



SO8 range (high voltage)

Typical applications : High voltage and AC-56b loads (capacitive)

Reference	Output voltage	Output current	Vpeak (V)	Control voltage
SO885060	24-690VAC	50A	1600V	3,5-32VDC
SO887060	24-690VAC	75A	1600V	3,5-32VDC
SO888060	24-690VAC	95A	1600V	3,5-32VDC
SO889060	24-690VAC	125A	1600V	3,5-32VDC

- Zero cross with low zero-cross level (<12V)
- Voltage protection on input (transil) with very high immunity according to IEC/EN61000-4-4
- IP20 protection
- Regulated input current
- Control status LED

SO7 range

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

Reference	Output voltage	Output current	Vpeak (V)	Control voltage
SO745090	12-275VAC	50A	600V	3-32VDC
SO747090	12-275VAC	75A	600V	3-32VDC
SO763090	24-510VAC	35A	1200V	3,5-32VDC
SO765090	24-510VAC	50A	1200V	3,5-32VDC
SO767090	24-510VAC	75A	1200V	3,5-32VDC
SO768090	24-510VAC	95A	1200V	3,5-32VDC
SO769090	24-510VAC	125A	1200V	3,5-32VDC



- Random with turn on time < 50 microseconds
- Voltage protection on input (transil) and output (RC+VDR) with very high immunity according to IEC/EN61000-4-4 and IEC/EN61000-4-5
- IP20 protection
- Regulated input current
- Control status LED

SO9 range

Typical applications : Resistive loads (AC-51)

SO9 range with input current regulator



- Zero cross
- Regulated input current
- Voltage protection on input (transil)
- Control status LED
- RC and VDR as options
- IP20 protection flaps only on request*

Reference	Output voltage	Output current	Vpeak (V)	Control voltage
SO941460	12-280VAC	12A	600V	3-32VDC
SO942460	12-280VAC	25A	600V	3-32VDC
SO943460	12-280VAC	35A	600V	3-32VDC
SO945460	12-280VAC	50A	600V	3-32VDC
SO963460	24-600VAC	35A	1200V	3,5-32VDC
SO965460	24-600VAC	50A	1200V	3,5-32VDC
SO967460	24-600VAC	75A	1200V	3,5-32VDC

SO9 range without input current regulator

- Zero cross
- Control status LED
- RC and VDR as options
- IP20 protection flaps only on request*

Reference	Output voltage	Output current	Vpeak (V)	Control voltage
SO942560	12-280VAC	25A	600V	7-30VDC
SO942860	12-280VAC	25A	600V	15-32 VAC/10-30 VDC
SO942960	12-280VAC	25A	600V	185-265 VAC/DC
SO963560	24-600VAC	35A	1200V	8-30VDC
SO965560	24-600VAC	50A	1200V	8-30VDC
SO967560	24-600VAC	75A	1200V	8-30VDC

* order the flaps separately for outputs and / or inputs if needed (AC control)



ACCESSORIES FOR okpac®



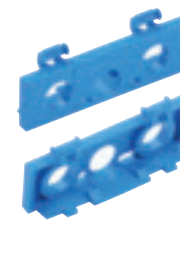
Heatsink 2,2 K/W



DIN Rail adaptor



Thermal pad

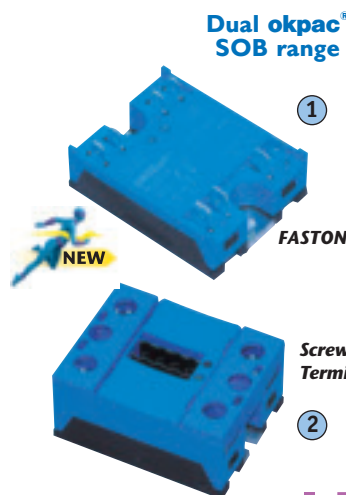


Protection flaps



Heatsink 1,1 K/W

Our okpac® range has been extended :



Dual okpac® SOB range

①

FASTON

②

Screw Terminals

New generation of proportional controllers SO4 and SO5 range

DC relays SOM range

Ready to use okpac®

celduc® relais, expert in Solid State Relays and contactors...



