

Power Solid-State Relais PSSR 24VDC/1PH AC75A HP

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 24...600 VAC / 50 A or 75 A
- No-voltage switching
- Wear-free and silent switching
- High capacity for handling surge currents (I^2t) up to 6000 A²s (10 ms)
- Compact design



General ordering data

Type	PSSR 24VDC/1PH AC75A HP
Order No.	1406250000
Version	Power Solid-State Relais, Solid state contactor, 1 NO contact (Thyristor (zero-cross switch)), Rated control voltage: 3.5...32 V DC , Rated switching voltage: 24...600 V AC, Continuous current: 62 A (AC51) at 40 °C, mounted on heatsink with 0.75 K/W
GTIN (EAN)	4050118206852
Qty.	2 pc(s).

Creation date September 29, 2020 3:36:25 AM CEST

Power Solid-State Relais PSSR 24VDC/1PH AC75A HP

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	45 mm	Width (inches)	1.772 inch
Height	58.5 mm	Height (inches)	2.303 inch
Depth	29 mm	Depth (inches)	1.142 inch
Net weight	88 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
------------	----------------

Rated data UL

Certificate No. (cURus)	E360862
-------------------------	---------

Control side

Rated control voltage	3.5...32 V DC	Nominal control current	13.4 mA DC $\pm$ 20 %
Power rating	$\leq$ 280 mW	Cut-in / dropout voltage	3 V / 2 V DC
Status indicator	Green LED	Protective circuit	Suppressor diode

Load side

Rated switching voltage	24...600 V AC	Continuous current	62 A (AC51) at 40 °C, mounted on heatsink with 0.75 K/W
Max. switching current	90 A	Load category	AC 51
Inrush current	600 A (10 ms)	Pulse load, max. current	1100 A (10 ms), non-recurrent
Load limit integral (I^2t) <10 ms	6,000 A ² s	Switch-on delay	$\leq$ 10 ms
Switch-off delay	$\leq$ 10 ms	Voltage drop at max. load	$\leq$ 1.4 V
Leakage current	$\leq$ 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 (zero-cross switch))
--------------	--

General data

Version	Single-phase without heat sink (zero-voltage switch output)	Colour	black
---------	---	--------	-------

Power Solid-State Relais PSSR 24VDC/1PH AC75A HP

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

Pollution severity	2	Surge voltage category	III
Clearance and creepage distances for control side - load side	≥ 8 mm	Dielectric strength for control side - load side	4 kV _{eff}
Dielectric strength of load side - housing	4 kV _{eff}	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)	E360862
-----------	-------------------------------------	-------------------------	---------

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)	0.75 mm ²	Max. rated connection clamping range (control side)	2.5 mm ²
Wire connection method (control side)	M4 ring cable lug (insulated)	Min. tightening torque (control side)	1.2 Nm
Max. tightening torque (control side)	2 Nm	Blade size (control side)	Gr. PZ2

Connection data (load side)

Wire connection method (load side)	Screw connection	Nom. rated connection clamping range (load side)	10 mm ²
Min. rated connection clamping range (load side)	1.5 mm ²	Max. rated connection clamping range (load side)	10 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

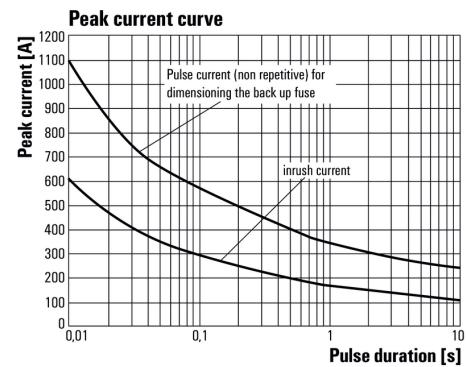
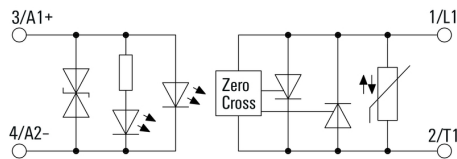
Approval/Certificate/Document of Conformity	EU Konformitätserklärung / EU Declaration of Conformity
Brochure/Catalogue	CAT 4.2 ELECTR 18/19 EN
Engineering Data	EPLAN, WSCAD
User Documentation	Beipackzettel / Package Insert - multilingual

Power Solid-State Relais PSSR 24VDC/1PH AC75A HP

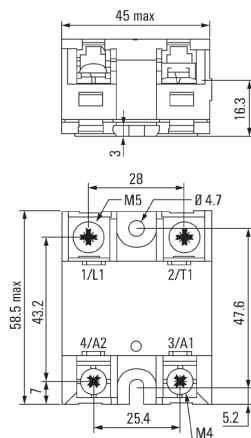
Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Drawings

Wiring diagram



Dimensional drawing



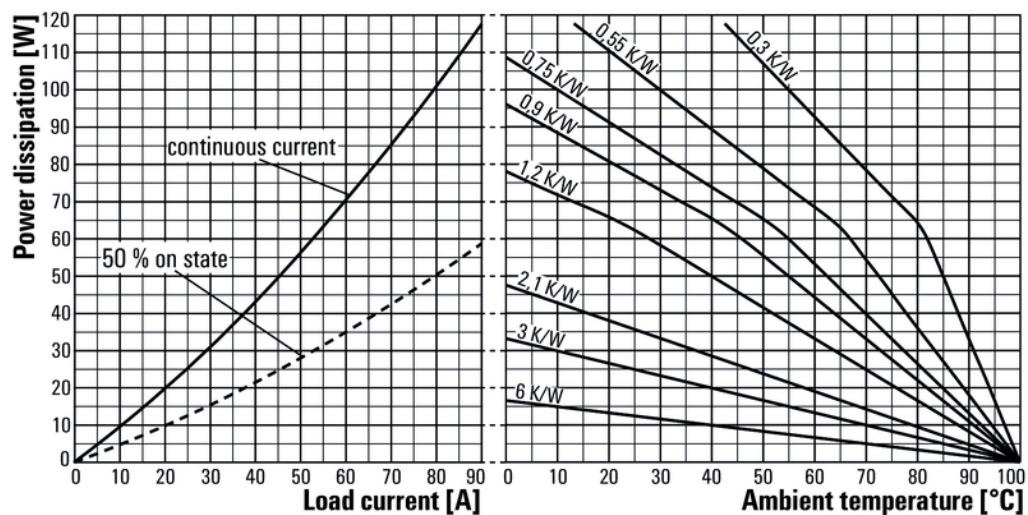
Power Solid-State Relais PSSR 24VDC/1PH AC75A HP

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

Derating curve

Thermal curves and heatsink choice



**Power Solid-State Relais
PSSR 24VDC/1PH AC75A HP**

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**Signal characteristics of zero cross switching PSSR**

shown at an example with resistive load

