



# FOOD INDUSTRY by **celduc**<sup>®</sup> relais

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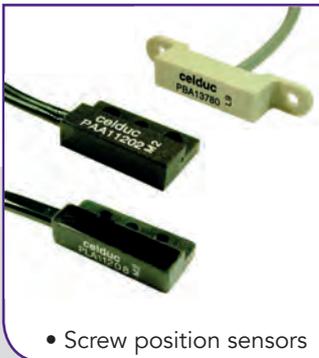
DESIGNER & MANUFACTURER OF  
SOLID STATE RELAYS AND  
MAGNETIC SENSORS USED IN  
EQUIPMENT FOR FOOD &  
BEVERAGE INDUSTRY

APPLICATIONS :  
MOTION CONTROL,  
HEATING CONTROL,  
POWER CONTROL &  
MACHINE SAFETY.





PRODUCTS MADE IN FRANCE  
FOR MORE THAN 50 YEARS !



# OUR STRENGTHS



MORE THAN 50 YEARS OF EXPERIENCE ON THE MARKET AND A HIGH QUALITY LEVEL OF PRODUCTION IN FRANCE.



CONTROL OF THE COMPLETE CHAIN  
design, development, production, testing and marketing.



ANALYSIS OF CUSTOMERS' REQUIREMENTS  
celduc® relais is the indisputable global expert and preferred choice of companies all over the world.



A WORLDWIDE PRESENCE IN MORE THAN 60 COUNTRIES for a better understanding of customer's needs and offering of solutions which fully meet their requirements.

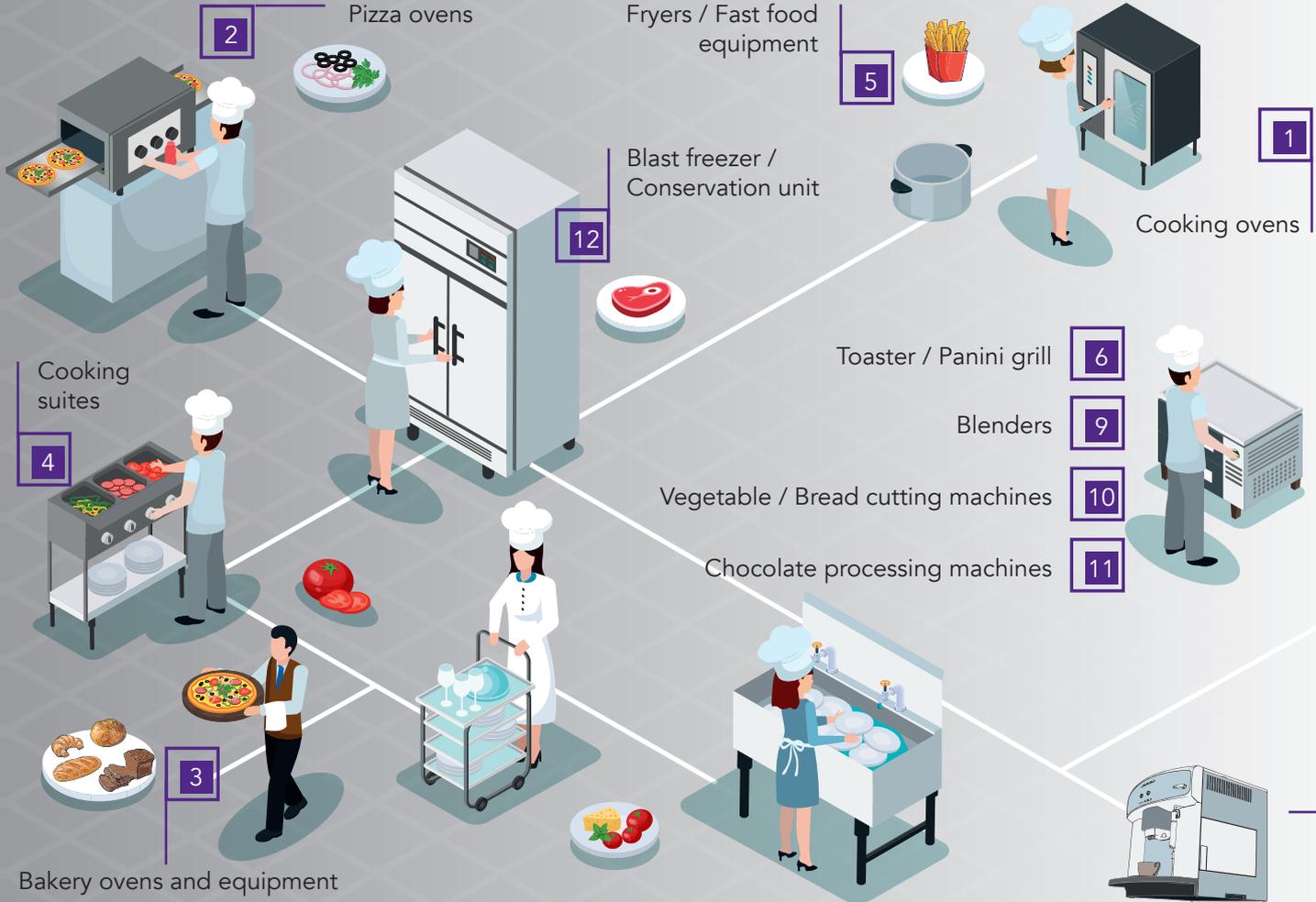


CONSTANT PRODUCT DEVELOPMENT  
our experienced R & D engineers constantly work on developing 10 to 15% of new products each year.



