

Power Solid-State Relais PSSR 24VDC/1PH AC 22A I

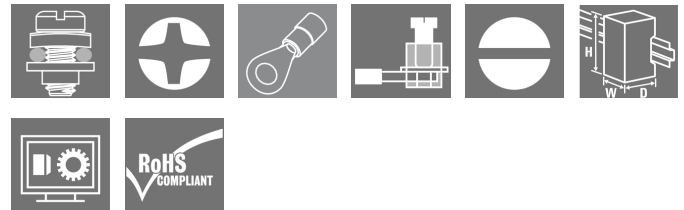
Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Product image



Similar to illustration

- Load circuit: single-phase 12...275 VAC / 25 A or 24...600 VAC / 35 A
- No-voltage switching
- Ready-to-use: snap on - connect - ready
- Wear-free and silent switching
- High capacity for handling surge currents (I^2t) up to 6000 A²s (10 ms)
- Plug-in monitoring module



General ordering data

Type	PSSR 24VDC/1PH AC 22A I
Order No.	2531050000
Version	Power Solid-State Relais, Solid state contactor, 1 NO contact (Thyristor (instantaneous-switching)), Rated control voltage: 3.5...32 V DC, Rated switching voltage: 24...510 V AC, Continuous current: 22 A (AC51) at 40 °C, 7 A (AC 53)
GTIN (EAN)	4050118541168
Qty.	1 pc(s).

Creation date May 2, 2020 6:59:35 AM CEST

Catalogue status 17.04.2020 / We reserve the right to make technical changes.

**Power Solid-State Relais
PSSR 24VDC/1PH AC 22A I**

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Technical data**Dimensions and weights**

Width	22.5 mm	Width (inches)	0.886 inch
Height	98 mm	Height (inches)	3.858 inch
Depth	115.4 mm	Depth (inches)	4.543 inch
Net weight	252 g		

Temperatures

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

Environmental Product Compliance

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

Control side

Rated control voltage	3.5...32 V DC	Nominal control current	13.4 mA DC ±20 %
Power rating	< 500 mW	Cut-in / dropout voltage	3 V / 2 V DC
Status indicator	LED yellow	Protective circuit	Suppressor diode

Load side

Rated switching voltage	24...510 V AC	Continuous current	22 A (AC51) at 40 °C, 7 A (AC 53)
Max. switching current	50 A	Load category	AC 51, AC 53
Inrush current	290 A (10 ms)	Pulse load, max. current	530 A (10 ms), non-recurrent
Load limit integral (I^2t) <10 ms	1,400 A ² s	Switch-on delay	≤0,1 ms
Switch-off delay	≤ 10 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
Output voltage frequency range	50...60 Hz	max. switching frequency (DC control voltage)	10 Hz

Contact data

Contact type	1 NO contact (Thyristor (instantaneous-switching))
--------------	--

General data

Version	Single-phase with mounted heat sink (instantaneous-switching output)	Rail	TS 35
---------	--	------	-------

**Power Solid-State Relais
PSSR 24VDC/1PH AC 22A I**

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Technical data**Insulation coordination**

Insulation coordination according to	EN 60947-4-3:2014	Pollution severity	2
Surge voltage category	III	Clearance and creepage distances for control side - load side	≥ 3.2 mm
Dielectric strength for control side - load side	3.3 kV _{eff} / 1 min.	Dielectric strength of load side - housing	4 kV _{eff}
Impulse withstand voltage	4 kV (1.2/50 μs)	Protection degree	IP20

Connection data (control side)

Wire connection method (control side)	Screw connection	Nom. rated connection clamping range (control side)	1.5 mm ²
Min. rated connection clamping range (control side)	0.13 mm ²	Max. rated connection clamping range (control side)	3.3 mm ²
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 ²
Min. rated connection clamping range (load side)	1.5 mm ²	Max. rated connection clamping range (load side)	6 mm ²
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
eClass 9.0	27-37-10-14	eClass 9.1	27-37-10-14
eClass 10.0	27-37-10-14		

Approvals

Approvals



ROHS

Conform

Downloads

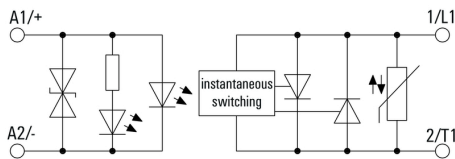
Approval/Certificate/Document of Conformity	EU Konformitätserklärung / EU Declaration of Conformity
Engineering Data	EPLAN
Engineering Data	STEP
User Documentation	Beipackzettel / Package Insert - multilingual

