INOSYS LBS

Load Break Switches incorporating tripping function from 100 to 800 A, up to 1000 VAC

AC applications

your energy
our expertise

socomec
Innovative Power Solutions

Safe & reliable installations

Reliability and guaranteed safety combined with low maintenance costs are vital when selecting components for integration in electrical systems.
With its proven switch technology combined with the tripping function, INOSYS LBS can be used for performing safe maintenance in the installation as well as for emergency switching.



Complete safety

To meet the requirements of safe disconnection, including when operating **in harsh environments**, the INOSYS LBS integrates a patented technology that allows fast arc quenching to ensure switching performance. The remote tripping function for **use in all emergency situations** is also **compatible with many protection relays**, e.g. earth leakage relays, UPS backfeed protection, etc.

Total reliability

INOSYS LBS are the right choice for applications requiring **high reliability**, **compliance** with **multi-standards** and **low maintenance** under any circumstances.
The use of long lasting materials, combined with increased creepage and clearance distances ensures **optimum performance** during the complete installation lifecycle.

Global approvals

INOSYS LBS disconnect switches meet UL 98, IEC 60947-3/GB14048.3 and bear the CE mark. The use of Socomec's range within your design enables the development of a standardised, global offer.

SOCOMEC, your best asset

European manufacturing group
- Created in 1922.
- A workforce of almost 3000.
- Located on all five continents.

A culture of independence
- Family shareholding.
- Control of the decision-making process.
- Respect of human values.

The spirit of innovation
- Almost 10 % of turnover is invested in R&D.

A flexible manufacturing structure
- Competitive production sites.
- Lean Management.
- Lead times, quality and cost guaranteed.

The vision of a specialist
- Expertise in core technologies.
- Product adaptations as per customer requirements.

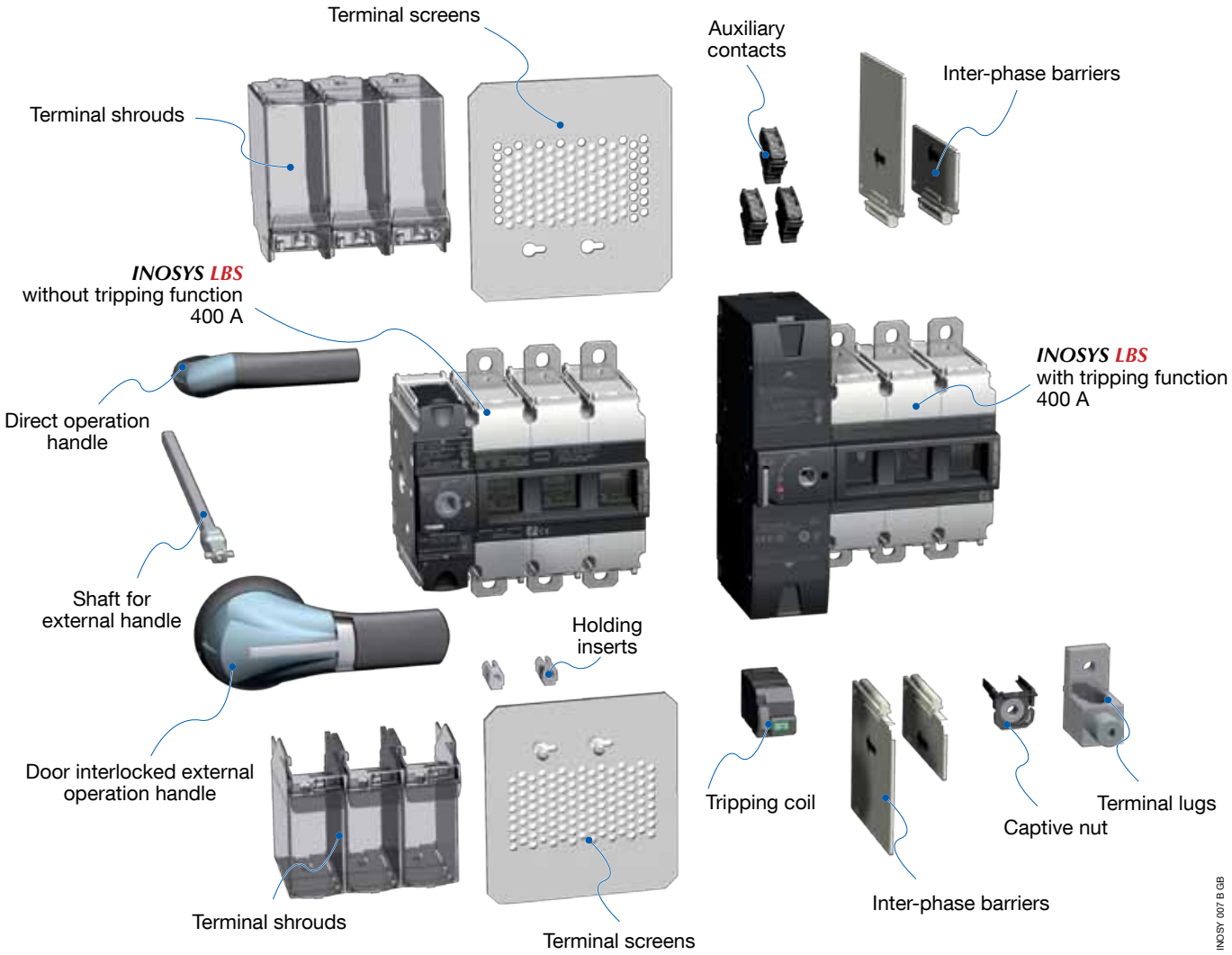
A focus on service
- Advice, technical assistance and call-out, training, etc.
- Teams located across the globe.