IN COMPLIANCE WITH THE MAJOR INTERNATIONAL STANDARDS  
our products are designed, tested and manufactured in accordance with the strictest international standards.





# SSRS ■ AND MAGNETIC SENSORS FOR EACH EQUIPMENT



7 Coffee machines

9 Coffee grinders



## CONTENTS

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Our solutions - **MAGNETIC SENSORS** 30 - 36

# COOKING OVENS

- Heating resistance control
- Water heater control for vapour production in "combined" ovens with convection system
- Motor control of the hot air distribution fan
- Door position detection : open or closed (supervising the opening).

USE OUR DUAL SOLID STATE RELAYS  
FOR SPACE SAVING IN YOUR  
CONTROL PANELS !

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## KEY PRODUCTS

TWO-PHASE  
SSR



SOB  
pages 22-23

EMC OPTIMISED  
SSR



SON and SCFL  
pages 26-27

HIGH TEMPERATURE  
MAGNETIC  
SENSORS



PTA10490  
page 32



# ROTARY PIZZA OVENS

- Heating control
- Motor control of the rotating bedplate.

**CELDUC® RELAIS' SSR ARE THE RIGHT CHOICE FOR ACCURATE AND LONG LIFE TIME TEMPERATURE CONTROL**

## KEY PRODUCTS

**SINGLE PHASE  
SSR**



**okpac®  
pages 18-19**

**THREE-PHASE  
SSR**



**cel3pac &  
sightpac  
pages 28-29**



Image courtesy of Morello Forni S.a.s.

# BAKERY OVENS AND EQUIPMENT

- Pre-heating control
- Heating control.

SUPERIOR DESIGN, EASY TO INSTALL AND OPTIMUM LIFESPAN ARE DELIVERED WITH OUR NEW THREE-PHASE RANGE

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## KEY PRODUCTS

EMC OPTIMISED  
SSR



SON and SCFL  
pages 26-27

THREE-PHASE  
SSR



cel3pac and  
sightpac  
pages 28-29



# COOKING SUITES

## MAGNETIC PROXIMITY SENSORS : WE ARE THE EXPERTS PROFIT FROM OUR 45 YEARS OF EXPERIENCE

- Temperature control
- Heating element control
- Pan position detection on the burners (to turn them "on" or switch from low to full flame).

### KEY PRODUCTS

#### SINGLE PHASE SSR



celpac® + temperature controller  
pages 18-19

#### HIGH TEMPERATURE MAGNETIC SENSORS



PTA10490  
page 32



# FRYERS / FAST FOOD EQUIPMENT

- Heating control.

COMPONENTS USED IN FAST-FOOD EQUIPMENT MUST BE RELIABLE AND MUST SUSTAIN HIGH FREQUENCY SWITCHING.

## CELDUC'S SOLID STATE RELAYS MEET THESE REQUIREMENTS

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### KEY PRODUCTS

SINGLE PHASE  
SSR



celpac®  
pages 18-19

THREE-PHASE  
SSR



cel3pac & sightpac  
pages 28-29



# TOASTER / PANINI GRILL

- Heating control
- Machine safety for user protection.

INNOVATION AND QUALITY ARE THE DRIVERS OF OUR THINKING AND DOING

## KEY PRODUCTS

SINGLE PHASE  
SOLID STATE RELAYS



celpac®  
pages 18-19

MAGNETIC  
SENSORS



Faston Terminals  
pages 20-21



Safety sensors  
pages 34-35



# COFFEE MACHINES

- Water heating control
- Motor control of grinders and pumps.

**CELDUC® RELAIS, WORLD LEADER  
IN SOLID-STATE POWER SWITCHING & CONTROL !**



Image courtesy of WMF Group GmbH

## KEY PRODUCTS

SINGLE PHASE  
SSR



okpac®  
pages 18-19

TWO-PHASE  
SSR



Faston terminals  
pages 24-25

FOUR-LEG  
SSR



SCQ range  
page 25



Image courtesy of Nuova Simonelli

# VENDING MACHINES

- Door position detection : open or closed (supervising the opening)
- Heating control for hot-drinks vending machines
- Product presence detection for the dispensing mechanism.

