

# Altech Corp.®

*Serving the Automation & Control Industry since 1984*



ISO 9001  
QMI-SAI Global



**Solid State Relays**



# Altech Corp.®

Since 1984, Altech Corporation has grown to become a leading supplier of automation and industrial control components. Headquartered in Flemington, NJ, Altech has an experienced staff of engineering, manufacturing and sales personnel to provide the highest quality products with superior service. This is the Altech Commitment!

With experienced Product Engineers and Customer Service personnel, Altech provides solutions to your most pressing application challenges. All with one thought in mind - *to ensure that we solve your problem the first time!*



## Quality Commitment

Altech's control components meet diverse national and international standards such as UL, NEC, CSA, IEC, VDE and more. Altech provides superior customer service and delivery through Total Quality Management and Continuous Process Improvement. Altech is ISO 9001 approved. We perform these services with honesty and integrity and are committed to achieve these goals.





# SOLID STATE RELAYS

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Solid State Relays (SCR's) have many advantages over Electro Mechanical Relays (EMR's). Since they offer fully electronic switching, they operate without mechanical movement, so they are not subject to wear and have a much higher life time expectancy. They also provide a very fast response time with no audible noise and can withstand significant vibration.

Under the appropriate conditions the lifespan of Solid State Relays is virtually unlimited, as opposed to the typical 100K cycle life of Electro Mechanical Relays. Solid State Relays are maintenance free and can eliminate machine down time due to relay failures.

## STANDARDS

- IEC/EN60947-4-2 for motor control
- IEC/EN60947-4-3 for the other loads
- American and Canadian (UL, cUL, CSA)
- IEC/EN 60950 – VDE0805
- IEC60335-1 – VDE0700-1
- IEC 62314



- Some of our products fulfil the requirements according to EN 60601-1 (VDE 0750) for medical applications and also the requirements for KOSHA (S-MARK) or for explosive atmospheres ATEX "EX".
- All of our relays okpac<sup>®</sup> SO (as well as SC relays), celpac<sup>®</sup> 2G SU/SA (including the current sense module ESUC) but also the 2-phase SOB and 3-phase SGT comply with the European standard EN61373 for railways : shocks and vibrations tests on relay. Regarding the standards about Fire behavior and fumes NF F16-101, NF F16-102 and EN 45545 calling for the EN 60695-2-10/11/12 (Glow Wire tests (GWFI – GWIT), blue and black plastic covers and encapsulating resin of SO and SU/SA relays are classified (for more detailed information – please contact us).
- The manufacturing process of our relays complies with the ISO9001 requirements version 2008. We incorporate highly reliable components with a very high electromagnetic interference level which give to our products the highest life-time one can find on the market.

## MAIN APPLICATIONS

### HEATING

Plastic injection molding  
Furnaces  
Power supply distribution  
Air conditioning  
Textile  
Home heating  
Infrared heating  
Drying  
Thermoforming

### MOTOR STARTING

Pumps  
Compressors  
Plastic injection molding  
Conveyors  
Fans

### LIGHTING

Public lighting  
Cinema  
Theatre lamps  
Airport runway lamps  
Road lighting

### CONTROL

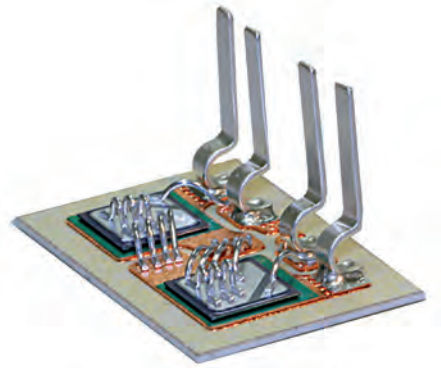
PLC interface  
Heating element control  
Solenoid valves  
Contactor Coils  
Optocoupling of sensors

### MISCELLANEOUS

Transformer starting  
Power factor corrector  
Uninterrupted power supplies  
Energy source switching  
Capacitors control



*All our solid state relays are fitted with back to back thyristors (power products: single phase, two phase, three phase) now use TMS<sup>2</sup> technology with a very high life expectancy compared to other products on the market (application note on request).*



## OKPAC Series

- Versatile, easy and quick connections
- Removable IP20 Protection
- Same screwdriver for outputs and inputs
- Tightening on metal baseplate not on plastic
- Removable control terminals
- SSR, mains and load status.
- Output voltage from 24 to 690 VAC (600V-1200V-1600V peak)
- Very low zero-crossing level
- Large and regulated AC and DC input voltage
- Control status LED
- EMC compatible for industrial environment
- UL/cUL, VDE (EN60950), IEC/EN60947-4-3, CE marking
- Items up to 2,000A and I<sup>2</sup>t>20,000A<sup>2</sup>s
- Protection against circuit breaker.

