

# Load break & Transfer switching

On-load isolation and source changeover applications

Low voltage switching solutions from 16 to 6300 A













# Power control & safety products and solutions

Our mission: managing power while protecting people and facilities

### Specific solutions for different needs







OEM



Critical building



Industry Renewables

- Airports
- Railway
- Subway
- Tram
- Energy production
- Energy distribution
- HVAC
- Power Electronics
- Drives
- Genset
- Data centers
- Medical facilities
- Banking, finance, insurance
- Commercial centers
- Offices
- Hotels & resorts
- Public buildings
- Manufacturing
- Processes
- Oil & gas
- Energy production
- Solar parks
- Industrial buildings

### Continuous innovation -> 90 years of expertise

Throughout its history, Socomec has constantly anticipated market changes by developing cutting-edge technologies, providing solutions that are adapted to customer requirements and international standards.

### 1922

Creation of Socomec First LBS in France.

### 1952

First trippable LBS.

### 1965

Power Laboratory creation.

### 1974

Introduction of polyester fiber glass for switches cases.

### 1980

First Fusible LBS (FCU).

### 1984

First MTSE. Invention of the Back to Back concept.

### 1988

First RTSE (Motorised).

### 1991

Socomec opened an office in India and started manufacturing through partnership.

### 1998

Introduction of the UL range of disconnects.

### 2003

First Automatic Transfer Switch including controller.

### 2005

Introduction of small rating switches with production in China.

### 2007

Introduction of first Modular Automatic Transfer Switches ATYS M.

### 2009

Second range of UL LBS for North America.

### 2010

First range of PV LBS.

### 2013

New PV range New ATYS range.

### 2014

Socomec India becomes independent to better serve local customer needs.

### 2016

New SIRCO LBS, SIRCO PV and SIRCOVER MTSE made and launched in India.

### 4 performance levers

### The vision of a specialist

- Solutions focused on customer applications
- Listening to customers' requirements
- Experienced personnel

### The focus on service

- Project consulting in design phases
- CIM worldwide organization
- Audits & consulting

### The spirit of innovation

- Advanced technologies
- Patent policy
- Regular launch of new solutions
- Products and solutions

### The know-how of a manufacturer

- Quality commitment
- LEAN manufacturing
- The largest plant in Europe





# Designed and manufactured by an innovative specialist

As an independent manufacturer, employing over 3000 people globally, the group is committed to constant innovation to improve the energy performance of electrical installations in infrastructures as well as industrial and commercial sites.

### **Expert Services**

The expertise and proximity of our specialists are there to ensure the reliability and durability of your equipment.

### 10% of turnover invested in R&D

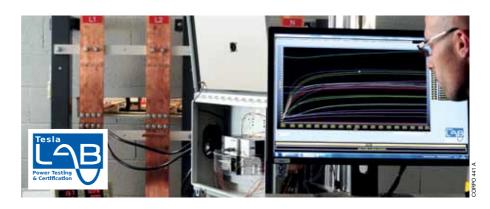
Constantly employing and retaining specialsed engineers to always be at the cutting-edge of technology for innovative, high-quality products.

### 3,500 m<sup>2</sup> of test platforms

One of the leading independent power testing labs in Europe.

### A cutting-edge laboratory - The backing of an expert

Created in 1965, Socomec's laboratory brings its expertise to guarantee the reliability and the conformity of our products and solutions. Since 2015, the laboratory renamed Tesla Lab - Power Testing and Certification in 2015, offers its testing and certification services to all its customers



### Proven expertise

Tesla Lab is an independent laboratory specialised in testing of LV switchgears, components and switchgear assemblies. 4 M€ has been invested since 2011 in this 2000 m<sup>2</sup> laboratory, where 30 experts guarantee the quality of the performed tests, making the Tesla Lab one of the most modern laboratories in Europe.

### Vast range of tests

The laboratory has 100 MVA (100 kA rms 1 s) short-circuit platform, three 10 kA overload platforms and many other test facilities covering 2000 m<sup>2</sup> for:

- functional tests.
- mechanical tests: endurance.
- dielectric tests.
- environmental tests: vibrations.
- Ingress Protection (IP),
- temp rise tests up to 60 °C ambient.

### International partnership

The laboratory is recognised by the major certification bodies worldwide: member of ASEFA and LOVAG, it is accredited by COFRAC, UL (CTDP), CSA (shared certification) and DEKRA (WMT). The partnership with many international certification bodies guarantees the quality and safety requirements in each country.