**CELDUC® RELAIS, MORE THAN 50 YEARS MARKET EXPERIENCE  
AND HIGH QUALITY PRODUCTION IN FRANCE**

## KEY PRODUCTS

SINGLE PHASE  
SSR



okpac®  
pages 18-19

MAGNETIC  
SENSORS



Screw sensors  
pages 30-31



# COFFEE GRINDERS / BLENDERS

- Motor control
- Detection of coffee level as well as the presence of the drawer in the base before starting the motor
- Detection of the presence of the protective cover.

## BENEFIT FROM OUR REED TECHNOLOGY FOR LEVEL AND POSITION DETECTION

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### KEY PRODUCTS

#### MAGNETIC PROXIMITY SENSORS



Screw sensors  
pages 30-31



Tubular sensors  
page 33



# VEGETABLE / BREAD CUTTING MACHINES

- Detection of the lever hopper's position to automatically stop the machine when the lever hopper is lifted and to restart automatically when lowered
- Machine safety to protect the operator by stopping the machine in the case of misuse.

ENSURE THE SAFETY OF MACHINE OPERATORS  
AND MACHINE OPERATING RELIABILITY

## KEY PRODUCT

MAGNETIC  
PROXIMITY  
SENSORS



High power  
switching sensors  
pages 34-35



Image courtesy of DITO-SAMA and ELECTROLUX

# CHOCOLATE PROCESSING MACHINES

- Heating control for pre-heating time process, tempering and molding of chocolate.

USE CELDUC®RELAIS' SSRs FOR ACCURATE  
AND LONG TIME TEMPERATURE CONTROL

## KEY PRODUCTS

SINGLE PHASE  
SSR

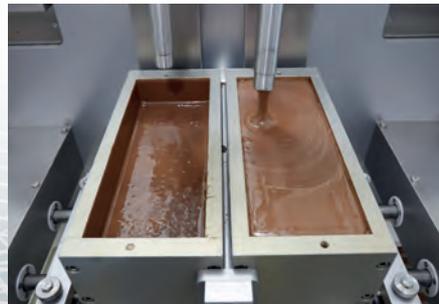


okpac®  
pages 18-19

THREE-PHASE  
SSR



cel3pac & sightpac  
pages 28-29



# BLAST FREEZER / CONSERVATION UNIT

- Door position detection : open or closed (supervising the opening).

WE CAN DESIGN SPECIFIC PRODUCTS  
IN CLOSE COLLABORATION  
WITH OUR CUSTOMERS

## KEY PRODUCT

MAGNETIC  
PROXIMITY  
SENSORS



Tubular sensors  
page 33



Image courtesy of CFI

## SOLID STATE RELAYS

- AC switching up to 125A / 690VAC
- DC switching up to 50A / 1700Vp or 150A / 100Vp
- Diagnostic and protections available

celduc® Solid State Relays (SSRs) are widely used in the food industry as a replacement of electromechanical relays (EMR) because of their ability to work in harsh environments (dust, gas, shocks and vibrations) without operating problems. Fully electronic, there are no moving parts inside

the SSRs, so they have higher life-time expectancy. Furthermore, their semiconductor based design makes them environmentally safe to be used in most applications including : ovens, fast-food equipment, coffee machines, ...

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Single phase Solid State Relays ..... p.18-19

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Single phase Solid State Relays with Faston terminals ..... p.20-21



Two-phase Solid State Relays ..... p. 22-23



Two-phase and 4-leg Solid State Relays with Faston terminals ..... p.24-25



Solid State Relays EMC optimised (low electromagnetic emission – low RFI) ..... p.26-27



Three-phase Solid State Relays & Contactors ..... p.28-29

# MAGNETIC PROXIMITY SENSORS

In the food industry, there are numerous applications for our **magnetic proximity sensors** : if you are looking for position, presence or level detection, we are able to offer a solution.  
We are eager to offer the best products for your application, thanks to our 45-year experience in the key technologies that we use in our products :

- Reed switch, a dry contact in a sealed glass bulb providing insulation at the same time : a simple, reliable and low cost solution.
- Electronic cell, based on either magneto-resistance or Hall effect, necessary for higher performance, particularly in high frequency operation.

	Screw position magnetic sensors .....	p. 30-31
	High temperature magnetic sensor .....	p. 32
	Tubular positions magnetic sensors .....	p. 32-33
	Magnetic safety sensors without coding .....	p. 34-35

The solutions displayed in this brochure should not be considered as exhaustive, please visit [www.celduc-relais.com](http://www.celduc-relais.com)

# celpac<sup>®</sup> 2G okpac<sup>®</sup>

## TWO RANGES OF SINGLE PHASE SOLID STATE RELAYS TO COVER ALL YOUR NEEDS

OUR **OKPAC<sup>®</sup>** AND **CELPAC<sup>®</sup>** RANGES COMBINE INNOVATION, PERFORMANCES AND DESIGN

With our integrated back to back thyristors technology (direct copper bonded ceramic) offering a very high life expectancy, our SSRs are perfectly adapted to the requirements of food processing machines manufacturers. Our single phase range okpac<sup>®</sup> SO9 or celpac<sup>®</sup> SU9 are ideal solutions for heating resistance control.