### Versatile, easy & quick connections

#### POWER WIRING



**Direct connection by wire or tip**

2 x 10 AWG (6 mm<sup>2</sup>)  
fine strand i.e. 32A  
2 x 8 AWG (10 mm<sup>2</sup>)  
solid i.e. 50A



**With tips with contained palm**

Up to 4 AWG (25mm<sup>2</sup>) i.e. 85A  
Up to 1 AWG (50mm<sup>2</sup>)  
with or without special adaptations i.e. 150A



**Screw with brake washers**

Better behavior with shocks and vibrations

#### CONTROL WIRING



**Screws connection**



**Removable spring terminals**



## Single Phase

## S09 Type

Typical applications : Resistive loads (AC-51)

- Same footprint as standard industrial flatpack relays
- Zero cross
- Control status LED (SO7 / SO8 / SO9 / SOL) (SOR)
- IP20 protection



S09 range with regulated control current – control current <13mA

Product reference	Thyristor rating	Switching voltage	Peak voltage	Control voltage	I <sup>2</sup> t	Dimensions mm
SO941460	12A	12-280VAC	600V	3-32VDC	128A <sup>2</sup> s	45 x 58,5 x 30
SO942460	25A	12-280VAC	600V	3-32VDC	600A <sup>2</sup> s	
SO943460	40A	12-280VAC	600V	3-32VDC	1 250A <sup>2</sup> s	
SO945460	50A	12-280VAC	600V	3-32VDC	2 800A <sup>2</sup> s	
SO963460	40A	24-600VAC	1200V	3,5-32VDC	1 250A <sup>2</sup> s	
SO965460	60A	24-600VAC	1200V	3,5-32VDC	2 800A <sup>2</sup> s	
SO967460	90A	24-600VAC	1200V	3,5-32VDC	7 200A <sup>2</sup> s	
SO96846T	95A	24-600VAC	1200V	3,5-32VDC	11 250A <sup>2</sup> s	

These products should be mounted on heatsinks in order to reach nominal current.

► Frequently stocked item.

S09 range with AC input

Product reference	Thyristor rating	Switching voltage	Peak voltage	Control voltage	I <sup>2</sup> t	Dimensions mm
SO942860	25A	12-280VAC	600V	15-32VAC/10-30VDC	600A <sup>2</sup> s	45 x 58,5 x 30
SO942960	25A	12-280VAC	600V	185-265VAC/DC	600A <sup>2</sup> s	

These products should be mounted on heatsinks in order to reach nominal current.

## S07 Type

Typical applications : Motors (AC-53), inductive loads and phase angle control applications.

- Same footprint as standard industrial flatpack relays
- Random or instant switching
- Voltage protection on input (transil) and output (RC and VDR).



Product reference	Thyristor rating	Switching voltage	Peak voltage	Control voltage	I <sup>2</sup> t	Dimensions mm
SO745090	50A	12-275VAC	600V	3-32VDC	2 800A <sup>2</sup> s	45 x 58,5 x 30
SO763090	35A	24-510VAC	1200V	3,5-32VDC	1 250A <sup>2</sup> s	
SO765090	50A	24-510VAC	1200V	3,5-32VDC	2 800A <sup>2</sup> s	
SO767090	75A	24-510VAC	1200V	3,5-32VDC	7 200A <sup>2</sup> s	
SO768090	95A	24-510VAC	1200V	3,5-32VDC	16 200A <sup>2</sup> s	
SO769090	125A	24-510VAC	1200V	3,5-32VDC	24000A <sup>2</sup> s	
SO785060	50A	24-690VAC	1600V	3,5-32VDC	2 800A <sup>2</sup> s	
SO789060	125A	24-690VAC	1600V	3,5-32VDC	22 000A <sup>2</sup> s	

These products should be mounted on heatsinks in order to reach nominal current.

## Single Phase

## S08 Type

Designed for most types of loads

- Same footprint as standard industrial flatpack relays
- Zero cross with low zero-crossing level (<12V)
- Voltage protection on input (transil) with very high immunity according to IEC/EN61000-4-4
- IP20 protection
- Control current < 13mA for all the voltage range at any operating temperature
- Control status LED

Product reference	Thyristor rating	Switching voltage	Peak voltage	Control voltage	I <sup>2</sup> t	Dimensions mm
SO842074	25A	12-275VAC	600V	3-32VDC	600A <sup>2</sup> s	45 x 58,5 x 30
SO842974	25A	12-275VAC	600V	20-265VAC/DC	600A <sup>2</sup> s	
SO843070	35A	12-275VAC	600V	3-32VDC	1 250A <sup>2</sup> s	
SO843970	35A	12-275VAC	600V	20-265VAC/DC	1 250A <sup>2</sup> s	
SO845070	50A	12-275VAC	600V	3-32VDC	2 800A <sup>2</sup> s	
SO845970	50A	12-275VAC	600V	20-265VAC/DC	2 800A <sup>2</sup> s	
SO848070	95A	12-275VAC	600V	3-32VDC	16 200A <sup>2</sup> s	
SO849070	125A	12-275VAC	600V	3-32VDC	22 000A <sup>2</sup> s	
SO863070	35A	24-510VAC	1200V	3,5-32VDC	1 250A <sup>2</sup> s	
SO863970	35A	24-510VAC	1200V	20-265VAC/DC	1 250A <sup>2</sup> s	
SO865070	50A	24-510VAC	1200V	3,5-32VDC	2 800A <sup>2</sup> s	
SO865970	50A	24-510VAC	1200V	20-265VAC/DC	2 800A <sup>2</sup> s	
SO867070	75A	24-510VAC	1200V	3,5-32VDC	7 200A <sup>2</sup> s	
SO867970	75A	24-510VAC	1200V	20-265VAC/DC	7 200A <sup>2</sup> s	
SO868070	95A	24-510VAC	1200V	3,5-32VDC	16 200A <sup>2</sup> s	
SO868970	95A	24-510VAC	1200V	20-265VAC/DC	16 200A <sup>2</sup> s	
SO869070	125A	24-510VAC	1200V	3,5-32VDC	22 000A <sup>2</sup> s	
SO869970	125A	24-510VAC	1200V	20-265VAC/DC	22 000A <sup>2</sup> s	
SO885060	50A	24-690VAC	1600V	3,5-32VDC	2 800A <sup>2</sup> s	
SO885960	50A	24-690VAC	1600V	20-265VAC/DC	2 800A <sup>2</sup> s	
SO887060	75A	24-690VAC	1600V	3,5-32VDC	7 200A <sup>2</sup> s	
SO888060	95A	24-690VAC	1600V	3,5-32VDC	16 200A <sup>2</sup> s	
SO889060	125A	24-690VAC	1600V	3,5-32VDC	22 000A <sup>2</sup> s	

