

# Solid State Relays with push-in spring terminals

Fast wiring,  
even in tight spaces !



World leader in Solid-State power switching & control !



[www.celduc-relais.com](http://www.celduc-relais.com)

# Solid State Relays with push-in spring terminals

Intuitive and requiring no special tools, this connection technology is perfect for compact installations where you need **fast and safe cabling**.



## Advantages “Push-In” connections offer many of advantages :

### STRONG

Push-in connections are strong and reliable.



### FLEXIBLE

Push-in connections are suitable for various conductors : solid conductors, for stranded conductors, and for fine-stranded conductors with crimped-on ferrules.

### SAFE

Push-in connections avoid downtime, maintenance, and reduce costs.

- No heat risk
- No risk of breaking the terminal inside the product.
- Retightening of screws is no longer necessary and operation in vibrating environments is no longer a problem.
- Touchproof protection without a cover.

**Fast wiring,  
even in tight spaces !**

### FAST

- Quick and tool-free conductor connection using direct plug-in technology.
- Replacing a damaged relay is quick and easy.



**Single phase  
Solid State Relays  
SOR**



**Two-phase  
Solid State Relays  
SOBR**



**Three-phase  
Solid State Relays  
SGTR**

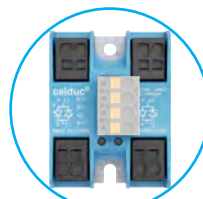


**Four-Legs  
Solid State Relays  
SMQR**

**Power  
wiring**



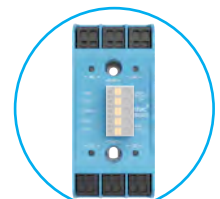
2 x doubled 6mm<sup>2</sup>  
or AWG10



4 x doubled 6mm<sup>2</sup>  
or AWG10



6 x doubled 6mm<sup>2</sup>  
or AWG10

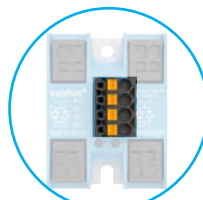


6 x doubled 6mm<sup>2</sup>  
or AWG10

**Control  
wiring**



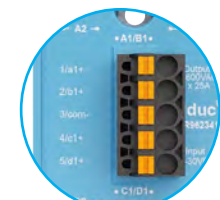
2 x doubled 2.5mm<sup>2</sup>  
or AWG14



4 x poles 2.5mm<sup>2</sup>  
or AWG14



4 x poles 2.5mm<sup>2</sup>  
or AWG14



5 x poles 2.5mm<sup>2</sup>  
or AWG14



# SOR

- **Single phase Solid State Relays** SOR Series of single phase Solid State Relays with push-in terminals is suitable for resistive loads AC-1

- Current limiter
- Green control status LED
- Voltage protection on input (transil)
- Connection on the power side : 2 x doubled 6mm<sup>2</sup> or AWG10
- Connection on the control side : 2 x doubled 2.5mm<sup>2</sup> or AWG14

Product reference	Max. Thyristor current	Switching current AC-1 (at 40°C) *	I <sub>pt</sub>	Switching voltage	Control voltage	Protections
<b>SOR943440-HE</b>	35A	35A	882A <sup>2</sup> s	12-280VAC	3-32VDC	TVS
<b>SOR965440-HE</b>	50A	41A	1680A <sup>2</sup> s	24-600VAC	3.5-32VDC	TVS
<b>SOR967440</b>	90A	41A	7200A <sup>2</sup> s	24-600VAC	3.5-32VDC	TVS

\*These products should be mounted on heatsink in order to reach nominal current.



Dim. 45 x 59 x 41.2 mm

- **Single phase Solid State Relays** "Ready to use" models with integrated heatsink

Product reference	Switching current AC-1 (at 40°C)	I <sub>pt</sub>	Switching voltage	Control voltage	Protections
<b>SOR943440-HE-WF151</b>	28A	882A <sup>2</sup> s	12-280VAC	3-32VDC	TVS
<b>SOR965440-HE-WF114</b>	34A	1680A <sup>2</sup> s	24-600VAC	3.5-32VDC	TVS



# SOBR

- **Two-phase Solid State Relays** We have extended our SOBR range of two-phase Solid State Relays with push-in terminals. Suitable for resistive loads AC-1

