



ATyS S

Remote Transfer Switching Equipment
for Auto Mains Failure and Auto Transfer
Switching applications up to 125 A



SOCOMEK: an independent manufacturer attentive to your needs

The benefit of a specialist: founded in 1922, SOCOMEK is an industrial group with a multicultural workforce of over 3000 people. Our core business - the availability, power control and safety of low voltage electrical networks with an increased focus on transfer switch equipment (TSE).

The culture of independence

- Control over decision-making.
- Respect for human values.

The vision of a specialist

- Complete control over technological process.
- Optimal customised solutions.

A cutting edge laboratory

- 100 MVA of instantaneous power.
- Prestigious lab accredited by COFRAC.
- Works in partnership with KEMA, CEPEC, UL, CSA, ASTA, Lloyd's Register of Shipping, Bureau VERITAS, BBJ-SEP, EZU, GOST-R and others...

The spirit of innovation

- Significant R&D investment.
- Always one technological step ahead.

The focus on service

- Design and commissioning.
- Customer training.

A flexible manufacturing structure

- European centres of excellence.
- Competitive production sites.
- Lean Management principles.
- Short lead times.
- High quality.

Four key applications: the know-how of a specialist

Ensuring the availability of high-quality power for critical applications



Managing power and protecting individuals and property

Improving building and facility energy efficiency



Guaranteeing the safety and durability of PV (photovoltaic) facilities



APPLI 1559 A

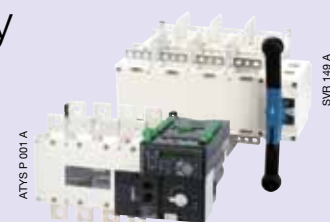
Competitive • Reliable • Safe • Compact • DC Controls • Factory assembled

ATyS S: Remote Transfer Switching Equipment (RTSE) based on proven reliable technology

The ATyS S is a cost effective yet extremely robust RTSE solution designed for Auto Mains Failure (AMF) & Auto Transfer Switching (ATS) applications.

Engineered by "Power Control & Safety" specialists, the ATyS S provides clear technical benefits and differentiation for Genset Standby Power Applications with loads of up to 125 A (< 90 kVA/415 Vac).

Furthermore, the ATyS S benefits of SIRCOVER & ATyS back to back changeover switch technology that has long been a worldwide reference in transfer switching equipment (TSE).

