

PSSR 24VDC/1PH AC50A HP
Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com
Product image


- Load circuit: 1-phase 26...600 V AC / 50 A or 75 A
- Zero-cross switch
- Wear-free and silent switching
- High capacity for handling surge currents (I^2t) up to 6000 A²s (10 ms)
- Plug-in current-monitoring module
- Compact design for direct mounting on a metal surface or heat sink

General ordering data

Version	Power Solid-State Relais, Solid state contactor, Rated control voltage: 3.5...32 V DC, Rated switching voltage: 24...600 V AC, Continuous current: 52 A (AC51) at 40 °C, mounted on heatsink with 0.75 K/W, Screw connection
Order No.	1406240000
Type	PSSR 24VDC/1PH AC50A HP
GTIN (EAN)	4050118206746
Qty.	2 items
Delivery status	Discontinued
Available until	2022-09-30T00:00:00+02:00

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Technical data

Approvals

Approvals



ROHS Conform

UL File Number Search [UL Website](#)

Certificate No. (cURus) E360862

Dimensions and weights

Depth	29 mm	Depth (inches)	1.1417 inch
Height	58.5 mm	Height (inches)	2.3031 inch
Width	45 mm	Width (inches)	1.7716 inch
Net weight	87 g		

Temperatures

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

Environmental Product Compliance

RoHS Compliance Status	Compliant
REACH SVHC	Lead 7439-92-1
SCIP	68d07448-41d4-40df-bc1f-f0c4ff99974f

Rated data UL

Certificate No. (cURus)	E360862
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Control side

Rated control voltage	3.5...32 V DC	Nominal control current	13.4 mA DC ±20 %
Power rating	≤ 280 mW	Status indicator	Green LED
Protective circuit	Suppressor diode	Input frequency	10 Hz

Load side

Rated switching voltage	24...600 V AC	Continuous current	52 A (AC 51) @ 40 °C @ mounted on heatsink with 0.75 K/W
Max. switching current	60 A	Load category	AC 51
Inrush current	400 A (10 ms)	Pulse load, max. current	700 A (10 ms), non-recurrent
Load limit integral (I²t) <10 ms	2450 A²s	Switch-on delay	≤ 10 ms
Switch-off delay	≤ 10 ms	Voltage drop at max. load	≤1.35 V
Leakage current	≤ 1 mA	Min. switching current	5 mA
Short-circuit-proof	No	Protective circuit, load side	Varistor
Contact type	1 NO contact (Thyristor (zero-cross switch))	Output voltage frequency range	50 / 60 Hz
max. switching frequency (DC control voltage)	10 Hz		

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Technical data

General data

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

Pollution severity	2	Surge voltage category	III
Dielectric strength for control side - load side	4 kVeff	Diaelectric strength of load side - housing	4 kVeff
Impulse withstand voltage	4 kV (1.2/50 µs)	Protection degree	IP20

Further details of approvals / standards

Certificate No. (cURus)	E360862
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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 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 (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 (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

Connection data

Wire connection method	Screw connection
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Classifications

ETIM 8.0	EC002055	ETIM 9.0	EC002055
ETIM 10.0	EC002055	ECLASS 14.0	27-37-10-14
ECLASS 15.0	27-37-10-14		

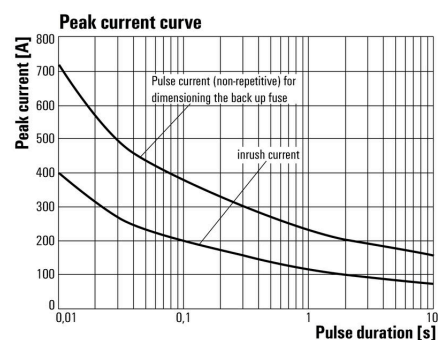
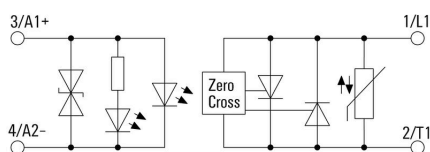
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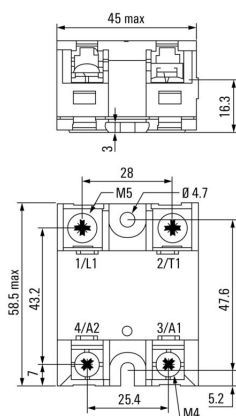
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Drawings