- 2 x Green input status LED
- Connection on the power side : 4 x doubled 6mm<sup>2</sup> or AWG10
- Connection on the control side : 4 x poles 2.5mm<sup>2</sup> or AWG14

Product reference	Max. Thyristor current	Switching current AC-1 (at 40°C) *	I <sub>pt</sub>	Switching voltage	Control voltage	Protections
<b>SOBR943640-HE</b>	2x35A	2x35A	882A <sup>2</sup> s	12-280VAC	10-30VDC	TVS
<b>SOBR965640-HE</b>	2x50A	2x41A	1680A <sup>2</sup> s	24-600VAC	10-30VDC	TVS
<b>SOBR967640</b>	2x75A	2x41A	7200A <sup>2</sup> s	24-600VAC	10-30VDC	TVS

\*These products should be mounted on heatsink in order to reach nominal current.



Dim. 45 x 59 x 48.1 mm

- **Two-phase Solid State Relays** "Ready to use" model with integrated heatsink

Product reference	Switching current AC-1 (at 40°C)	I <sub>pt</sub>	Switching voltage	Control voltage	Protections
<b>SOBR965640-HE-WFF05</b>	2x41A	1680A <sup>2</sup> s	24-600VAC	10-30VDC	TVS



# SGTR

## • Three-phase Solid State Relays

Our 3-phase Solid State Relays are also available with push-in terminals.  
Versions for resistive loads AC-1 : SGTR9XXXXXX  
Versions for all types of loads AC-3 : SGTR8XXXXXX

- Green control status LED
- Voltage protection on input (transil)
- Overvoltage protection for AC-1 by self urn-ON of the thyristor (TVS diodes on gates) and for AC-3 by VDR
- Connection on the power side : 6 x doubled 6mm<sup>2</sup> or AWG10
- Connection on the control side : 4 x poles 2.5mm<sup>2</sup> or AWG14

Product reference	Max. Thyristor current	Switching current AC-1 (at 40°C) *	Switching current AC-3 (at 40°C) *	I <sup>2</sup> t	Switching voltage	Control voltage	Protections
SGTR9854310	3x50A	3x41A	-	2800A²s	24-660VAC	4-30VDC	TVS
SGTR8690510	3x125A	3x41A	3x32A	22000A²s	24-520VAC	4-30VDC	VDR

\*These products should be mounted on heatsink in order to reach nominal current.



Dim. 100 x 77 x 47.5 mm

## • Three-phase Solid State Relays

"Ready to use" model with integrated heatsink

Product reference	Switching current AC-1 (at 40°C)	I <sup>2</sup> t	Switching voltage	Control voltage	Protections
SGTR9854310-WF031	3x41A	2800A²s	24-660VAC	4-30VDC	TVS



# SMQR

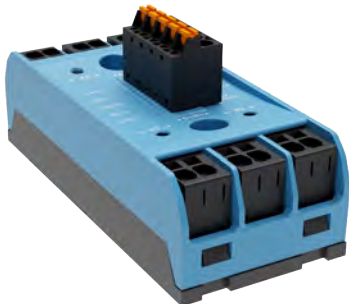
## • Four-Legs Solid State Relays

Integrating 4 single-phase relays in a "sightpac" style housing, our SMQR product family is the best choice to reduce the size of your control panel (compact 45 mm version). Suitable for resistive loads AC-1

- Green control status LED
- Overvoltage protection by TVS diodes on gates
- Connection on the power side : 6 x doubled 6mm<sup>2</sup> or AWG10
- Connection on the control side : 5 poles 2.5mm<sup>2</sup> or AWG14

Product reference	Max. Thyristor current	Switching current AC-1 (at 40°C) *	I <sup>2</sup> t	Switching voltage	Control voltage	Protections
SMQR9623410	4x25A	4x25A	380A²s	24-600VAC	10-30VDC	TVS

\*These products should be mounted on heatsink in order to reach nominal current.



Dim. 45 x 100 x 48.1 mm

## • Four-Legs Solid State Relays

"Ready to use" model with integrated heatsink

Product reference	Switching current AC-1 (at 40°C)	I <sup>2</sup> t	Switching voltage	Control voltage	Protections
SMQR9623410-WFF05	4x18A	380A²s	24-600VAC	10-30VDC	TVS