OUR PRODUCTS ARE SUITABLE FOR ALL KINDS OF LOADS :

- PLC Interface,
- Heating,
- Motor starting,
- Lighting,
- Transformers...



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Our distributor



okpac®

Innovative power Solid State Relays



INSTALL IT - FORGET IT



PROUD TO SERVE YOU

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All technical characteristics are subject to change without previous notice. Imprimerie du Forez - Freynet Frères - PLAQ SO02 - Janvier 2005 - 5000 ex.



Solid State Relays okpac®



Innovation, Performance & Design !

okpac® range designed for professionals

Innovation



- Screw connection up to 50mm²
- Removable control terminals
- Removable IP20 flaps
- Versatile, easy and quick connections
- Same screwdriver for outputs and inputs
- Tightening on metal baseplate not on plastic
- SSR, mains and load status
- Less potting resin : environmentally friendly
- 25 to 30% lighter than standard series
- Only 29mm high
- Screw with brake washers : better shocks and vibrations withstand

• Versatile, easy and quick connections



Direct connection by wire or tip
2 x 6 mm² (AWG10) fine strand i.e. 32A
2 x 10 mm² (AWG8) solid i.e. 50A



With tips with contained palm
Up to 25mm² (AWG4) i.e. 85A
Up to 50mm² (AWG1)
with or without special adaptations i.e. 150A



Screw with brake washers
Better behaviour with shocks and vibrations



Fastons on request

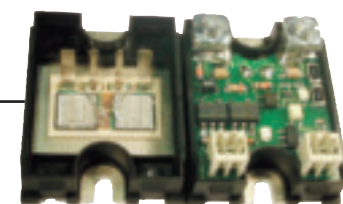


Screws connection



Removable spring terminals

Performance



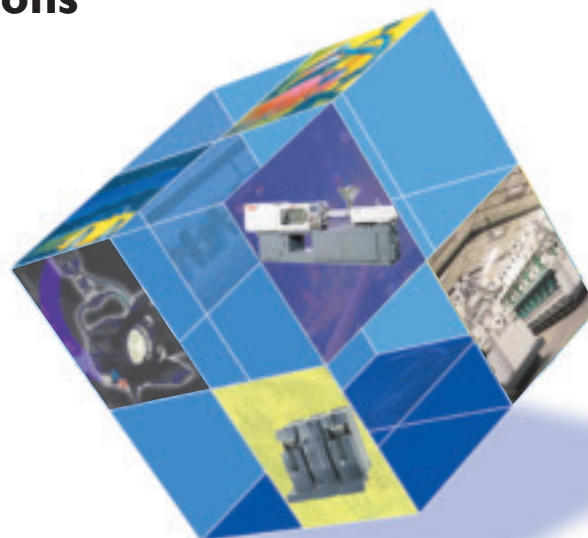
- Designed for all types of loads
- Currents from 12 to 125A
- TMS² technology with very long life time expectancy
- Output voltage from 24 to 690VAC (600V-1200V-1600V peak)
- Very low zero-cross level
- Large and regulated AC and DC input voltage
- Control status LED
- High immunity opto-couplers
- Very high immunity according IEC/EN61000-4-4 (bursts) and IEC/EN61000-4-5 (spikes) : 4KV with no change of state
- EMC compatible for industrial environment
- UL/cUL, VDE (EN60950), IEC/EN60947-4-3, CE marking
- I_{tsm} up to 2000A and I²t up to 24 000A²s allowing loads with high inrush current and protection against short-circuits by circuit breaker