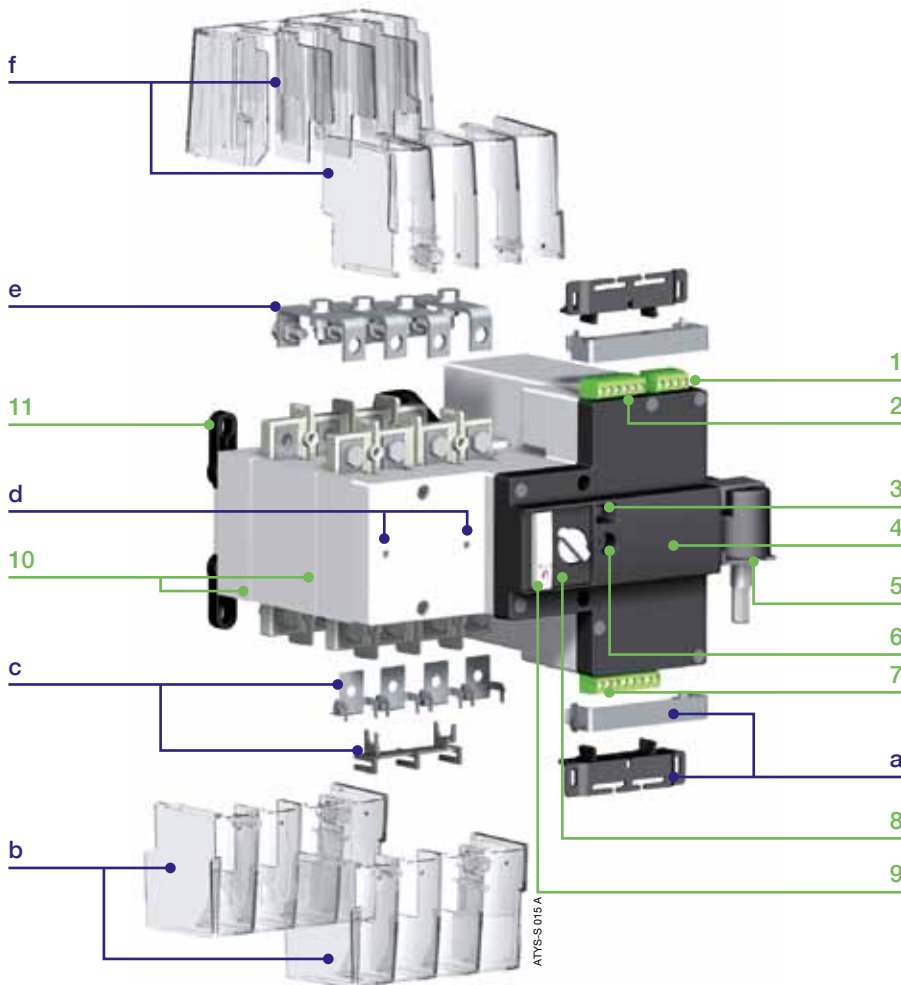


SIRCOVER/ATyS range
125 - 3200 A



ATyS S

A fully integrated cost effective solution to isolate and switch between a main and an alternative standby power supply with loads of up to 125 A: < 90 kVA/3 phase/415 Vac



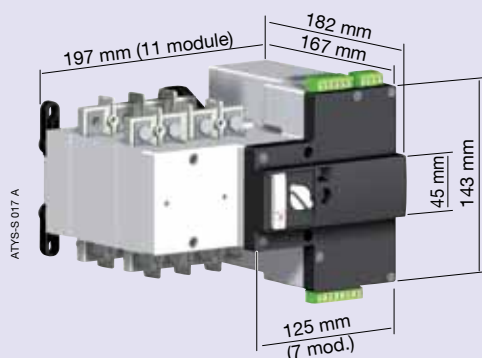
Included as standard

1. Control/Command inputs
2. Position auxiliary contact output
3. Switch position indication window (clearly shows position as I - 0 - II)
4. Replaceable motorisation module (only 4 screws to remove)
5. Emergency manual operation handle and storage clip (dual function)
6. Shaft location for manual operation
7. Dual AC aux control power supply (also available in single AC or 12-48 Vdc)
8. Operating mode selector switch (Auto/Manu/Padlocking mode)
9. Facility for padlocking in "0" position (up to 3 padlocks of 4-8 mm)
10. Back to back load break switches (includes an inherent mechanical interlock)
11. Adjustable fixing lugs (x4)

Available as an accessory

- a. Easy secure connector bracket
- b. Supply side terminal shrouds
- c. Voltage tapping kit
- d. Mounting holes for the ATyS S din rail accessory (accepts up to 4 modules)
- e. Reversible top/bottom bridging bars
- f. Load side terminal shrouds

Dimensions



Robust design and build with a very compact footprint

Fits into virtually any enclosure with a depth of ≥ 200 mm

Main benefits



Safe and Reliable

- **Prevents premature equipment failure** through a stable position design that ensures to retain constant pressure on the switch contacts independent of the network voltage (this prevents welding of the contacts as well as operating coil failure.)
- **Protects downstream loads** from bounce and chatter effects commonly produced by contactor based TSE that need a constant supply to be held in the "ON" position (prevents damage to sensitive equipment).
- **Total control** when using the ATyS S 12/24/48 Vdc versions available as a standard product (totally isolated from the network voltage whilst providing the possibility to switch to any position I – 0 – II at all times).
- **Wide-band AC control voltage** when using the 230 Vac ATyS S or ATyS Sd to safely accept control voltage fluctuations of +/- 30% (160 - 310 Vac).



Simple Online Maintenance

- **Minimal down time** is guaranteed thanks to the independent ATyS S power and control modules (in the unlikely event of a failure, the motorisation module can be replaced easily and quickly. Only 4 screws!).
- **Uninterrupted power to the load** is also possible during maintenance (the power section can remain in circuit and still be operational with the motorisation module in place as well as removed. "Dual emergency manual operation with the same handle").