We offer a wide range with thyristor ratings up to 125A / 660V as well as a wide AC-DC input range with regulated current models. Removable flaps for IP20 protection.



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## Zero-cross single phase Solid State Relays designed for resistive loads AC-51

# celpac<sup>®</sup> 2G

Reference	Thyristor rating	Max. switching current at 25°C	Switching voltage	Peak voltage	Control voltage	I <sup>2</sup> t	Specifications
<b>SU942460</b>	25A	depends on heatsink	12-280VAC	600V	3-32VDC	600A <sup>2</sup> s	For mounting on heatsink
<b>SUL963460</b>	35A	30A	24-600VAC	1200V	3.5-32VDC	882A <sup>2</sup>	22.5mm heatsink
<b>SUL967460</b>	75A	35A	24-600VAC	1200V	3.5-32VDC	7200A <sup>2</sup> s	22.5mm heatsink

To add functions to your SSR, use our two modules directly pluggable on our SSR type SU and SUL →



ECOM  
Temperature controller PID,  
current monitor and  
communication interface  
in one unit



ESUC  
Current monitoring,  
Diagnostics module



SU9



SUL9

# okpac<sup>®</sup>

Reference	Thyristor rating	Switching voltage	Peak voltage	Control voltage	I <sup>2</sup> t
<b>SO945460</b>	60A	12-280VAC	600V	3-32VDC	2800A <sup>2</sup> s
<b>SO963460</b>	40A	24-600VAC	1200V	3.5-32VDC	1250A <sup>2</sup> s
<b>SO965460</b>	60A	24-600VAC	1200V	3.5-32VDC	2800A <sup>2</sup> s
<b>SO967460</b>	90A	24-600VAC	1200V	3.5-32VDC	7200A <sup>2</sup> s



SO9

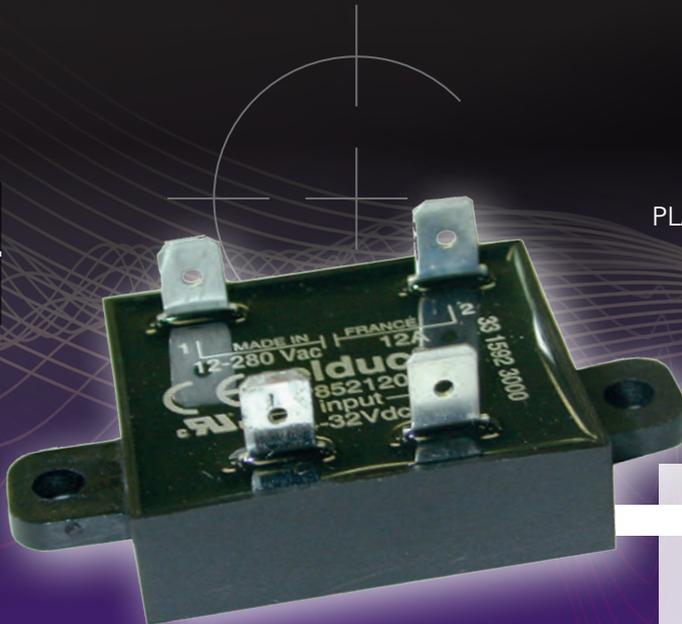
Other models available please visit our website [www.celduc-relais.com](http://www.celduc-relais.com)

# celduc®

## USE OUR SOLID STATE RELAYS WITH "FASTON" TERMINALS FOR A QUICK CONNECTION

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### SP7 / SP8 RANGE

PLASTIC CASED RELAYS THAT CAN SWITCH UP TO 12A AC51

Solid State Relays with « FASTON » terminals are appropriate for the food industry and for switching current < 20A.

celduc® relays offers a large range of single phase and two-phase SSRs with « FASTON » terminals.

## SF5

### Compact solution 21mm wide

The very small size of this range, UL and cUL approved, allows it to be placed as an interface in all configurations.

Reference	Thyristor rating	Switching voltage	Control voltage	Specifications
<b>SF541310</b>	10A	12-280VAC	4-30VDC	Zero-cross
<b>SF546310</b>	25A	12-280VAC	4-30VDC	Zero-cross



## SCF

### To control resistive loads

Reference	Thyristor rating	Control voltage	Peak voltage	Control voltage	LED	I <sup>2</sup> t	Protec.
<b>SCF42160</b>	25A	12-280VAC	600V	4-30VDC	oui	312A <sup>2</sup> s	-
<b>SCF42324</b>	25A	12-280VAC	600V	12-30VDC	non	312A <sup>2</sup> s	VDR
<b>SCF62160</b>	25A	24-600VAC	1200V	5-30VDC	oui	265A <sup>2</sup> s	-

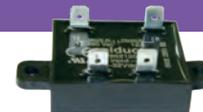


## SP7/SP8

### This range is well adapted to the food industry

These relays are appropriate for any type of load thanks to high immunity components and an integrated overvoltage protection combined with 800Vpeak power components.