ENERGY SPECIALIST SINCE 1922

THE GLOBAL COMPACT WE SUPPORT

INOSYS LBS

The perfect combination of proven switch technology with remote tripping function



Switch to innovation, benefit from the experience of a world leader in industrial switching

Highest safety level
- Visible blade indication.
- Disconnection and isolation function.
- Remote tripping function.
- High-performance switching.

Extreme reliability
- Robust design, tested in extreme conditions.
- Manufactured using long-lasting, stable raw materials.
- Stable On, Off and Trip positions.

Full power availability
- No nuisance tripping; trips only when necessary.
- High withstand to temperature (both high ambient and cycling temperatures).

Ultimate safety

Tripping function

> Fast remote disconnection for on demand shutdown/de-energisation
> Robust operation for maximum uptime and no nuisance tripping

Robust

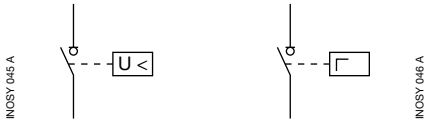
- **Fully immune to any voltage perturbation** (tripping mechanism completely independent from the power poles).
- Designed and tested to **withstand large temperature fluctuations**.

Reliable

- **Fast operation ensured under any conditions** (more than 30 kg of power embedded in the switch actuator).
- Usage of high power coil for high reliability over time.

Versatile

- **2 different actuators means:** shunt-trip coils or undervoltage release from 24 to 220 VDC and from 24 to 230 VAC.



Switch disconnector with undervoltage release. *Switch disconnector with shunt-trip.*

- Compatible with virtually any electronic protection device (earth leakage relay, UPS backfeed protection, phase loss monitoring, etc.).

Firefighter emergency switch

Via undervoltage release or shunt-trip coil combined with position auxiliary contacts, the switches can be used for firefighting operations to completely disconnect any dangerous voltage in the electrical installation.

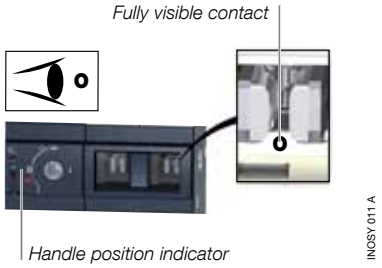
The tripping of the switch provides an extremly fast disconnection (< 50 ms), which is fully compliant with installation standards.

Clear visible contact indication

> Safe operation under any circumstances

Reliable switch position

- Handle position indicator.
- Fully visible contacts.
- True contact state position indicator.



Optimum arc containment

- Fast arc quenching for limiting arc energy (patented arc chute chamber technology).
- Specific contacts and arc chute arrangement to keep the arc located behind the cover to avoid arc flash.

Performance guaranteed

- Simultaneous opening and closing of the poles allows the neutral to be connected to the left or the right side of the product.
- The auxiliary contacts are directly linked to the true state of the product, one linked with the ON position and the other with OFF, guaranteeing their position.

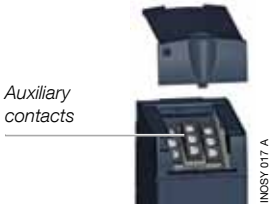
Enhanced disconnection and isolation

> Ensures the safety of the electrical maintenance personnel

- Stable ON, OFF & Trip positions resistant to external perturbation.
- Guaranteed disconnection in both OFF & Trip positions.