HIGH VOLTAGE  
RELAY



These products should be mounted on heatsinks in order to reach nominal current.

## SOL Type

- low profile (h=16,3mm)
- Same footprint as standard industrial flatpack relays

Flatpac® SSRs are mainly designed for applications where a PCB is used on the input or possibly on the output side. The small size of this relay makes it easy to use when room is restricted. Wiring will be facilitated as this relay also allows input or output cables to go any direction.

Product reference	Thyristor rating	Switching voltage	Peak voltage	Control voltage	I <sup>2</sup> t	Dimensions mm
SOL942460	25A	12-280VAC	600V	3-32VDC	600A <sup>2</sup> s	56 x 58,5 x 16,3
SOL942960	25A	12-280VAC	600V	185-265VAC/DC	600A <sup>2</sup> s	
SOL965460	50A	24-600VAC	1200V	3,5-32VDC	2 800A <sup>2</sup> s	

These products should be mounted on heatsinks in order to reach nominal current.



## SOR Type

With removable input connector - Spring terminals. Designed for most types of loads.

Product reference	Thyristor rating	Switching voltage	Peak voltage	Control voltage	I <sup>2</sup> t	Dimensions mm
SOR842074	25A	12-275VAC	600V	3-32VDC	600A <sup>2</sup> s	45 x 58,5 x 30
SOR865070	50A	24-510VAC	1200V	3,5-32VDC	2 800A <sup>2</sup> s	
SOR867070	75A	24-510VAC	1200V	3,5-32VDC	7 200A <sup>2</sup> s	

These products should be mounted on heatsinks in order to reach nominal current.





# SOLID STATE RELAYS

## Single Phase

### Performances & Reliability

- Maximum voltage up to 1600V (690VRMS), 600VAC and 1200VAC as standard.
- Thyristor rating up to 75A.
- Large input range : 3-32VDC with regulated current models.
- AC input control available.
- Input status yellow LED.
- Over-voltage protection on input.
- New generation of TMS<sup>2</sup> technology for thyristors for a longer life expectancy.
- Mounting screws compatible with all hockey puck style relays (SO and SC type).
- Quick and easy connections.
- Designed according to European standards EN60947-4-3 (IEC947-4-3) and EN60950 (VDE0805 reinforced insulation) -IEC62314-UL-cUL.
- IP20 protection with removable flaps (SU range) or cover (SA range)  
Other devices available as an option : RC snubber, VDR, self activation.

### SA

- Transparent protective cover
- For mounting on your heatsink or panel mount
- SA8 : designed for most types of loads / integrated VDR protection
- SA9 : designed for resistive loads AC-51

Product reference	Thyristor rating	Switching voltage	Peak voltage	Control voltage	I <sup>2</sup> t	Dimensions mm
SA842070	25A	12-275VAC	600V	3-32VDC	600A <sup>2</sup> s	22,5 x 90 x 42
SA941460	12A	12-280VAC	600V	3-32VDC	128A <sup>2</sup> s	
SA942460	25A	12-280VAC	600V	3-32VDC	450A <sup>2</sup> s	
SA945460	50A	12-280VAC	600V	3-32VDC	1 680A <sup>2</sup> s	
SA963460	35A	24-600VAC	1200V	3,5-32VDC	882A <sup>2</sup> s	
SA965460	50A	24-600VAC	1200V	3,5-32VDC	1 680A <sup>2</sup> s	

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

### SAL/SAM

- Transparent protective cover
- "Ready to use" with 22,5 or 45mm heatsinks included
- SAx9 : designed for resistive loads AC-51.