### Providing a Wide Range of Robust Solutions for your installation requirements





SIRCO MC PV

















# **SIRCO** - Load Break Switch (LBS)



Manually operated 3 and 4 pole load break and isolation switch rated from 63 A to 5000 A at 415 VAC. SIRCO provide a compact and robust design featuring high performance with easy installation making it the most convenient LBS for LV switching applications.

### **Function**

SIRCO are multipolar LBS that make and break under full load and provide safety isolation in compliance with IS/IEC 60947-3.

SIRCO are designed for 415 VAC heavy duty applications up to AC 23 A utilisation category.

### General characteristics

- Double positive break indication given through a position indication window and by the operating handle.
- Severe utilisation categories and high resistance to damp and heat.

### The solution for

- Main switchboards
- Distribution panels
- Network coupling
- Emergency breaking
- Local safety breaking

### Main advantages

- Reliability
- Performance
- Safety of property
- Safety of personnel
- Simplicity
- Ease of installation

# Reliable performance

Double break fast opening and closing on each pole.

# Suitable even for sensitive loads

Solid sliding bar with synchronised pole contacts.

# Safety for the user and the load

Fully independent switching mechanism.

# LBS with isolation for AC circuits



### Standards

• IS/IEC 60947-3



### High performance

- Up to AC23A @ 415 VAC.
- High durability and short-circuit withstand lcw.

# SIRCO 468 A SIRCO 471 A SIRCO 471 A

### Wide range

- Eight frames (B2-B9)
- 63 A 5000 A
- 3P and 4 Pole

### Isolation

Fully compliant to IEC standards for isolation and further includes a padlocking feature with all handle types.

### Robust design

- High mechanical and thermal resistance.
- Reinforced glass fibre housing.

### **Enclosed solutions**

Steel enclosed LBS up to 1600 A. Includes the possibility to add top and bottom extension boxes to suit individual needs.

# Ultra clear switch position

Fail-safe position indicator directly on the sliding bar.

### Easy to install

Ease of installation and wiring with wide terminals, the additional option for spreaders, and a very compact frame size.

### Accessories

- Spreading bars
- Terminal screens
- Terminal shrouds
- 2x Aux contacts
- Interphase barrier

### Ordering guide

26 XX X XXX A

Current rating (from 006 to 500 where 006 = 63 A and 500 = 5000 A)

3 or 4 pole (where 3 = 3 pole and 4 = 4 pole)

Type: Where K1 = direct handle kit; K2 = external handle kit;

E1 = enclosed and RD = spare switch body with no handle

# **SIRCOVER** - Transfer Switching Equipment (TSE)



Manually operated 3 and 4 pole open transition transfer switching equipment rated from 63 A to 3200 A. Considered to be one of the safest and most utilised transfer switch to changeover a supply from one source to another source.

### **Function**

SIRCOVER MTSE benefits from Socomec LBS technology that is proven to be extremely robust, ergonomic, safe and virtually maintenance free. SIRCOVER transfer switching equipment is designed specifically for a safe changeover of two source supplies.

### General characteristics

- SIRCOVER design includes two LBS switches that are mounted back to back and include an inherent and fail safe mechanical interlock.
- SIRCOVER provides for severe utilisation categories and a high resistance to damp and heat.

### The solution for

- Source changeover
- Manufacturing industry
- Power distribution
- Emergency Supply
- Ultimate Backup Supply

### Main advantages

- Robust
- Ergonomic
- Straightforward
- High performance
- Reduced footprint
- Stable positions
- Isolation feature

### Wide range

- Seven frames (B2-B8)
- 63 A 3200 A
- 3 and 4 pole

### Synchronised contacts

Solid bar carrying all moving contacts ensures simultaneous making and breaking.

### Safe switching

A reliable switching mechanism that is fully independent of the user manual operating speed.

### Long lasting

Tested and proven with a high durability and short-circuit withstand lcw.

### Standards

- IEC 60947-6-1
- IS/IEC 60947-3



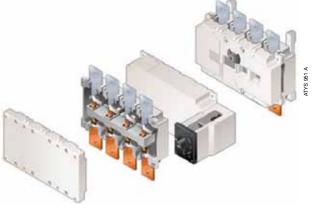
### High performance

• Up to AC33B in IEC 60947-6-1 and up to AC23A - in IS/IEC 60947-3.



# Ease of installation

Wiring directly onto wide terminals with the possibility to add spreaders whilst providing a very small footprint.



### Durable design

Double break main contacts with a very fast opening and closing on each pole.

### Secure and reliable

Capable of switching all types of loads, without the need for a pre-breaking switch installed upstream.

### Clear indication

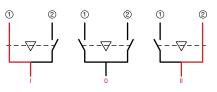
I – 0 – II position indicator directly on the handle and mechanism.