- Real disconnection, fully compliant with IEC & NEC installation standards.
- Padlocking in OFF position available directly on the switch and on the external handle.

- Double isolation between auxiliary contacts and main power.
- Protection cover against indirect contact with auxiliaries.



Optimum performance

Highly reliable solution

> Optimum performance during the complete installation lifecycle

Patented switching technology

- **High-performance switching, compact footprint:** switches are capable of breaking all types of load, even high inductive motor loads (AC-23 A) up to 1000 VAC and can make and withstand consequent short circuits currents.
- **Guaranteed safety:** the contacts opening and closing speed is fully independent of the handle operation.

Long lasting stable raw materials

INOSYS LBS is an extremely robust product, with all casings made from fiber glass reinforced polyester materials that provide:

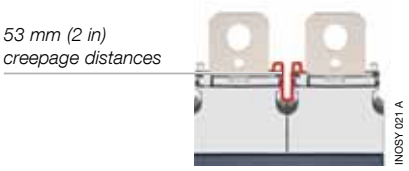
- high mechanical withstand,
- high stability to temperatures (RTI of 130 °C),
- high dielectric performance (high CTI/tested according to ASTM D 2303).

High temperature withstand

- No derating up to 55 °C (131 °F)
- Wide operating temperature from -25 to +70 °C (-15 to +160 °F).

Guaranteed isolation over time

- Designed with materials that maintain structural integrity.
- Increased creepage distance (doubled compared to IEC 60947-3 standard requirements) to ensure no isolation failures.



External handles

The INOSYS LBS range includes an assortment of heavy duty handles

- Door interlocked in the ON position.
- Possibility to defeat the door interlock with the use of a tool.
- Padlockable in the OFF position; padlocking engages door interlock.
- High degree of protection: up to IP65 IEC and 4, 4X UL.
- UV rated according to UL50.

Ease of installation

> Flexible configuration, wiring and installation to suit every application

Installation

- Easy integration in modular type enclosures.

- Back plate mounting: between poles or through use of the adjustable fixing pads.

Connection

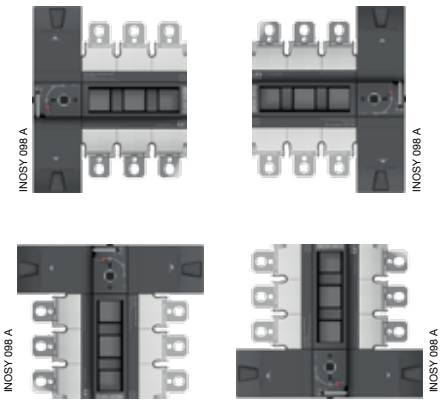
- **Free access to terminals** for flexible wiring.

- **Easy access** without tools to integrate auxiliary contacts and tripping coil (both located within the switch footprint).

- **Simplified fastening** with captive nuts, enabling one-handed connection to the power terminals.

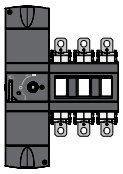
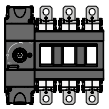
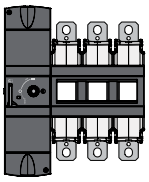
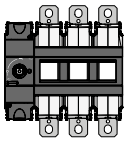
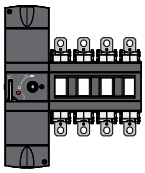
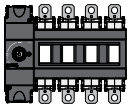
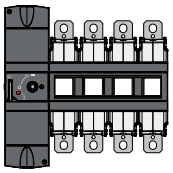
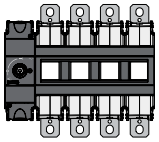
Mounting orientation

- All mounting orientations are possible.

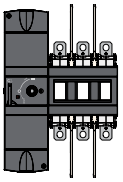
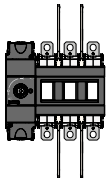
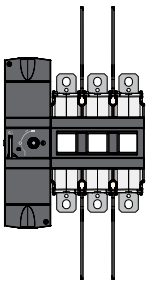
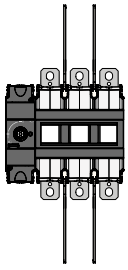


Selection guide

Which standard ? ▶ Which function ? ▶ Which rating ?