Product reference	Thyristor rating	Max.switching current at 25°C	Switching voltage	Peak voltage	Control voltage	I <sup>2</sup> t	Dimensions mm
SAL941460	12A	12A	12-280VAC	600V	3-32VDC	128A <sup>2</sup> s	22,5 x 90 x 112
SAL942460	25A	23A	12-280VAC	600V	3-32VDC	450A <sup>2</sup> s	
SAL963460	35A	30A	24-600VAC	1200V	3,5-32VDC	882A <sup>2</sup> s	
SAL965460	50A	32A	24-600VAC	1200V	3,5-32VDC	1 680A <sup>2</sup> s	
SAM943460	35A	32A	12-280VAC	600V	3-32VDC	882A <sup>2</sup> s	45 x 90 x 112
SAL/SAM with low input current – control current <10mA							
SAL961360	15A	15A	24-600VAC	1200V	6-32VDC	882A <sup>2</sup> s	22,5 x 90 x 112
SAL962360	25A	23A	24-600VAC	1200V	6-32VDC	882A <sup>2</sup> s	
SAM963360	35A	32A	24-600VAC	1200V	6-32VDC	882A <sup>2</sup> s	45 x 90 x 112
SAM965360	50A	45A	24-600VAC	1200V	6-32VDC	1 680A <sup>2</sup> s	

### Compact Solution

The 22,5 mm pitch of our Solid State contactors reduces space to the minimum  
Reduced assembling time, easy cabling  
Reduced maintenance thanks to a very long life expectancy  
One single screw driver for input and output



#### SA range

with screw connection on inputs.



*The 22,5mm pitch SSR solution!  
Smart Solid State Relays with optional modules*

### SU

- Removable flaps for protection
- For mounting on your heatsink or panel mount.
- SU7 : designed for motors AC-53 and inductive loads.  
Also use in phase angle control systems.
- SU8 : designed for most types of loads / integrated VDR protection
- SU9 : designed for resistive loads AC-51.



#### SU range

with pluggable connector on inputs.

Product reference	Thyristor rating	Switching voltage	Peak voltage	Control voltage	I <sup>2</sup> t	Dimensions mm
<b>SU765070</b>	50A	24-510VAC	1200V	3,5-32VDC	1 680A <sup>2</sup> s	22,5 x 90 x 42
<b>SU842070</b>	25A	12-275VAC	600V	3-32VDC	600A <sup>2</sup> s	
<b>SU842970</b>	25A	12-275VAC	600V	180-240VAC	600A <sup>2</sup> s	
<b>SU865070</b>	50A	24-510VAC	1200V	3,5-32VDC	1 680A <sup>2</sup> s	
<b>SU865970</b>	50A	24-510VAC	1200V	180-240VAC	1 680A <sup>2</sup> s	
<b>SU867070</b>	75A	24-510VAC	1200V	3,5-32VDC	7 200A <sup>2</sup> s	
<b>SU942460</b>	25A	12-280VAC	600V	3-32VDC	600A <sup>2</sup> s	
<b>SU963460</b>	35A	24-600VAC	1200V	3,5-32VDC	882A <sup>2</sup> s	
<b>SU965460</b>	50A	24-600VAC	1200V	3,5-32VDC	1 680A <sup>2</sup> s	
<b>SU967460</b>	75A	24-600VAC	1200V	3,5-32VDC	7 200A <sup>2</sup> s	

These products should be mounted on heatsinks in order to reach nominal current.



### SUL/SUM

- Removable flaps for protection
- "Ready to use" with 22,5 or 45mm heatsinks included.
- SULx7 : designed for motors AC-53 and inductive loads.
- SULx8 : designed for most types of loads / integrated VDR protection
- SULx9 : designed for resistive loads AC-51

Product reference	Thyristor rating	Max.switching current at 25°C	Switching voltage	Peak voltage	Control voltage	I <sup>2</sup> t	Dimensions mm
<b>SUL765070</b>	50A	32A	24-510VAC	1200V	3,5-32VDC	1 680A <sup>2</sup> s	22,5 x 90 x 112
<b>SUL842070</b>	25A	23A	12-275VAC	600V	3-32VDC	600A <sup>2</sup> s	
<b>SUL842770</b>	25A	23A	12-275VAC	600V	18-30VAC/DC	600A <sup>2</sup> s	
<b>SUL842970</b>	25A	23A	12-275VAC	600V	160-240VAC	600A <sup>2</sup> s	
<b>SUL865070</b>	50A	32A	24-510VAC	1200V	3,5-32VDC	1 680A <sup>2</sup> s	
<b>SUL865770</b>	50A	32A	24-510VAC	1200V	18-30VAC/DC	1 680A <sup>2</sup> s	
<b>SUL865970</b>	50A	32A	24-510VAC	1200V	160-240VAC	1 680A <sup>2</sup> s	
<b>SUL867070</b>	75A	35A	24-510VAC	1200V	3,5-32VDC	7 200A <sup>2</sup> s	
<b>SUL942460</b>	25A	23A	12-280VAC	600V	3-32VDC	600A <sup>2</sup> s	
<b>SUL963460</b>	35A	30A	24-600VAC	1200V	3,5-32VDC	882A <sup>2</sup> s	
<b>SUL965460</b>	50A	32A	24-600VAC	1200V	3,5-32VDC	1 680A <sup>2</sup> s	45 x 90 x 112
<b>SUL967460</b>	75A	35A	24-600VAC	1200V	3,5-32VDC	7 200A <sup>2</sup> s	
<b>SUM865070</b>	50A	45A	24-510VAC	1200V	3,5-32VDC	1 680A <sup>2</sup> s	45 x 90 x 112
<b>SUM867070</b>	75A	45A	24-510VAC	1200V	3,5-32VDC	7 200A <sup>2</sup> s	