**Power Solid-State Relais
PSSR 24VDC/1PH AC 22A I**

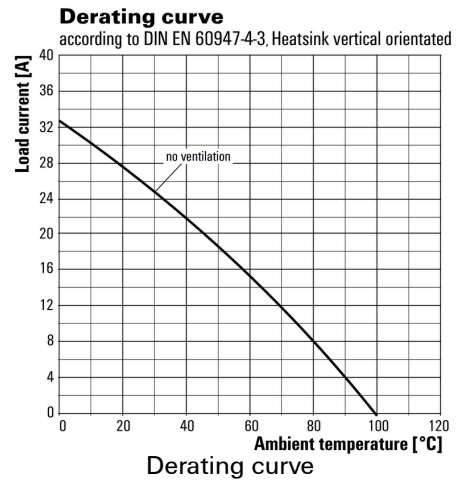
Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Drawings

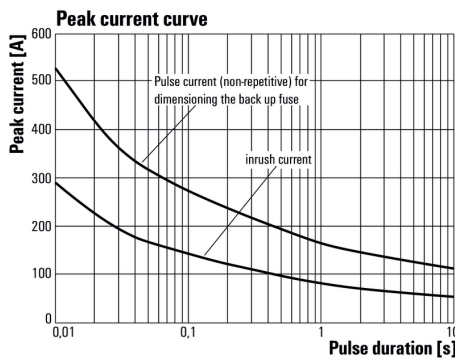
Wiring diagram



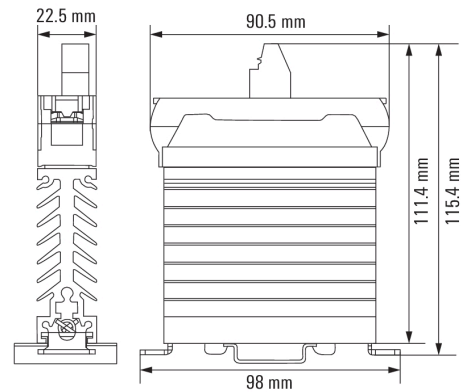
Graph



Graph



Dimensional drawing

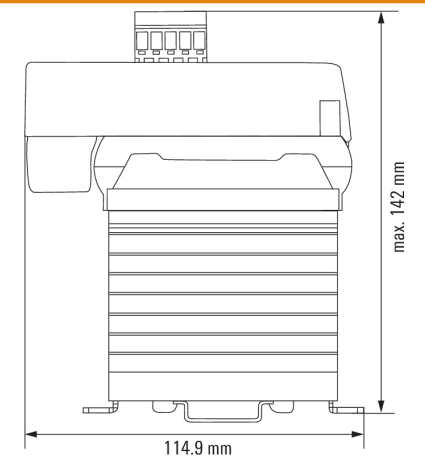


Example of use



Optional plug-in current-monitoring module (item no.: 1406230000)

Dimensional drawing



Dimensions of a 1-phase PSSR with current monitoring module attached

**Power Solid-State Relais
PSSR 24VDC/1PH AC 22A I**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Accessories

Crosshead screwdriver Pozidriv

VDE insulated crosshead screwdriver type Pozidriv SDIK PZ DIN 7438, ISO 8764/2-PZ, output to ISO 8764-PZ, SoftFinish grip



General ordering data

Type	SDIK PZ2	Version
Order No.	9008890000	Screwdriver, Blade length: 100 mm
GTIN (EAN)	4032248266661	
Qty.	1 pc(s).	

Slotted screwdriver

Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip



General ordering data

Type	SDS 0.6X3.5X100	Version
Order No.	9008330000	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm
GTIN (EAN)	4032248056286	
Qty.	1 pc(s).	

Power Solid-State Relais PSSR 24VDC/1PH AC 22A I

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Accessories

Crosshead screwdriver Pozidriv

Crosshead screwdriver, Pozidriv, SDK PZ DIN 5262, ISO 8764/2-PZ, output to ISO 8764/1-PZ, ChromTop tip, SoftFinish grip



General ordering data

Type	SDK PZ2	Version
Order No.	9008540000	Screwdriver, Blade width (B): 6 mm, Blade length: 100 mm
GTIN (EAN)	4032248056538	
Qty.	1 pc(s).	