### Safe Isolation

Suitable for safe downstream maintenance without the need for additional aear.

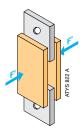
### Open transition MTSE

SIRCOVER provides 2 back to back switches, an independent mechanism and a safe changeover from one source to another source through the sequence I-0 - II. Safety is further guaranteed by including one handle and a robust inherent mechanical interlock to ensure that the two different source supplies do not overlap.



# **SIRCOVER** - Manually operated TSE (MTSE)

SIRCOVER is an IEC 60947-6-1 compliant Class PC Transfer Switch that is capable of making and intended for withstanding short-circuit currents. This helps to ensure that the transfer switching equipment is robust and long lasting.



Under short circuit conditions the design of Class PC contacts as shown attract. This increases the pressure on the contacts thereby favouring performance. Class PC TSE can withstand (Icw) and close on (Icm) capability that are key to ensure the availability of power in essential applications.

By withstanding a fault current the TSE remains closed for a set period of time permitting upstream coordinated protection devices to do their job by tripping and isolating the fault. Keeping the contacts closed ensures that an arc is not produced in the MTSE thereby allowing it to remain operational even after short circuit.

### SIRCOVER is a fully compliant Class PC MTSE

"PC is one of the most specified Class of TSE worldwide".

### Robust, and maintenance free

Self-cleaning contacts retain performance with virtually no need for maintenance.

### 3 stable positions

Not affected by voltage drops or vibrations, thus protecting your load against network interference.

### High electrical performance

Even compatible with motor and mixed loads up to utilisation category AC 33B at 415 VAC.

### Source changeover for AC or DC circuits









### Robust metal mounting legs

Strong mounting legs that provide ample clearance to the back of the panel for optimal wiring.







### Padlocking facility

Ideal for safe isolation and downstream maintenance. Available with both the direct and external handles.



### Mechanical interlocks

Safe and easy to use including a fail-safe mechanical interlock for all 3 positions (I-O-II).

### **Enclosed solutions**

Full range up to 3200 A with the possibility to add top and bottom extension boxes to suit any cabling requirements.

### Other SIRCOVER applications

Also suitable for creating a safe earth connection. (For maintenance)

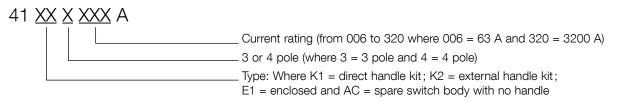
### Engineered copper bridging bars

Allows easy bridging and wiring of outgoing cables whilst ensuring not to damage the terminals due to tolerance.

### Accessories

- Spreading bars
- Terminal screens
- Terminal shrouds
- Interphase barrier
- Bridging bars
- 2x Aux contacts

### Ordering guide



# Remotely Operated and Automatic TSE: RTSE/ATSE/ATyS Bypass

Automatic and remotely operated transfer switching equipment designed and tested in line with IEC 60947-6-1 standard which is the international standard for source changeover applications. Transfer switching equipment that is proven as robust and reliable products worldwide.

### **Function**

RTSE is motorised and remotely operated TSE and is the essential part of an automatic changeover installation for all applications. An ATSE will further include all the monitoring equipment necessary to detect a power supply failure and automatically switch to an alternative supply.

### ATyS Bypass

ATyS Bypass is the ultimate transfer switching equipment solution for the availability of power in essential loads. This allows changeover systems and TSE to be inspected and maintained with a minimum or no interruption of power supply to the load.

### The solution for

- Residential buildings
- Public Buildings
- Data Centre
- Genset
- Hospital & Airports
- Infrastructure
- Telecoms...

### Main advantages

- Safety and reliability
- Stable positions
- Maintenance free
- Suitable for isolation
- Motor replacement
- Padlocking in 0 position

### Compact

Select your product as back to back for a small footprint or side by side for a DIN rail mounted solution.

### High performance

- Up to AC33B
   IEC 60947-6-1 and
   AC23A IS/IEC 60947-3.
- Even suitable for motor loads.

# TSE available from 40 A to 3200 A

One of the widest ranges of TSE on the market.

# Source changeover for AC & DC circuits



### Standards

- IEC 60947-6-1
- IS/IEC 60947-3

Proven globally

ATyS is known to be

the pioneer in RTSE

and ATSE products

installed worldwide.

with over 500 K units

• IEC 61439 (ATS Bypass)

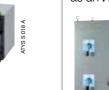




ATyS g M 40 - 160 A; 2P

ATYS SOIB A

ATyS S & S d 40 - 125 A 4P





ATyS r, d, t, g, p 125 - 3200 A; 3P/4P

# ATyS is also available as an **ATyS Bypass**



40 A - 3200 A Single & double line No break option.

### Ease of installation

Simple wiring with wide terminals and a very compact frame providing a small footprint.