SUL



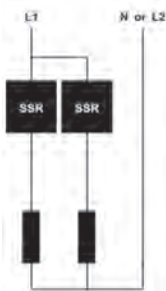
SUM



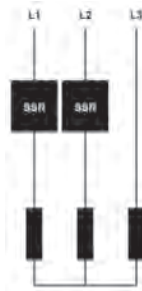
**Three Phase units are available upon request.**

Our two-phase range provides two solid state relays in a compact standard 45 mm enclosure. They are perfectly adapted to three phase applications with breaking of two phases only.

### wiring examples



2 load control wiring  
Single phase



Two-phase SSR SOB to control heaters  
connected in star  
(for balanced low voltage loads without  
neutral connection)



Two-phase SSR SOB to control heaters  
connected in delta  
(for high voltage, balanced or  
unbalanced loads)

### SCB5 / SOB5

We offer various kinds of two-phase SSRs with Faston terminals.

Product reference	Thyristor rating	Switching voltage	Peak voltage	Control voltage	I <sup>2</sup> t	Specifications	Dimensions mm	Fig n°
<b>SCB564310</b>	2x40A	24-510VAC	1200V	5-30VDC	610A²s	zero-cross / 2 controls	44,8 x 58,5 x 27	1
<b>SOB542460</b>	2x25A	12-280VAC	600V	3-32VDC	265A²s	zero-cross / 2 controls	45 x 58,5 x 27	2
<b>SOB562460</b>	2x25A	24-600VAC	1200V	3,5-32VDC	265A²s	zero-cross / 2 controls		2
<b>SOB544330</b>	2x40A	12-275VAC	600V	8-30VDC	882A²s	zero-cross / 2 controls	45 x 58,5 x 27	3
<b>SOB564330</b>	2x40A	24-510VAC	1200V	8-30VDC	882A²s	zero-cross / 2 controls		3

These products should be mounted on heatsinks in order to reach nominal current.



- Power and control connections by FASTON terminals



- Double input with connector CE100F ITWPANCON type or similar.
- Power connection by FASTON 6,3mm terminals with IP20 protection.

## Two-phase Solid State Relays

**Three Phase units are available upon request.**

### SOB

Two-phase relays in okpac<sup>®</sup> IP20 housing.  
Removable connector for control allowing many wiring possibilities eg. springs, screw and so on (please consult us).



SOB6 : zero-cross - double input with connector CE100F ITWPANCON type or similar

SOB7 : random

SOB8 : zero-cross – designed for most types of loads

SOB9 : zero-cross – resistive loads AC-51

• Connectors to be ordered separately.

Product reference	Thyristor rating	Switching voltage	Peak voltage	Control voltage	I <sup>2</sup> t	Specifi cations	Dimensions mm
<b>SOB665300</b>	2x50A	24-600VAC	1200V	10-30VDC	1680A <sup>2</sup> s	2 controls	45 x 58,5 x 27
<b>SOB763670</b>	2x35A	24-510VAC	1200V	8-30VDC	1250A <sup>2</sup> s	2 controls	
<b>SOB765670</b>	2x50A	24-510VAC	1200V	8-30VDC	2500A <sup>2</sup> s	2 controls	
<b>SOB767670</b>	2x75A	24-510VAC	1200V	8-30VDC	7200A <sup>2</sup> s	2 controls	
<b>SOB863860</b>	2x35A	24-600VAC	1200V	17-30VAC/DC	882A <sup>2</sup> s	2 controls	
<b>SOB865660</b>	2x50A	24-600VAC	1200V	8-30VDC	2500A <sup>2</sup> s	2 controls	
<b>SOB867640</b>	2x75A	24-510VAC	1200V	8-30VDC	7200A <sup>2</sup> s	2 controls / transil	
<b>SOB942360</b>	2x25A	24-280VAC	600V	10-30VDC	600A <sup>2</sup> s	1 control	
<b>SOB942660</b>	2x25A	24-280VAC	600V	10-30VDC	600A <sup>2</sup> s	2 controls	
<b>SOB943360</b>	2x35A	24-280VAC	600V	10-30VDC	1 250A <sup>2</sup> s	1 control	
<b>SOB945360</b>	2x50A	24-280VAC	600V	10-30VDC	2 800A <sup>2</sup> s	1 control	
<b>SOB963660</b>	2x35A	24-600VAC	1200V	10-30VDC	1250A <sup>2</sup> s	2 controls	
<b>SOB965160</b>	2x50A	24-600VAC	1200V	6-16VDC	1 680A <sup>2</sup> s	1 control	
<b>SOB965660</b>	2x50A	24-600VAC	1200V	10-30VDC	2500A <sup>2</sup> s	2 controls	
<b>SOB967660</b>	2x75A	24-600VAC	1200V	10-30VDC	7200A <sup>2</sup> s	2 controls	

On request : 1600V peak version, 75A version, overvoltage protection option available.