Current-monitoring module



- Monitoring of up to 5 consumers connected in parallel
- Monitoring of single failure and short-circuit
- Can be plugged into the single-phase PSSRs with heat sink
- Feedback output for error message
- Teach button on the module and external teach input
- Undercurrent switching threshold: $0.84 \times I_{teach}$

General ordering data

Type	PSSR 1PH CONTROL UNIT	Version
Order No.	1406230000	Power Solid-State Relais, Current monitoring, Screw connection
GTIN (EAN)	4050118206739	
Qty.	1 pc(s).	

**Power Solid-State Relais
PSSR 24VDC/1PH AC 22A I**

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Accessories

Blank



ESG is the tried-and-tested marker in MultiCard format for use on many well-known electrical devices. The result is high-quality device marking with a high-contrast appearance.

Various types are available for devices from the following manufacturers:

- Siemens
- Télémecanique
- ABB
- Beckhoff
- Lumberg
- Tags for all-purpose usage; self-adhesive or clip-on tags, depending on the type

Advantages at a glance:

- Tags for universal usage, self-adhesive or clip-on tags, depending on type
- For aligned equipment, e.g. circuit breakers, we supply ESG markers for clipping onto tag rails
- Individual laser-quality printing according to specifications

For custom printing: Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

Please note that these markers are not intended for printing with the SpeedMarking laser.

General ordering data

Type	ESG 6/15 RIDER MC NE WS	Version
Order No.	1881280000	ESG, Device markers x 15 mm, PA 66, Colour: white, pluggable
GTIN (EAN)	4032248482276	
Qty.	200 pc(s).	

**Power Solid-State Relais
PSSR 24VDC/1PH AC 22A I**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Accessories

End bracket



Klippon® Connect with clamping yoke Technology

The high reliability and variety of designs of the terminal blocks with clamping yoke connections make planning easier and optimises operational safety. Klippon® Connect provides a proven response to a range of different requirements.

General ordering data

Type	MEW 35/1	Version
Order No.	1805610000	Accessories, End bracket
GTIN (EAN)	4032248287017	
Qty.	10 pc(s).	

Crosshead screwdriver, Pozidrive



VDE insulated screwdriver sets, for working on live parts up to 1000 V AC and 1500 V DC, DIN EN 60900. IEC 900. Each piece is "GS" safety tested. Blade made from fully hardened, high-alloy chromium-vanadium-molybdenum steel, gun-metal finish.

General ordering data

Type	SDIK PZ2 SL	Version
Order No.	1274740000	Mounting tool, Blade length: 100 mm
GTIN (EAN)	4050118073218	
Qty.	1 pc(s).	

Power Solid-State Relais PSSR 24VDC/1PH AC 22A I

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Accessories

Slotted screwdriver

VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip



General ordering data

Type	SDIS 0.6X3.5X100	Version
Order No.	9008390000	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm
GTIN (EAN)	4032248056354	
Qty.	1 pc(s).	

Slotted screwdriver

VDE insulated screwdriver sets, for working on live parts up to 1000 V AC and 1500 V DC, DIN EN 60900. IEC 900. Each piece is "GS" safety tested. Blade made from fully hardened, high-alloy chromium-vanadium-molybdenum steel, gun-metal finish.



General ordering data

Type	SDIS SL 0.6X3.5X100	Version
Order No.	1274660000	Mounting tool, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm
GTIN (EAN)	4050118072631	
Qty.	1 pc(s).	