Reference	Thyristor rating	Switching voltage	Peak voltage	Control voltage	I <sup>2</sup> t	Specifications
<b>SP752120</b>	25A	12-280VAC	800V	3-32VDC	340A <sup>2</sup> s	Random
<b>SP852120</b>	25A	12-280VAC	800V	4-32VDC	340A <sup>2</sup> s	Zero-cross



Other models available please visit our website [www.celduc-relais.com](http://www.celduc-relais.com)

# okpac<sup>®</sup>

■ USE DUAL RELAYS FOR SPACE SAVING !



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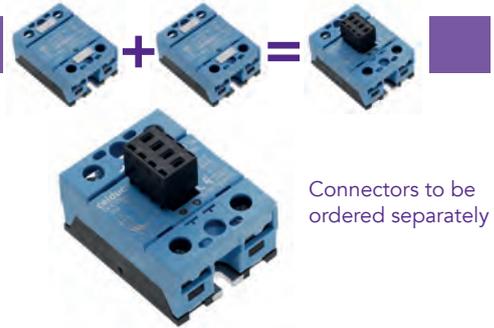
**NEW**

SOBR RANGE: **"PUSH-IN" SIMPLE CONNECTION**  
WITH NO TOOLS REQUIRED

Always ahead in solid-state control innovation, celduc<sup>®</sup> relais has launched a new range of two phase Solid State Relays in okpac<sup>®</sup> housing with push-in spring power terminals.

# okpac<sup>®</sup>

## Two-phase Solid State Relays



Our two-phase range provides two solid state relays in a compact standard 45mm enclosure.

Advantages of using our two-phase SSRs :

- Cost reduction of the complete solution
- Simple wiring
- Compact standard 45mm housing.

Reference	Thyristor rating	Switching voltage	Peak voltage	Control voltage	I <sup>2</sup> t	Specifications
<b>SOB942660</b>	2x25A	12-280VAC	600V	10-30VDC	600A <sup>2</sup> s	2 controls
<b>SOB943360</b>	2x35A	12-280VAC	600V	10-30VDC	1250A <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

New range of two phase Solid State Relays in okpac<sup>®</sup> housing with push-in spring power terminals. Limited to 24A by connections.

Référence	Calibre Thyristor	Tension commutable	Tension crête	Tension de commande	I <sup>2</sup> t	Specifications
<b>SOBR965660</b>	2x50A	24-600VAC	1200V	10-30VDC	2500A <sup>2</sup> s	2 controls
<b>SOBR965560</b>	2x50A	24-600VAC	1200V	10-30VDC	2500A <sup>2</sup> s	2 controls - 1 common internal connection on input



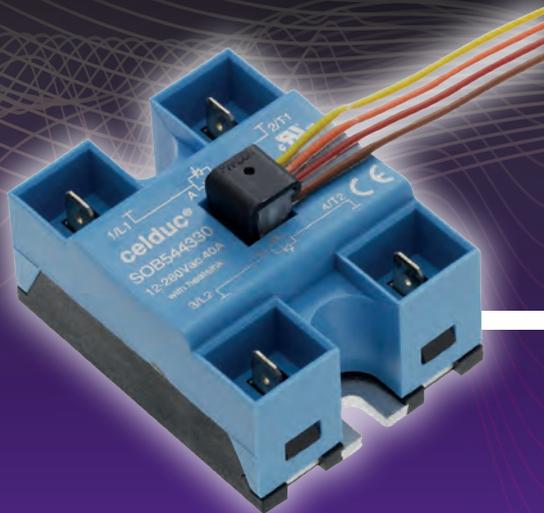
Other models available please visit our website [www.celduc-relais.com](http://www.celduc-relais.com)

# celduc®

■ USE OUR TWO-PHASE AND FOUR-LEG POWER SSR WITH FASTON TERMINALS FOR A QUICK CONNECTION AND SPACE SAVING !

**NEW**

**SOB5 RANGE**



- DOUBLE INPUT WITH CONNECTOR CE100F ITWPANCON TYPE OR SIMILAR.
- POWER CONNECTION BY FASTON 6,3MM TERMINALS WITH IP20 PROTECTION.

We have introduced pages 20-21 our single phase Solid State Relays with Faston terminals. celduc® relais offers also two-phase and four-leg power SSRs with Faston terminals.