For SOB6 range : other rating on request, TVS (Transient Voltage Suppression) protection possible.

These products should be mounted on heatsinks in order to reach nominal current.



### SCB

SCB6 : zero-cross – control connections with pins

SCB8 : zero-cross – designed for most types of loads

SCB9 : zero-cross – resistive loads AC-51

Product reference	Thyristor rating	Switching voltage	Peak voltage	Control voltage	I <sup>2</sup> t	Specifi cations	Dimensions mm
<b>SCB665300</b>	2x50A	24-600VAC	1200V	8-35VDC	1500A <sup>2</sup> s	1 control	44,8 x 58,5 x 27
<b>SCB865300</b>	2x50A	24-600VAC	1200V	10-30VDC	1500A <sup>2</sup> s	1 control	
<b>SCB865600</b>	2x50A	24-600VAC	1200V	10-30VDC	1500A <sup>2</sup> s	2 controls	
<b>SCB941300</b>	2x12A	12-280VAC	600V	8-30VDC	72A <sup>2</sup> s	1 control	
<b>SCB942600</b>	2x25A	12-280VAC	600V	8-30VDC	288A <sup>2</sup> s	2 controls	
<b>SCB962600</b>	2x25A	24-600VAC	1200V	8-30VDC	265A <sup>2</sup> s	2 controls	
<b>SCB965600</b>	2x50A	24-600VAC	1200V	8-30VDC	1500A <sup>2</sup> s	2 controls	

Protection cover : see accessories (1K470000).

These products should be mounted on heatsinks in order to reach nominal current.

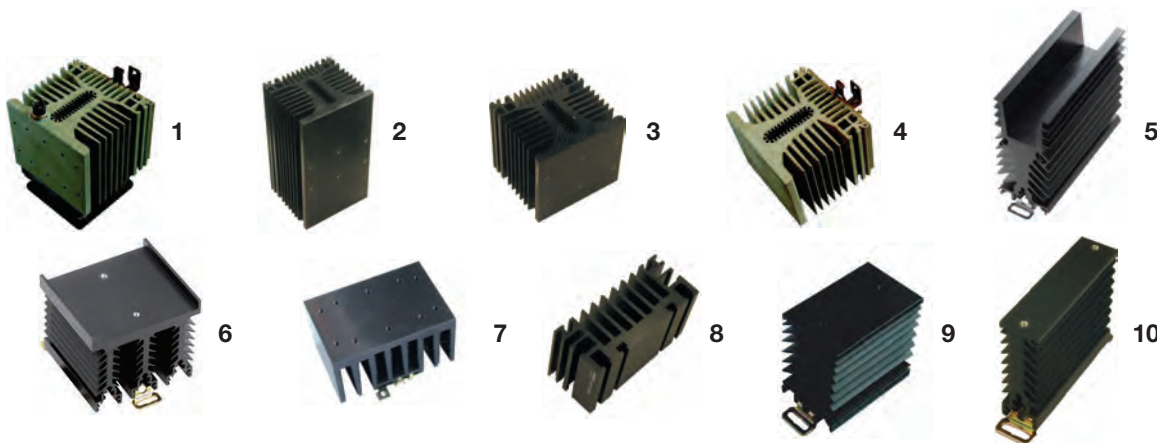


# SOLID STATE RELAYS

## Heatsinks & Accessories

Product reference	Thermal characteristics	Specifications	Dimensions mm	Relay type	Fig n°
<b>WF031100</b>	0,3K/W	ventilated for DIN rail or screw - fan supply 230Vac	110 x 120 x 145	SO, SC, SG, SGT, SVT	1
<b>WF031200</b>	0,3K/W	ventilated for DIN rail or screw - fan supply 24Vdc	110 x 120 x 145	SO, SC, SG, SGT, SVT	1
<b>WF050000</b>	0,55K/W	DIN rail adaptor as option	110 x 100 x 200	SO, SC, SG, SGT, SVT	2
<b>WF070000</b>	0,75K/W	DIN rail adaptor as option	110 x 100 x 100	SO, SC, SG, SGT, SVT	3
<b>WF115100</b>	0,9K/W	for DIN rail or screw	110 x 100 x 90	SO, SC, SG, SGT, SVT	4
<b>WF112100</b>	1K/W	for DIN rail or screw	49,5 x 117,5 x 120	SA, SU	5
<b>WF108110</b>	1,1K/W	for DIN rail or screw	89,8 x 81 x 98,02	SO, SC	6
<b>WF121000</b>	1,2K/W	for DIN rail or screw	100 x 40 x 100	SO, SC, SG, SGT, SVT	7
<b>WF210000</b>	2,1K/W	DIN rail adaptor as option	96 x 41 x 55	SO, SC	8
<b>WF151200</b>	2,2K/W	for DIN rail or screw	45 x 73 x 80	SO, SC, SA, SU	9
<b>WF311100</b>	3K/W	for DIN rail or screw	22,5 x 73 x 80	SA, SU	10

The Rth values are given for a temperature of 50°C in calm air. Other dimensions available on request.



