> |
| Min. rated connection clamping range (load side) | 1.5 mm <sup>2</sup>           | Max. rated connection clamping range (load side) | 6 mm <sup>2</sup> |
| Wire connection method (load side)               | M5 ring cable lug (insulated) | Min. tightening torque (load side)               | 2 Nm              |
| Max. tightening torque (load side)               | 3 Nm                          | Blade size (load side)                           | Gr. PZ2           |

## Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC002055    | ETIM 7.0    | EC002055    |
| ETIM 8.0    | EC002055    | ECLASS 9.0  | 27-37-10-14 |
| ECLASS 9.1  | 27-37-10-14 | ECLASS 10.0 | 27-37-10-14 |
| ECLASS 11.0 | 27-37-10-14 | ECLASS 12.0 | 27-37-10-14 |

## Approvals

Approvals



|                         |            |
|-------------------------|------------|
| ROHS                    | Conform    |
| UL File Number Search   | UL Website |
| Certificate No. (cURus) | E223474    |

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## Technical data

### Downloads

|                                             |                                                                         |
|---------------------------------------------|-------------------------------------------------------------------------|
| Approval/Certificate/Document of Conformity | <a href="#">EU Konformitätserklärung / EU Declaration of Conformity</a> |
| Engineering Data                            | <a href="#">CAD data – STEP</a>                                         |
| Engineering Data                            | <a href="#">EPLAN, WSCAD</a>                                            |
| User Documentation                          | <a href="#">Beipackzettel / Package Insert - multilingual</a>           |
| Catalogues                                  | <a href="#">Catalogues in PDF-format</a>                                |
| Brochures                                   |                                                                         |

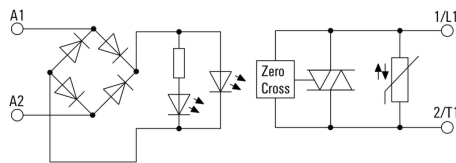
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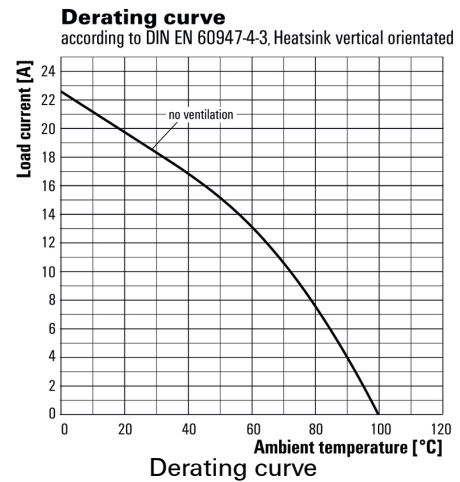
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# Drawings