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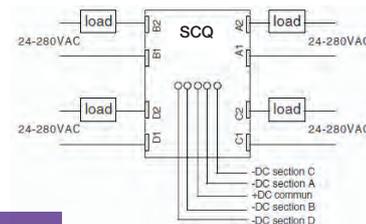
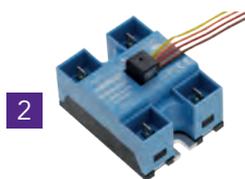
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# SOB5

## Dual okpac® range with Faston terminals

We offer you various possible connections with Faston terminals.

Fig.	Reference	Thyristor rating	Switching voltage	Peak voltage	Control voltage	I <sup>2</sup> t	Specifications
1	<b>SOB542460</b>	2x25A	12-280VAC	600V	3-32VDC	265A <sup>2</sup> s	Zero-cross / 2 controls
	<b>SOB562460</b>	2x25A	24-600VAC	1200V	3.5-32VDC	265A <sup>2</sup> s	
2	<b>SOB544330</b>	2x40A	12-275VAC	600V	8-30VDC	882A <sup>2</sup> s	
	<b>SOB564330</b>	2x40A	24-510VAC	1200V	8-30VDC	882A <sup>2</sup> s	



# SCQ

## Four-Leg Solid State Relay

Fig.	Reference	Thyristor rating	Switching voltage	Peak voltage	Control voltage	I <sup>2</sup> t	Specifications
3	<b>SCQ842060</b>	4x25A	12-280VAC	600V	3-32VDC	288A <sup>2</sup> s	Led

Other models available please visit our website [www.celduc-relais.com](http://www.celduc-relais.com)

# celduc<sup>®</sup>

## ■ EMC OPTIMISED SOLID STATE RELAYS (LOW ELECTROMAGNETIC EMISSION LOW RFI)

**NEW**

### **SON RANGE:**

THESE RELAYS ARE DESIGNED FOR USE IN APPLICATIONS WHERE LOW ELECTROMAGNETIC EMISSION IS ESSENTIAL: HOUSEHOLD AND ELECTRICAL APPLIANCES, INFORMATION TECHNOLOGY AND MEDICAL EQUIPMENT.

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You can find standard "low noise" SSRs on the market but these are limited to a low switching current of 5A for domestic applications or to low inductive loads, while lots of pure resistive loads applications have high emission noise.

Our new EMC optimized SON range meets these requirements (Conducted emission noise level < 66dB $\mu$ V) and can control class B appliances on pure resistive loads.

According to the application, applicable European standards are different. For celduc<sup>®</sup>, the major EN standards for Low Electromagnetic Noise Emission are EN55022, EN55011 and EN55014 which represent the main categories for electrical appliances.

# SON

## Power and control connections with screws

Reference	Thyristor rating	Switching voltage	Peak voltage	Control voltage	I <sup>2</sup> t	Specifications
<b>SON845040</b>	50A	40-260VAC	600V	6-32VDC	2800A <sup>2</sup> s	EMC optimised (low electromagnetic emission – low RFI)
<b>SON865040</b>	50A	50-480VAC	1200V	6-32VDC	2800A <sup>2</sup> s	
<b>SON867040</b>	75A	50-480VAC	1200V	6-32VDC	7200A <sup>2</sup> s	



Our new EMC optimized SON can control class B appliances on pure resistive loads with switching current > 5A with conducted emission noise level < 66dB $\mu$ V. This is a great advantage compared to standard "low noise" SSRs currently available on the market.

Standard	Reference standard	Current limit
<b>CEI 60947-1</b>	CISPR 11, B class, 1st group	40A @ 220V
<b>CEI 60947-4-3</b>	CISPR 22, B class	27A @ 400V

# SCFL

## Power connection by FASTON terminals

Reference	Thyristor rating	Switching voltage	Peak voltage	Control voltage	I <sup>2</sup> t	Specifications
<b>SCFL42100</b>	25A	12-280VAC	600V	4-30VDC	312A <sup>2</sup> s	EMC optimised (low electromagnetic emission – low RFI)
<b>SCFL62100</b>	25A	24-440VAC	1200V	5-30VDC	312A <sup>2</sup>	



Other models available please visit our website [www.celduc-relais.com](http://www.celduc-relais.com)

# cel3pac sightpac

## THREE-PHASE SOLID STATE RELAYS & CONTACTORS : NEW VISIONARY RANGES



SMT RANGE (45MM VERSION)  
SGT RANGE (100MM VERSION)

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**NEW**

Superior design, easy installation, optimum lifespan and price effectiveness are delivered with the new generation of three-phase Solid State Relays.

# cel3pac sightpac

## Three-phase Solid State Relays & Contactors

- Maximum peak voltage up to 1600V,
- Thyristor rating up to 125A,
- AC or DC Input control available,
- Using TMS<sup>2</sup> technology thyristors and RVF process (RoHs Void Free Process) for a longer lifespan (+40%),
- IP20 protection on terminals with removable flaps,
- Protections available : RC snubber, VDR, TVS.