## ACCESSORIES



### PROTECTION COVERS / FLAPS

<b>1K199000</b>	Protection cover for SGT/SG9
<b>1K460000</b>	Protection cover for SC range (except SCB and 125A rating SC)
<b>1K470000</b>	Protection cover for all SC/SCB range
<b>1K522000</b>	Protection cover for SA-SAL
<b>1K523000</b>	Removable protection flaps for SU-SUL



### MARKING LABELS

<b>1MZ09000</b>	marking labels to be mounted on protection flaps or covers for SA SU
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### MOUNTING KITS

<b>1LK00100</b>	mounting SC-SO-SF on heatsink or SC-SO on 1LD12020
<b>1LK00200</b>	mounting SG-SVT-SV9 on heatsink or 1LD00500
<b>1LK00300</b>	mounting heatsinks on 1LD00400 or SC-SO on 1LD00000
<b>1LK00700</b>	special kit for high current (okpac range)

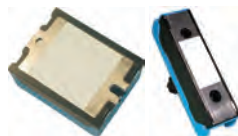
### DIN RAIL ADAPTORS

<b>1LD00400</b>	DIN rail adaptor for WF21/07/05
<b>1LD00500</b>	DIN rail adaptor for SG/SVT/SV969300
<b>1LD12020</b>	DIN rail adaptor for SC/SV8/SO vertical mounting



### THERMAL SEALS RELAY/HEATSINK

<b>5TH15000</b>	thermal grease for 30 relays SG/SVT ou 60 relays SC/SO
<b>5TH21000</b>	thermal precut film for SC/SO
<b>5TH23000</b>	adhesive thermal pads for SC/SO
<b>5TH24000</b>	adhesive thermal pads for SA/SU
<b>1LWP2300</b>	Assembling costs 5TH23000 on SC/SO + 5TH23000
<b>1LWP2400</b>	Assembling costs 5TH24000 on SA/SU + 5TH24000



### MOUNTING + HEATSINK + DIN ADAPTOR OPTION

<b>1LWD1202</b>	mounting of SC/SV/SO sur 1LD12020 + 1LD12020
-----------------	--

### MOUNTING OPTION (screw kit included)

#### ONLY IF QUANTITY > 10

<b>1LW00000</b>	mounting of relays on heatsink
<b>1LWD0000</b>	mounting of heatsink on DIN rail adaptor

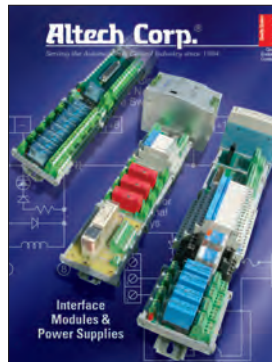
# Other Great Altech Products

## Smart Relays and Digital Timers



Supports up to 48 I/Os (32 digital inputs & 16 digital outputs). DST Feature Available. Backlit LCD Screen for display & modification of pre-selected parameters of functional blocks, viewing I/O status and programming on the device. PC software for programming, online & offline simulation, documentation & printing. Designed for use in automation for commercial & industrial sectors. Modbus Communication. UL 508 (UL File No. E352868), IEC 61000-3-2 and IEC 61000-4-2-1~11. 250 lines of ladder programming. 16 soft text messages, Time Switches, Compare Counters, Timers, Counters & 12 analog functions.

## Interface Modules and Power Supplies



Altech offers a wide range of DIN Rail or panel mount cable interface modules, relay interface modules, power supplies, carrier modules, and custom designed modules. Cable to connector models include: D-Sub connectors, ribbon cable connectors, and Dip socket connectors to terminals. Standard relay modules from 1 to 16 channels, and safety relay modules from 1 to 16 channels and up to 10 poles are included. The catalog also contains switching power supplies, linear power supplies, and custom designed interface modules.

## Current Limiting Circuit Breakers



Altech Current Limiting Circuit Breakers Current limiting circuit breakers minimizes the short circuit current to a relatively small amount in an extremely short time. This minimizes the harmful short circuit potential energy. Features include:

- DIN Rail Mounted
- 17.5mm width
- Thermal Magnetic
- AC: 240V, 480Y/277V AC, 50/60Hz
- DC: 125V DC (1 pole); 250V DC (2pole)
- 10kA Short Circuit
- Interrupting Capacity
- HACR Type 40°C
- Line/Load reversible

## Terminal Blocks



Altech offers a NEW Terminal Block catalog with the most competitively priced blocks in the industry. We feature screw and spring clamp models for DIN rail and panel mount applications. This advanced line of wire termination products will increase your design options and help to get the job done more efficiently. Our line of blocks include feed-through (single, double or triple level), distribution, ground, fuse, disconnect, thermocouple, surge suppressor and indicator. A wide variety of accessories, tools and ferrules are available.

## Industrial Enclosures



Altech offers a broad selection of non-metallic and aluminum Industrial Enclosures to meet your diverse design requirements. Sizes range from 1.97 x 2.05 x 1.38 to 35.43 x 11.81 x 5.59 inches. Materials include polycarbonate, polystyrene, polypropylene, ABS or aluminum. Polycarbonate and aluminum series have been recently expanded. Protection up to IP67 (NEMA 4, 4X). Smooth sidewalls or sidewalls with knockouts. Enclosures can be mounted directly onto a panel, frame or other mounting surfaces. EMI / RFI Coating is available. Competitive cover printing is available. Hinge Kits. Customization available.