IEC 60947-3		*INOSYS LBS* IEC 60947-3						
		160 A	250 A	315 A	400 A	500 A	630 A	800 A
3P	Frame size	F2			F3			
	With tripping function	84A0 **3016**	84A0 **3025**	84A0 **3031**	84A0 **3040**	84A0 **3050**	84A0 **3063**	84A0 **3079**
	Without tripping function	86A0 **3016**	86A0 **3025**	86A0 **3031**	86A0 **3040**	86A0 **3050**	86A0 **3063**	86A0 **3079**
		①  ② 			①  ② 			
4P	Frame size	F2			F3			
	With tripping function	84A0 **4016**	84A0 **4025**	84A0 **4031**	84A0 **4040**	84A0 **4050**	84A0 **4063**	84A0 **4079**
	Without tripping function	86A0 **4016**	86A0 **4025**	86A0 **4031**	86A0 **4040**	86A0 **4050**	86A0 **4063**	86A0 **4079**
		①  ② 			①  ② 			

1. With tripping function. 2. Without tripping function.

UL 98		*INOSYS LBS* UL 98			
		100 A	200 A	400 A	600 A
3P	Frame size	F2		F3	
	With tripping function	85A0 **3010**	85A0 **3020**	85A0 **3040**	85A0 **3060**
	Without tripping function	87A0 **3010**	87A0 **3020**	87A0 **3040**	87A0 **3060**
		①  ② 		①  ② 	
4P	Frame size	F2		F3	
	With tripping function	85A0 **4010**	85A0 **4020**	85A0 **4040**	85A0 **4060**
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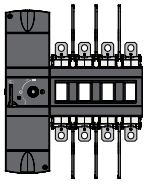
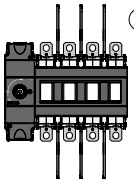
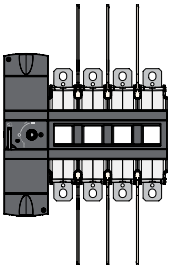
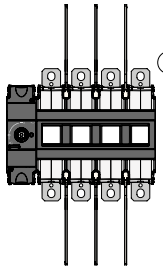
		①  ② 		①  ② 	

1. With tripping function. 2. Without tripping function.

Also available

RESYS M & RESYS P

Type A earth leakage relays

The differential relays in the RESYS range provide optimised protection and monitoring for electrical installations: combined with an automatic tripping device, they ensure protection for personnel and equipment. As a preventive measure, they also signal earth fault conditions.

The benefits

- Fully configurable.
- Tripping accuracy by TRMS measurement.
- Instantaneous display of permanent leakage currents.
- Compact and modular case with LED bargraph.
- Improved immunity to EMC interferences.
- Optional automatic reclosing.

INOSYS LBS

Load Break Switches incorporating tripping function - for DC and PV applications from 100 to 1250 A, up to 1500 VDC

Total reliability and guaranteed safety, combined with low maintenance costs, are vital when selecting components for integration into your DC distribution. Photovoltaic and DC installations must be able to perform in all conditions, even extreme operating environments. INOSYS LBS have been specifically engineered and tested for the most demanding applications.

The product at a glance

- Two frames from 100 to 1250 A.
- Local manual operation and remote tripping.
- High switching performance thanks to 500 VDC per pole switching capability.
- Multi-circuit, single or dual polarity switching.
- Robust trip function compatible with emergency switching.
- Shunt-trip coil or under voltage release.
- Visible contact blade indication.

The benefits

- No nuissance tripping.
- Safe operation under any circumstances.
- Remote switching for use in all emergency situations.
- Guaranteed disconnection in both OFF & Trip positions.
- Compatibility with virtually any electronic protection device (arc-fault detection system, battery protection, etc.).

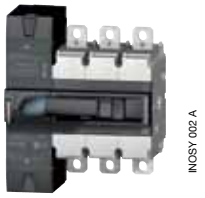
RESYS AFD & INOSYS LBS

PV Arc Fault Detection, string monitoring and electrical arc interruption

RESYS AFD - Arc Fault & String Monitoring system - is a compact solution for integration within a PV combiner box, designed to detect and interrupt an electrical arc before it results in a potential fire. It also monitors the PV energy production at string level to reduce energy losses and guarantee the return on investment of the PV plant. When used in conjunction with INOSYS LBS - Load Break Switches for DC and PV applications, incorporating tripping function - it interrupts the electrical arc by opening the load.

The benefits

- Accurate string monitoring.
- Reliable arc detection.
- Electrical arc interruption.
- Easy integration.
- UL 1699B compliant as Arc Fault Current Interruption device (AFCI).