### Redundancy

- Includes a safe and easy to use on-load manual operation.
- Emergency handle included as standard.

### Technology

Sliding pressure contacts that are selfcleaning and designed to withstand heavy short circuits (lcw).

### Fast switching

ATyS M (d, t, g, p)

40 - 160 A: 4F

Motorised as well as manual switching retains 100% of the performance thanks to the independent TSE mechanism.

### Precision

- Solid sliding bar with synchronised pole contacts.
- Fully independent switching mechanism.

### ATSE type

The right version for your application with or without dual power supply communication, software and more.

### Accessories

- Spreading bars
- Terminal screens
- Terminal shrouds
- Aux contacts
- Interphase barrier
- Bridging bars

### RTSE from 4000 A to 6300 A



- Safe on-load transfer with OFF Position: 3/4P Open Transition I 0 II.
- High performance switching: AC32: 143 kA lcm and 65 kA lcw (100 ms).
- Fixed and withdrawable versions with rack available.
- $\bullet$  Cost effective and the ideal solution for panel builders with high rating requirements.



# Socomec worldwide

### IN INDIA

### **CORPORATE OFFICE**

B1, II Floor Thiru-Vi-Ka Industrial Estate Guindy, Chennai - 600 032 Tel: +91 44 3921 5400 / 5423 / 5466 Mob: +91 9711229993, +91 9790968731 Fax: +91 44 39215450 info.in@socomec.com

### MANUFACTURING FACILITY

756 Pace City II Sector 37 Gurgaon - 122 001 Haryana

Tel: +91 124 4562700, 4597803 Fax: +91 124 4562733 CIN: U00000HR1999PTC038504

### **BRANCH OFFICES**

160, Arun Arch, 2nd Floor

### **BANGALORE**

9th Cross, Indiranagar First Stage Bangalore - 560 038 Tel: +91 80 41739101-03 Mob: +91 9972578171, +91 9886323448

### COCHIN

47/590, Mattathumkattil Narayanan Asan Road Ponnurunni, Vyttila Cochin - 682019 Mob: +91 9745012322, +91 8939550688

### **COIMBATORE**

12, 3rd Cross Street Lakshmipuram, Ganapathy Coimbatore - 641 006 Mob: +91 8939550688. +91 9003032012

### **HYDERABAD**

3<sup>rd</sup> Floor 6-3-652/K/12, KAUTILYA Complex Somajiguda Hyderabad - 500 082 Mob: +91 9959444277, +91 9642528800

### **KOLKATA**

AK-257, Sector-2 Salt Lake City, Kolkata - 700091 Mob: +91 9836405558, +91 8697709095

### MUMBAI

Office No.404, 4th Floor
"C" Wing, Neelkanth Business Park
Nr. Vidyavihar Station, Vidyavihar (W)
Mumbai - 400 086
Tel: +91 9987052602, +91 9167542007

### **NEW DELHI**

Plot No 100,1st Floor Okhla Industrial Estate Phase III New Delhi - 110020 Tel: +91 11 40884000 Mob: +91 9958595941, +91 9953595413

### PUNE

Plot No. 30, Wireless Co-operative Society Behind Convergys, Aundh Pune 411 007 Telefax: +91 20 25881587 Mob: +91 9987052604, +91 9423204106

YOUR DISTRIBUTOR / PARTNER

### RESIDENT OFFICIES

### **AHMEDABAD**

+91 9727753931 +91 9376639333

### CHANDIGARH

+91 9023154784

### TRIVANDRUM

+91 9020179364

### **VADODARA**

+91 9099947988

### IN EUROPE

BELGIUM FRANCE GERMANY ITALY NETHERLANDS POLAND PORTUGAL ROMANIA SLOVENIA SPAIN SWITZERLAND UNITED KINGDOM TURKEY

### IN ASIA PACIFIC

AUSTRALIA CHINA SINGAPORE THAILAND

### IN MIDDLE EAST

**UNITED ARAB EMIRATES** 

IN AMERICA

**USA, CANADA & MEXICO** 

OTHER COUNTRIES

www.socomec.co.in/worldwide

### HEAD OFFICE

### SOCOMEC GROUP

SAS SOCOMEC capital 10 686000 € 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.lsd@socomec.com

www.socomec.co.in















DOC 2770133 - 11/16 - Photo: Martin Bernhart - Réalisation: Socomec