## Liquid Tight Strain Reliefs



This 64-page catalog introduces Altech's full line Liquid Tight Strain Reliefs (Cord Grips) which are used to seal cable entries, keep contaminants from entering enclosures, provide strain relief and thus reduce stress on components and termination points inside enclosures. Available in standard, high-performance, and economy versions, functions include Straight-Through, Increased Strain Relief, Bend Protection, Pull/Bend Protection, Multi-conductor, Flat Cable and EMI/RFI. They can be used with almost any type of cable, cord or conductor - solid, stranded, flat, shielded, high temperature, etc.

## DIN Rail Power Supplies



Altech DIN RAIL mountable power supplies have Universal AC input. They are suitable for industrial and automation applications. UL508 Listed or UL Recognized. Single and Three phases up to 960W. Outputs of 5V, 12V, 15V, 24V and 48V. Class 2 devices are available. Installed on DIN rail TS35/ 7.5 or 15. Protections of Short circuit / Overload / Overvoltage / Over temperature. Cooling by free air convection. All-In-One DC-UPS, battery based. Ultra Capacitor DC-UPS, no battery required. Worldwide approvals. 3 year warranty.

## Motor Disconnect Switches



Altech's line of Motor Disconnect Switches are UL 508 listed as Manual Motor Controllers for AC Motor Starting Across-the-line and AC General use. This new 16 page catalog includes the 3 different handle designs, which are all available in gray/black or yellow/red housings. Electrical ratings are 25-150A / 600V. The switches are non-fused DIN Rail mountable. Neat features include: snap-on auxiliary switches, door mounting kit and a retrofit 30A fuse holder. Also featured are Enclosed Motor Disconnect Switches & Fused Enclosed Motor Disconnect Switch (30A) in plastic or stainless housings.



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### Solid State Relays Three Phase Proportional Controllers

Our SGTA range is a complementary range to the three-phase proportional controllers SVTA.

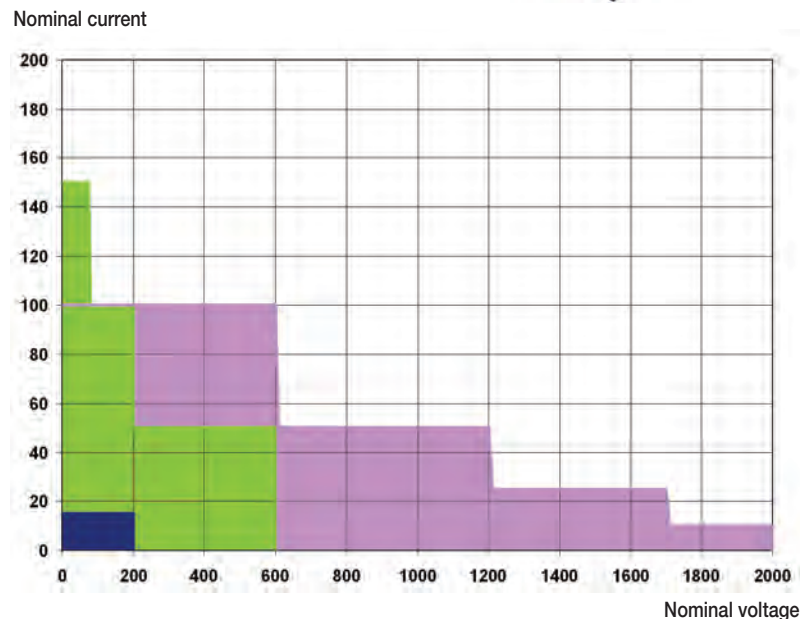
8-32V external  
power supply required.

### Solid State Relays DC Relays

*These relays are designed to switch DC loads e.g solenoid valves, brakes, indicators, motors.*



- **MOSFET**  
for applications where overcurrent  
capability and low dissipated power are  
needed.
- **Bipolaire**  
for applications where low control current  
is needed.
- **IGBT Technologies**  
for high voltage applications (> 600 VDC)



### Solid State Relays PCB Relays

For PCB mounting in 2.5 and 5 Amp versions.





### Solid State Relays FASTON Terminals *for a quick connection!*

Solid State Relays with "FASTON" terminals are appropriate mainly for the food industry and for switching current < 20A. We offer a wide range of "FASTON" solutions.



### Solid State Relays Three-phase

Relays for controlling three-phase loads. Models are available, with ratings up to 125 amps per phase, with either AC or DC input, random or zero-cross output.



### Solid State Relays Three Phase Motor Control

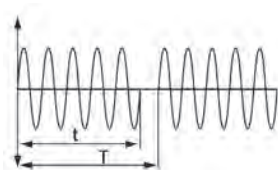
Three-phase contactors with heatsink and DIN rail mounting. Fitted with a LED indicators, and RC and VDR network protection this range is designed to control resistive loads (AC-51) or for motor control (AC-53).



No external power supply required.

### Solid State Relays Analogue Control Relays

Have an analog input isolated from the mains to proportionally vary the cyclic operating ratio of a load ( $t/T$ ).



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