• Typical applications

✓ Injection moulding machines for plastic or rubber

✓ Industrial ovens / soldering machines

✓ Coffee machines



✓ Medical equipment

✓ Packaging machines

✓ Machines for the textile industry

✓ Industrial or scene lighting

• Standard characteristics

	SOxx1xxx	SOxx2xxx	SOxx3xxx	SOxx5xx	SOxx7xxx	SOxx8xxx	SOxx9xxx
Nominal current	12 A	25 A	35 A	50 A	75 A	95 A	125 A
I _{tsm} (10ms) min	120 A	250 A	400 A	550 A	1000 A	1500 A	2000 A
I _{2t} (A2s) < 10ms (typical)	128A ² s	600A ² s	1250A ² s	2500A ² s	7200A ² s	14400A ² s	24000A ² s
R _{thj/c}	2,3K/W	1,7K/W	0,6K/W	0,45K/W	0,4K/W	0,3K/W	0,25K/W
Operating temperature	-55 to +80°C			-40 to +80°C			
Storage temperature	-55 to +125°C			-40 to +125°C			
Input/Output insulation	4000VMRS						
U _{imp}	4000V						
Pollution level	2						

okpac® range with system diagnostics

PATENTED

SSR, mains and load status

Typical applications : Heating (AC-51) and incandescent or infrared lamps (AC-55b)



- Zero cross with low zero-cross level (<12V)
- Voltage protection on output (RC)
- IP20 protection
- Control status LED and system diagnostics LED
- Diagnostic output without external power supply. These outputs can be chained

Reference	Output voltage	Output current	V _{peak} (V)	Control voltage
SOD843180	50-265VAC	35A	600V	7-30VDC
SOD845180	50-265VAC	50A	600V	7-30VDC
SOD865180	150-510VAC	50A	1200V	7-30VDC
SOD867180	150-510VAC	75A	1200V	7-30VDC

SOR range

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

Reference	Output voltage	Output current	V _{peak} (V)	Control voltage
SOR842074	12-275VAC	25A	600V	3-32VDC
SOR863070	24-510VAC	35A	1200V	3,5-32VDC
SOR865070	24-510VAC	50A	1200V	3,5-32VDC
SOR867070	24-510VAC	75A	1200V	3,5-32VDC
SOR967560	24-600VAC	75A	1200V	8-30VDC

- Zero cross with low zero-cross level (<12V)
- Voltage protection on input (transil) and output (VDR) with very high immunity according to IEC/EN61000-4-4 and IEC/EN61000-4-5
- IP20 protection
- Regulated input current
- Control status LED
- Double inputs

Our SO7, SO8 and SO9 ranges can be designed with this type of connection on request.

SO8 range

Designed for most types of loads.
(For three phase motors or very inductive loads we recommend the use of our SO7 random range).

- Zero cross with low zero-cross level (<12V)
- Voltage protection on input (transil) and output (VDR) with very high immunity according to IEC/EN61000-4-4 and IEC/EN61000-4-5. For SO8xxx40 : transient proof by self-protection (Triacs turn on in case of overvoltage)
- IP20 protection
- Regulated input current
- Control status LED

Reference	Output voltage	Output current	V _{peak} (V)	Control voltage
SO842074	12-275VAC	25A	600V	3-32VDC
SO842974	12-275VAC	25A	600V	20-265VAC/DC
SO843070	12-275VAC	35A	600V	3-32VDC
SO843970	12-275VAC	35A	600V	20-265VAC/DC
SO845070	12-275VAC	50A	600V	3-32VDC
SO847070	12-275VAC	75A	600V	3-32VDC
SO848070	12-275VAC	95A	600V	3-32VDC
SO849070	12-275VAC	125A	600V	3-32VDC
SO863070	24-510VAC	35A	1200V	3,5-32VDC
SO863970	24-510VAC	35A	1200V	20-265VAC/DC
SO865040	24-510VAC	50A	1200V	3,5-32VDC
SO865070	24-510VAC	50A	1200V	3,5-32VDC
SO865970	24-510VAC	50A	1200V	20-265VAC/DC
SO867040	24-510VAC	75A	1200V	3,5-32VDC
SO867070	24-510VAC	75A	1200V	3,5-32VDC
SO867970	24-510VAC	75A	1200V	20-265VAC/DC
SO868070	24-510VAC	95A	1200V	3,5-32VDC
SO868970	24-510VAC	95A	1200V	20-265VAC/DC
SO869070	24-510VAC	125A	1200V	3,5-32VDC
SO869970	24-510VAC	125A	1200V	20-265VAC/DC

