

## Power Solid-State Relais PSSR 230VAC/1PH AC 25A

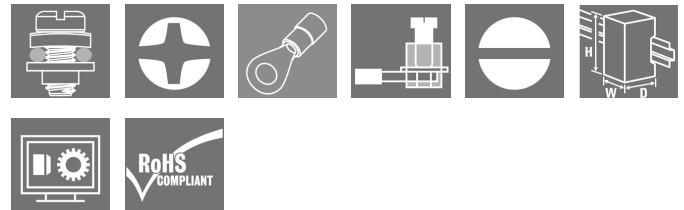
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### Product image



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 A<sup>2</sup>s (10 ms)
- Plug-in monitoring module



### General ordering data

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

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

Width	22.5 mm	Width (inches)	0.886 inch
Height	98 mm	Height (inches)	3.858 inch
Depth	115.9 mm	Depth (inches)	4.563 inch
Net weight	250 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
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**Rated data UL**

Certificate No. (cURus)	E223474
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**Control side**

Rated control voltage	160...240 V AC/DC	Nominal control current	6 mA AC (±20 %), 6 mA DC (±20 %)
Power rating	≤ 1.38 VA	Cut-in / dropout voltage	160 V / 5 V AC 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, 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
Output voltage frequency range	50...60 Hz	max. switching frequency (AC control voltage)	4 Hz
max. switching frequency (DC control voltage)	4 Hz		

**Contact data**

Contact type	1 NO contact (Triac (zero-cross switch))
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**General data**

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

Creation date May 27, 2019 8:03:22 PM CEST

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**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	≥ 6,5 mm
Dielectric strength for control side - load side	4 kV <sub>eff</sub>	Dialectric 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
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**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 5.0	EC001437	ETIM 6.0	EC002055
eClass 6.2	27-37-16-01	eClass 7.1	27-37-16-01
eClass 8.1	27-37-16-01	eClass 9.0	27-37-10-14
eClass 9.1	27-37-10-14		

**Approvals**

Approvals



ROHS Conform

**Downloads**

Approval/Certificate/Document of Conformity	<a href="#">DE_PA5600_160620_001.pdf</a>
Brochure/Catalogue	<a href="#">CAT 4.2 ELECTR 18/19 EN</a>
Engineering Data	<a href="#">EPLAN_WSCAD</a>
Engineering Data	<a href="#">STEP</a>
User Documentation	<a href="#">1431780000.pdf</a>

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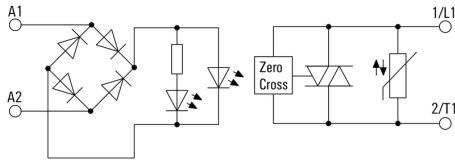
Catalogue status 23.05.2019 / We reserve the right to make technical changes.

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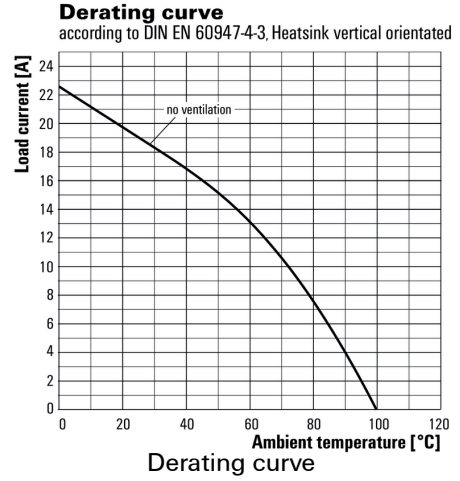
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**Drawings**

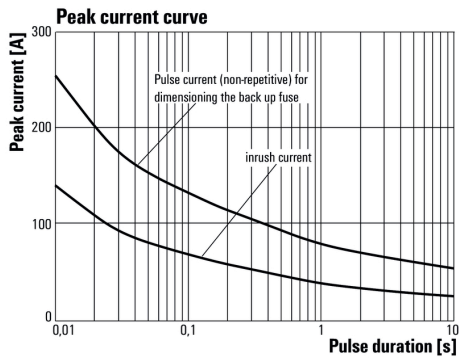
**Wiring diagram**



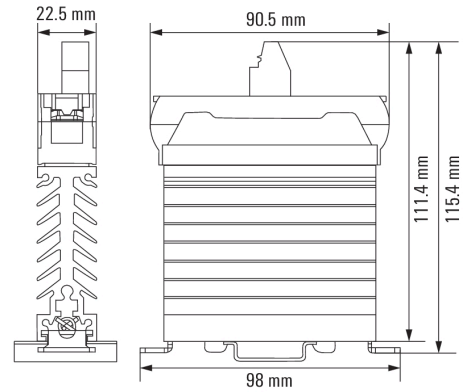
**Graph**



**Graph**



**Dimensional drawing**



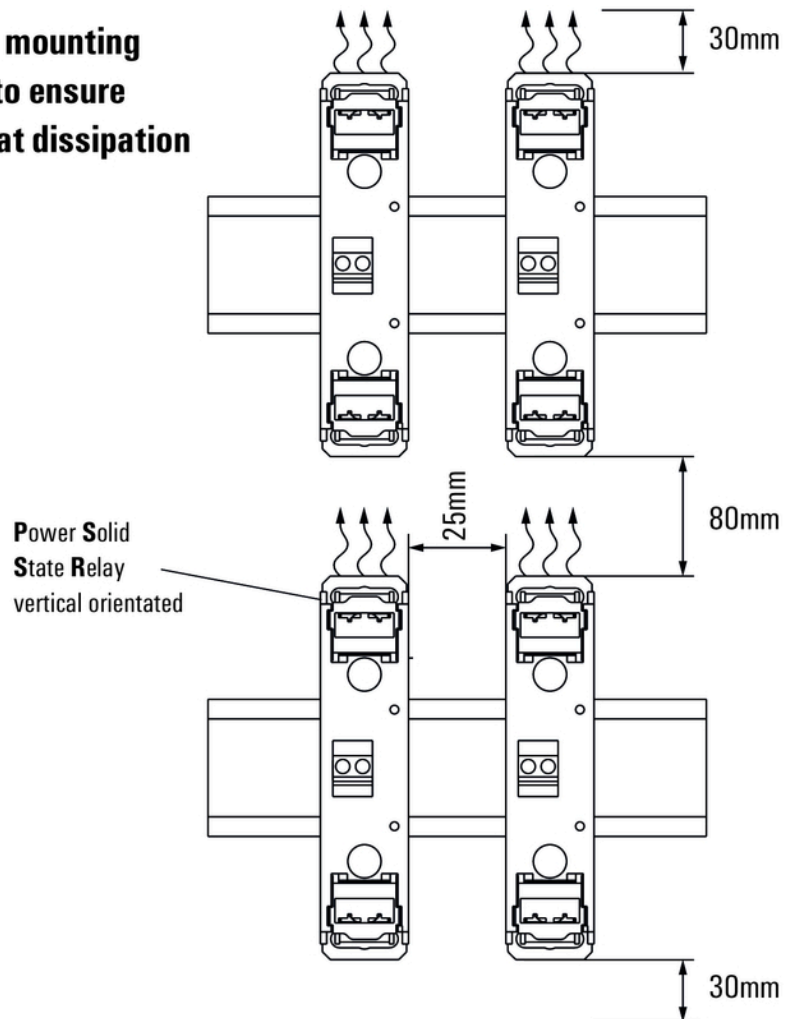
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**Drawings**

**Miscellaneous**

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



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**Signal characteristics of zero crossing PSSR**

shown at an example with resistive load