Reference	Thyristor rating	Switching current AC-51 (40°C)	Switching current AC-53 (40°C)	Switching voltage	Peak voltage	Control voltage	I <sup>2</sup> t	Protections
<b>cel3pac range</b>								
<b>SGT8678500</b>	3x75A	3x54A	3x16A	24-520VAC	1600V	24-255VAC/DC	7 200A <sup>2</sup> s	RC – VDR
<b>SGT8690500</b>	3x125A	3x64A	3x32A	24-520VAC	1600V	4-30VDC	22 000A <sup>2</sup> s	RC – VDR
<b>SGT8850200</b>	3x50A	3x42A	3x12A	24-640VAC	1600V	4-30VDC	2800A <sup>2</sup> s	VDR
<b>SGT8858200</b>	3x50A	3x42A	3x12A	24-640VAC	1600V	24-255VAC/DC	2 800A <sup>2</sup> s	VDR
<b>SGT9834300</b>	3x35A	3x30A	-	24-660VAC	1600V	4-30VDC	1250A <sup>2</sup> s	TVS
<b>SGT9854300</b>	3x50A	3x42A	-	24-660VAC	1600V	4-30VDC	2800A <sup>2</sup> s	TVS
<b>SGT9874300</b>	3x75A	3x54A	-	24-660VAC	1600V	4-30VDC	7200A <sup>2</sup> s	TVS
<b>sightpac range</b>								
<b>SMT8620520</b>	3x25A	3x20A	3x5A	24-520VAC	1200V	4-30VDC	380A <sup>2</sup> s	RC – VDR
<b>SMT8628520</b>	3x25A	3x20A	3x5A	24-520VAC	1200V	24-255VAC/DC	380A <sup>2</sup> s	RC - VDR

Other models available please visit our website [www.celduc-relais.com](http://www.celduc-relais.com)

# POSITION SENSORS

## LOOKING FOR POSITION DETECTION, DOOR OPENING DETECTION OR THE PRESENCE OF A PROTECTIVE COVER...

CONSULT OUR RANGE OF MAGNETIC PROXIMITY SENSORS USING REED SWITCHES, A DRY CONTACT IN A SEALED GLASS BULB.

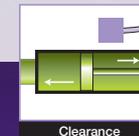
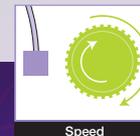
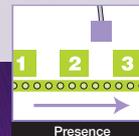
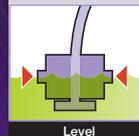
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Possible contact type:

- NO / A Form → Normally Open
- NF / B Form → Normally Closed
- BISTABLE NO / L Form
- CHANGE-OVER / C Form



# SCREW POSITION SENSORS



Range	PAA	PAB	PLA	PLB	PLC	PB367	PB390 / PBA
<b>Contact status</b>	NO	NC	NO	NC	Change-over	NC	NO
<b>Max. switching power</b>	12VA	3VA	12VA	12VA	NC : 3VA NO : 8VA	NC	NO
<b>Max. switching voltage</b>	100VDC	100VDC	100VDC or 250VDC	250VDC	100VDC	250VDC	250VDC
<b>Max. switching current</b>	0.4A	0.25A	0.4A	0.4A	0.25A	0.5A	0.5A
<b>Activation distance</b>	Between 10 & 18mm with P6250000 (depends on model)		Between 10 & 19mm with P6250000 (depends on model)	$4 \leq D \leq 12$ mm (magnet provided)	Between 10 & 14mm with P6250000 (depends on model)	6mm with P4159000	13mm with P4160000
<b>Working temperature</b>	-40 to +100°C						
<b>Dimensions (mm)</b>	23x14x6		32x15x6,8			51x8,5x11,5	
<b>Fixing screws distance</b>	14mm		17,5mm			40mm	

UL approved products on request

Other sensitivities, cable lengths or connection types are possible. Consult us !

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celduc<sup>®</sup>

## HIGH TEMPERATURE MAGNETIC PROXIMITY SENSORS

### **PTA10490**

THIS RAW BRASS SENSOR CAN BE USED AT WORKING TEMPERATURES UP TO +120°C

- Contact status : NO
- Max. switching power : 10VA
- Max. switching voltage : 100VDC
- Max. switching current : 0,4A
- Activation distance with magnet P6250000 : 16mm
- Working temperature : -40 to +120°C

In cooking ovens, magnetic proximity sensors are used to supervise the opening and closing of doors.