Wiring diagram

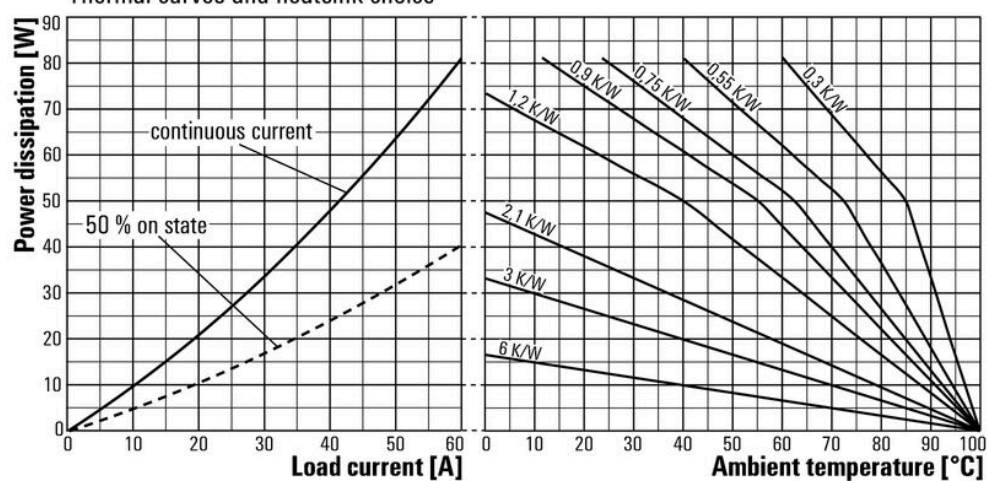


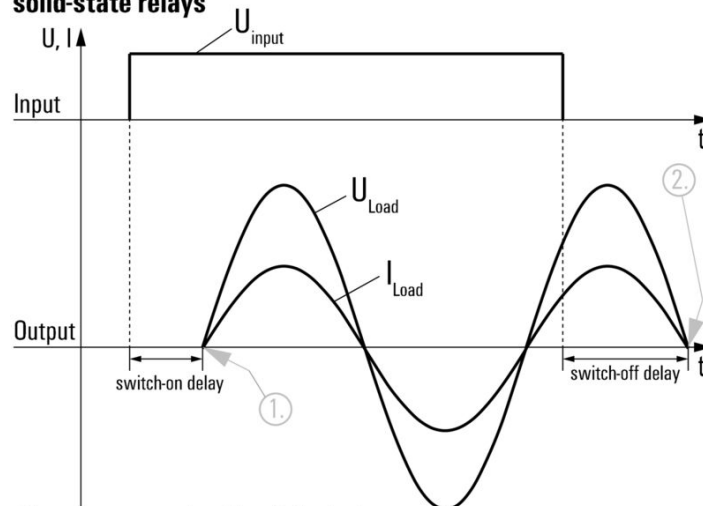
Dimensional drawing



Derating curve

Thermal curves and heatsink choice



**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.

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Accessories

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 0.5X3.0X80	Version	
Order No.	2749330000	Screwdriver, Blade width (B): 3 mm, Blade length: 80 mm, Blade thickness (A): 0.5 mm	
GTIN (EAN)	4050118895551		
Qty.	1 ST		

Crosshead screwdriver Pozidriv

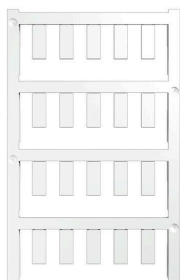


Crosshead screwdriver, Pozidriv, SDK PZ DIN 5262, ISO 8764/2-PZ, output to ISO 8764/1-PZ, ChromTop tip, SoftFinish grip

General ordering data

Type	SDK PZ2 X 100	Version	
Order No.	2749450000	Screwdriver, Blade width (B): 6 mm, 100 mm, Blade thickness (A): 2	
GTIN (EAN)	4050118895674		
Qty.	1 ST		

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 manufacturers like Siemens, ABB, Beckhoff etc.

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.

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Accessories

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 ST	

ESG 6/15



Guaranteed long service life: ESG

The multi-colour and multi-format labels have a strong adhesive layer to ensure the best possible adhesion to the underlying surface. Double laminated polyester makes the basic material very thin and yet extremely tear-resistant.

Your benefits with MultiMark

- "Different materials for various requirements"
- Can be used with equipment from many manufacturers
- Device markers with a familiar design

General ordering data

Type	ESG 6/15 MM WS	Version
Order No.	2619940000	ESG, Device markers, 6 x 15 mm, white
GTIN (EAN)	4050118626148	
Qty.	3000 ST	

ESG 6/17



Guaranteed long service life: ESG

The multi-colour and multi-format labels have a strong adhesive layer to ensure the best possible adhesion to the underlying surface. Double laminated polyester makes the basic material very thin and yet extremely tear-resistant.

Your benefits with MultiMark

- "Different materials for various requirements"
- Can be used with equipment from many manufacturers
- Device markers with a familiar design

General ordering data

Type	ESG 6/17 MM WS	Version
Order No.	2005100000	ESG, Device markers, 6 x 17 mm, white
GTIN (EAN)	4050118390728	
Qty.	3000 ST	