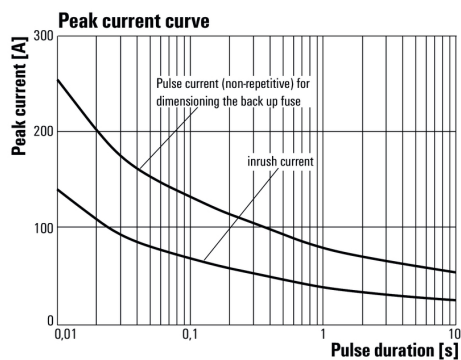
## Wiring diagram



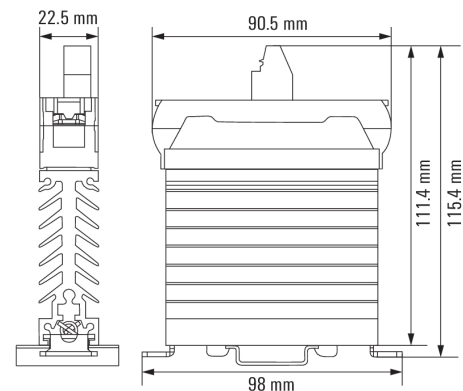
## Graph



## Graph



## Dimensional drawing



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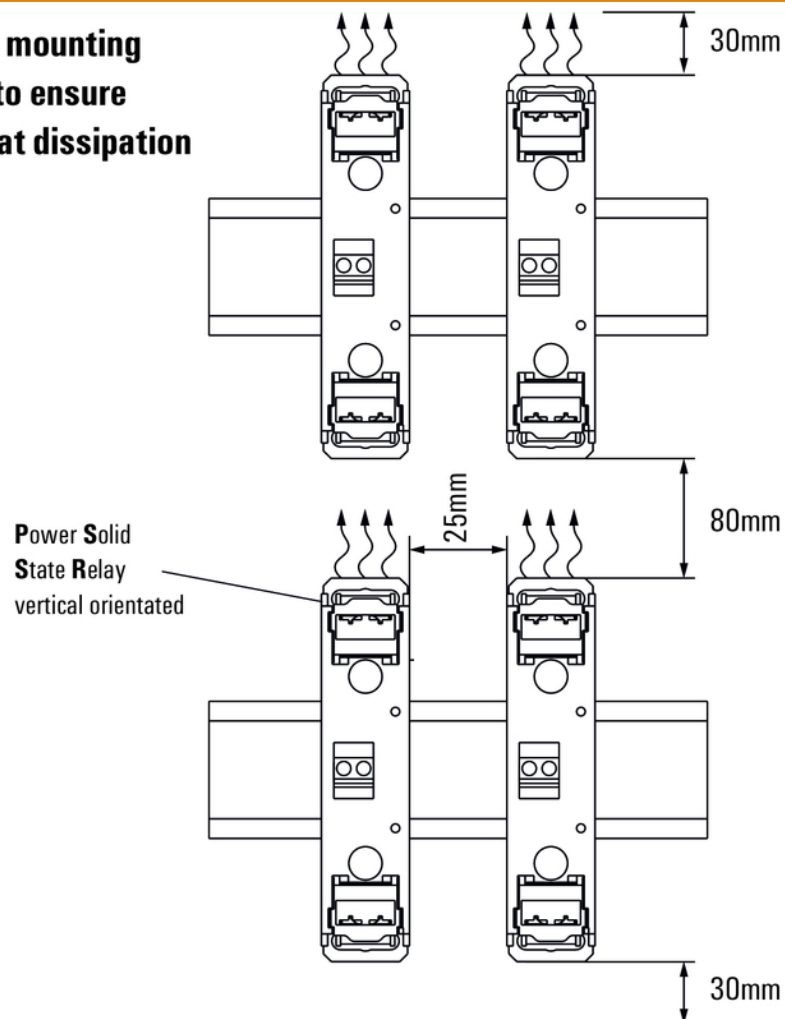
Klingenbergstraße 26

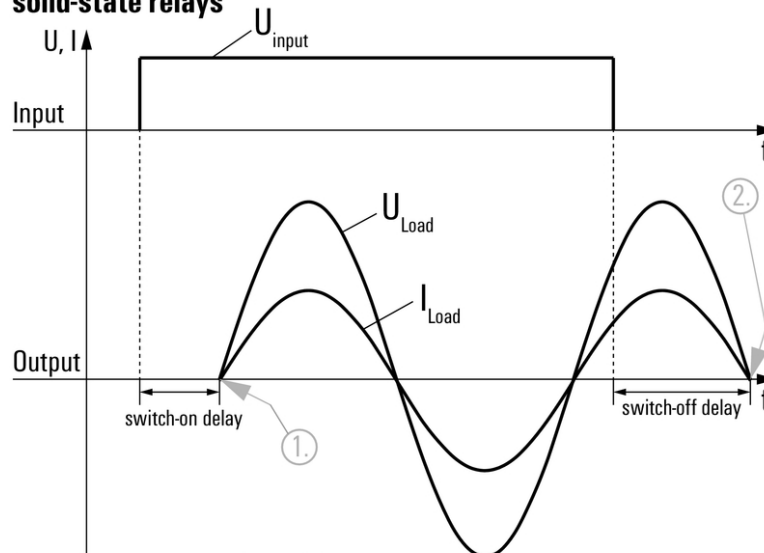
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[www.weidmueller.com](http://www.weidmueller.com)**Drawings****Miscellaneous**

**Suggested mounting  
distances to ensure  
optimal heat dissipation**



**Signal characteristics of zero cross switching  
solid-state relays**

Shown at an example with resistive load.

1. Switches on at first zero cross of mains voltage while control input gets signal.
2. Switches off at next zero cross of mains current after control input signal was switched off.

Switching DC voltages is not possible with this solid-state relays.