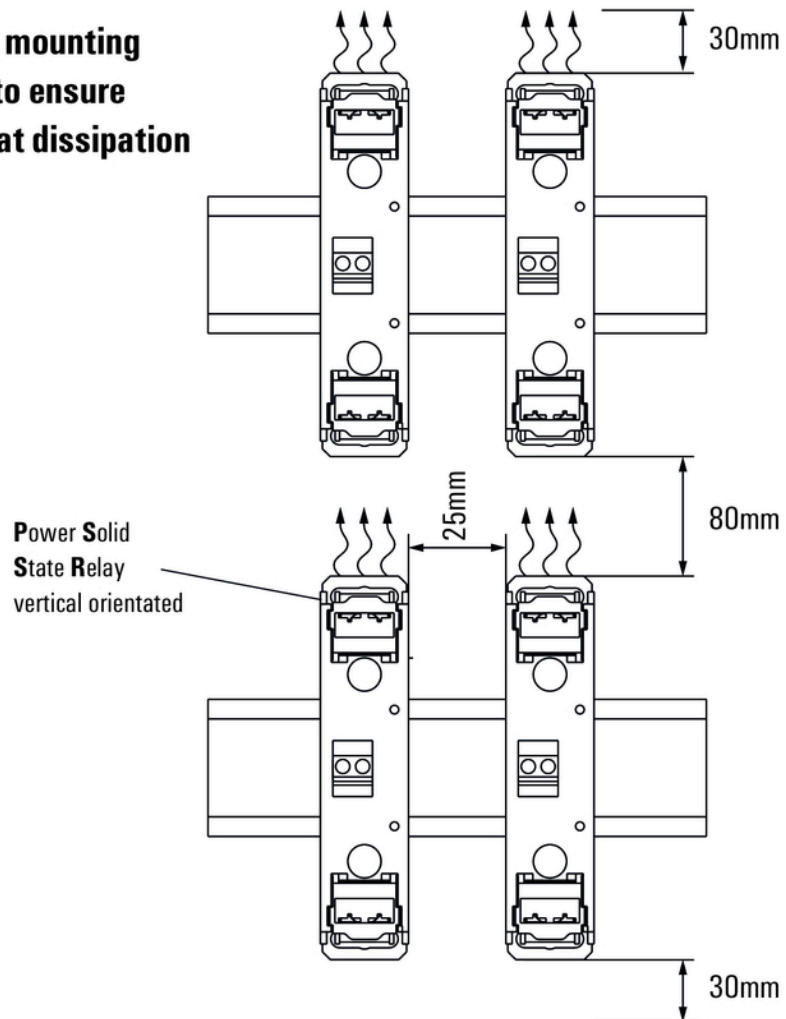
**Power Solid-State Relais
PSSR 24VDC/1PH AC 22A I**

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Drawings

Miscellaneous

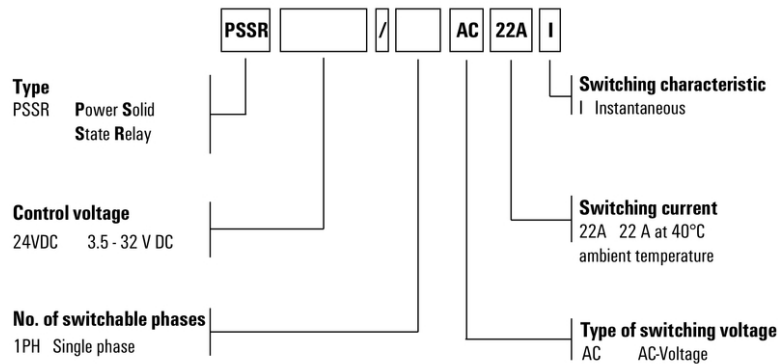
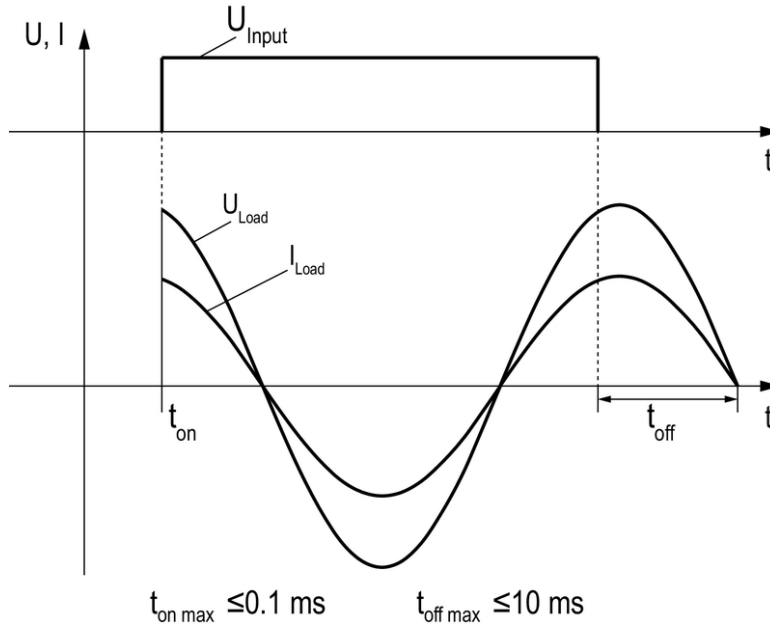
**Suggested mounting
distances to ensure
optimal heat dissipation**



**Power Solid-State Relais
PSSR 24VDC/1PH AC 22A I**

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Signal characteristics of instantaneous switching PSSR
 shown at an example with resistive load



Type codes