INOSYS LBS

RESYS AFD

Socomec worldwide

IN EUROPE

BELGIUM
Critical Power / Power Control & Safety / Energy Efficiency Power
Tel. +32 2 340 02 30
Fax +32 2 346 28 99
info.be@socomec.com

FRANCE
Critical Power / Power Control & Safety / Energy Efficiency
Tel. +33 1 45 14 63 00
Fax +33 1 48 67 31 12
dcm.ups.fr@socomec.com

GERMANY
Critical Power
Tel. +49 621 71 68 40
Fax +49 621 71 68 444
info.ups.de@socomec.com

Power Control & Safety / Energy Efficiency
Tel. +49 7243 65292 0
Fax +49 7243 65292 13
info.scp.de@socomec.com

ITALY
Critical Power
Tel.+39 02 98 242 942
Fax +39 02 98 240 723
info.ups.it@socomec.com

Power Control & Safety / Energy Efficiency
Tel.+39 02 98 49 821
Fax +39 02 98 24 33 10
info.scp.it@socomec.com

NETHERLANDS
Critical Power / Power Control & Safety / Energy Efficiency
Tel. +31 30 760 0900
Fax +31 30 637 2166
info.nl@socomec.com

POLAND
Critical Power
Tel. +48 22 825 73 60
Fax. +48 22 825 73 70
info.ups.pl@socomec.com

Power Control & Safety / Energy Efficiency
Tel. +48 91 442 64 11
Fax +48 91 442 64 19
info.scp.pl@socomec.com

PORTUGAL
Critical Power / Power Control & Safety / Energy Efficiency
Tel.+351 261 812 599
Fax +351 261 812 570
info.ups.pt@socomec.com

ROMANIA
Critical Power / Power Control & Safety / Energy Efficiency
Tel. +40 21 319 36 88
Fax +40 21 319 36 89
info.ro@socomec.com

SLOVENIA
Critical Power / Power Control & Safety / Energy Efficiency
Tel. +386 1 5807 860
Fax +386 1 561 11 73
info.si@socomec.com

SPAIN
Critical Power / Power Control & Safety / Energy Efficiency
Tel. +34 93 540 75 75
Fax +34 93 540 75 76
info.es@socomec.com

TURKEY
Critical Power / Power Control & Safety / Energy Efficiency
Tel. +90 216 540 71 20-21-22
Fax +90 216 540 71 27
info.tr@socomec.com

UNITED KINGDOM
Critical Power
Tel. +44 1285 863 300
Fax +44 1285 862 304
info.uk@socomec.com

Power Control & Safety / Energy Efficiency
Tel. +44 1462 440 033
Fax +44 1462 431 143
info.uk@socomec.com

IN ASIA PACIFIC

AUSTRALIA
Critical Power / Power Control & Safety
Tel. +61 2 9325 3900
Fax +61 2 9888 9544
info.ups.au@socomec.com

CHINA
Critical Power / Power Control & Safety / Energy Efficiency
Tel. +86 21 52 98 95 55
Fax +86 21 62 28 34 68
info.cn@socomec.com

INDIA
Critical Power / Power Control & Safety / Energy Efficiency
Tel. +91 44 39215400
Fax +91 44 39215450 & 51
info.in@socomec.com

SINGAPORE
Critical Power / Power Control & Safety / Energy Efficiency
Tel.+65 6506 7600
Fax +65 64 58 7377
info.sg@socomec.com

THAILAND
Critical Power
Tel. +66 2 941 1644 7
Fax +66 2 941 1650
info.ups.th@socomec.com

IN MIDDLE EAST

UNITED ARAB EMIRATES
Critical Power / Power Control & Safety / Energy Efficiency
Tel. +971 4 29 98 441
Fax +971 4 29 98 449
info.ae@socomec.com

IN AMERICA

USA, CANADA & MEXICO
Power Control & Safety / Energy Efficiency
Tel. +1 617 245 0447
Fax +1 617 245 0437
info.us@socomec.com

OTHER COUNTRIES

NORTH AFRICA
Algeria / Morocco / Tunisia
info.naf@socomec.com

AFRICA
Other countries
info.africa@socomec.com

SOUTH EUROPE
Cyprus / Greece / Israel / Malta
info.se@socomec.com

SOUTH AMERICA
Tel. +34 93 540 75 75
info.es@socomec.com

MORE DETAILS
www.socomec.com/worldwide

HEAD OFFICE

SOCOMEC GROUP
SAS SOCOMEC capital 10 678 740 €
R.C.S. Strasbourg B 548 500 149
B.P. 60010 - 1, rue de Westhouse
F-67235 Benfeld Cedex - FRANCE
Tel. +33 3 88 57 41 41
Fax +33 3 88 74 08 00
info.scp.isd@socomec.com

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www.socomec.com

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