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# TUBULAR POSITION SENSORS



Range	PTA	PTB	PTC	PTPA0230	PTPB0010	PTI4	PTI5	PTI6	PTI7
<b>Contact status</b>	NO	NC	Change-over	NO	NC	NO	NC	NO	NC
<b>Max. switching power</b>	12VA	3VA	NC : 3VA NO : 8VA	12VA	12VA	12VA	5W	12VA	5W
<b>Max. switching voltage</b>	100VDC	100VDC	100VDC	100VDC	100VDC	200VDC	175VDC	200VDC	175VDC
<b>Max. switching current</b>	0,4A	0,25A	0,25A	0,5A	0,5A	0,5A	0,25A	0,5A	0,25A
<b>Activation distance</b>	PTA : between 7 and 18mm PTB : 14mm ; PTC : 7mm (with P6250000)			PTPA : 30mm PTPB : 10mm (magnet provided)		PTI4 : 12mm PTI5 : 7mm (with PT505000)		12mm with PT505100	7mm with PT505100
<b>Working temperature</b>	-40 to +85°C								
<b>Dimensions (mm)</b>	Ø6x30 Plastic			Ø23x27 Plastic	Ø23x28 Plastic	M8x1 – Lg31 Plastic	M8x1 – Lg40 Stainless Steel	M8x1 – Lg40 Stainless Steel	

Other sensitivities, cable lengths or connection types are possible. Consult us ! [www.celduc-relais.com](http://www.celduc-relais.com)

# celduc®

## ■ HIGH POWER SWITCHING SENSORS

Ensure the safety of machine operators  
and machine operating reliability !

### PSA60010 / PSA60020

THESE SENSORS ARE MANUFACTURED IN COMPLIANCE  
WITH THE EUROPEAN DIRECTIVE 2006/42/CE

- PLC according to ISO13849-1
- SIL1 according to IEC62061
- Category 1
- High MTTFd
- UL approved product



The PSA60010 and PSA60020 are magnetic power proximity sensors with a wide working voltage range, protected from transient voltage phenomena and using reliable components.

These sensors allow load control up to 3A.



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# PSA

## Magnetic safety sensors without coding

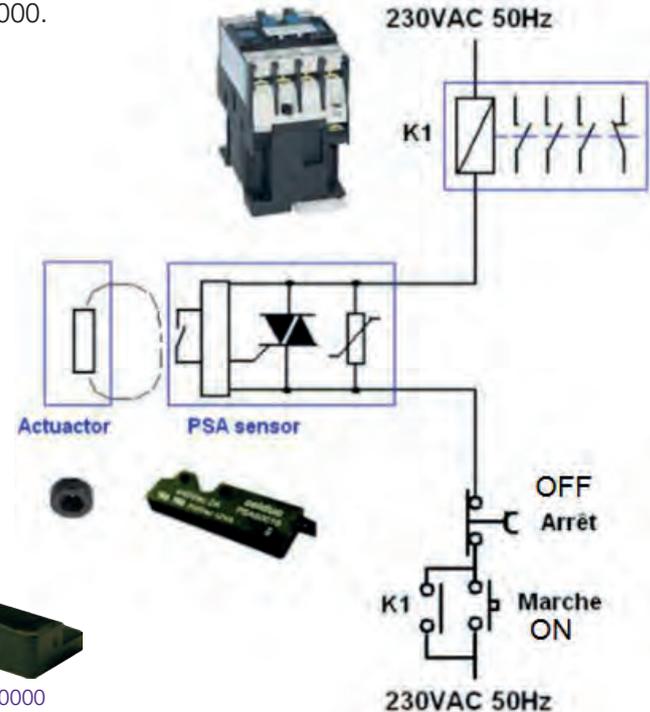
These magnetic safety sensors without coding have been designed to meet the security requirements for machines presenting "low danger" to operators. The actuator is a base magnet or a molded magnet type P6250000.



Range	PSA60010	PSA60020
Contact status	NO	NO
Max. switching power	500VA	500VA
Max. switching voltage	24-440VAC	6-440VAC
Max. switching current	3A	3A
Cable length	2 wires 350mm	2 wires 3m
Activation distance	12mm with P6250000	12mm with P6250000
Working temperature	-40 to +85°C	-40 to +85°C
Dimensions (mm)	51x16x7	
Fixing screws distance	16mm	



Magnet P6250000  
to be ordered separately



# celduc® relais ALSO PRODUCE

## MAGNETIC SAFETY SENSORS

to ensure the safety of machine operators.

celduc® relais is offering 2 ranges to cover all your needs :

- Coded magnetic Safety sensors with REED technology
- Coded magnetic Safety sensors fully electronics, Hall Effect Technology



## REED RELAYS & SWITCHES

For detection of clearance, position and level in extreme environments with no mechanical link between moving parts. These magnetically actuated maintenance free Reed switches can meet the toughest challenges that industry can throw at them.



MORE INFORMATION  
NEEDED ? [www.celduc-relais.com](http://www.celduc-relais.com)

Catalogues and leaflets available on request



Product Guide



Single Phase SSRs &  
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Three-Phase SSRs  
& Contactors cel3pac  
& sightpac ranges



# celduc® relais

## worldwide presence in more than 60 countries

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AUSTRALIA	MOROCCO
AUSTRIA	THE NETHERLANDS
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All technical characteristics are subject to change without previous notice // Dec. 2018 – CATA-FOOD-UK-2018