Fully Integrated

- **Guaranteed operation** as the ATyS S is delivered factory assembled and tested by SOCOMEC (no risk or time necessary to assemble a kit made up from several loose parts).
- **Increased reliability** as compared to solutions assembled from loose parts (single point of responsibility & factory tested as a complete functional unit in full compliance with IEC 60947-6-1).
- **Added safety** through an inherent and fail-safe mechanical interlock that ensures that the main and the alternative supplies are never closed simultaneously.
- **Easy to order:** a single reference provides for the complete solution.



User Friendly

- **Explicit operating modes** allow the user to select between Auto, Manual and locked (padlocked) mode using a simple and accessible selector switch.
- **Emergency operation** is easy, safe and designed for virtually any user to manage with confidence.



Cost Effective

- **Energy efficient** through a design based on stable switch positions where power consumption is minimal and only required during transfer.
- **A compact footprint** that allows the ATyS S to be installed in virtually any enclosure with a depth of ≥ 200 mm.
- **Quick and easy installation:** three control wiring terminals, four fixing bolts, incoming and outgoing power terminals all integrated to a back to back switch assembly and front mounted motorisation unit.
- **Optimized ergonomics** that provide extremely close proximity bridging.

Performance and Standards

Utilisation category

Transfer Switching Standards

IEC 60947-6-1 / GB 14048-11

- AC 32B - 415 Vac: (40 - 80 A)
- AC 31B - 415 Vac: (40 - 125 A)

Load Break Switch Standard

IEC 60947-3

- AC 23A - 415 Vac: (40 - 63 A)
- AC 22A - 415 Vac: (40 - 100 A)
- AC 21B - 415 Vac: (40 - 125 A)

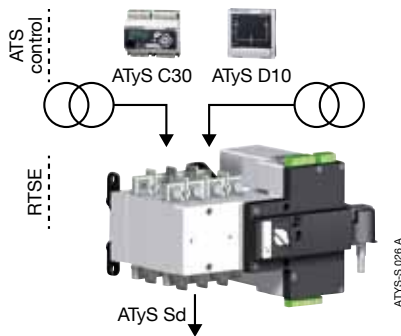
Current ratings: (4P)

40 A / 63 A / 80 A / 100 A / 125 A

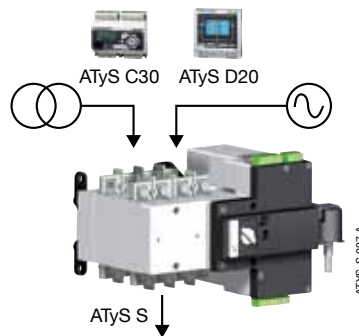


Typical applications

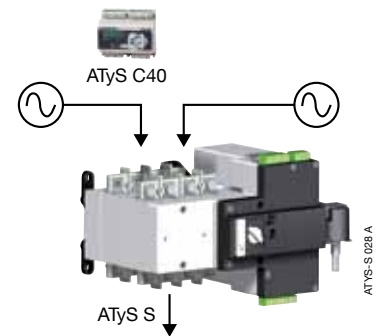
Mains/Mains



Mains/Genset

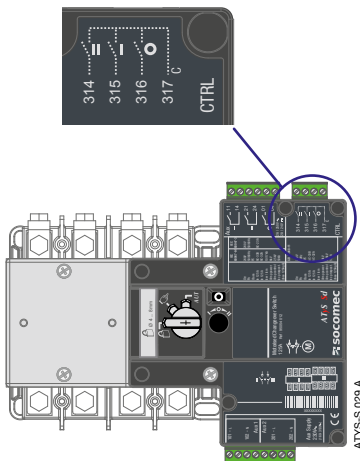


Genset/Genset

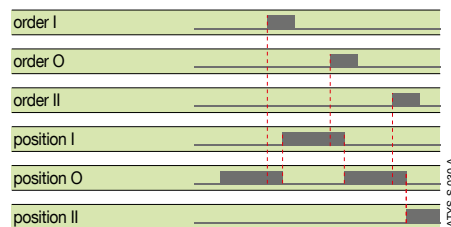


Operating principles

Three stable positions (I – 0 – II) with two control modes: Impulse or Contactor logic



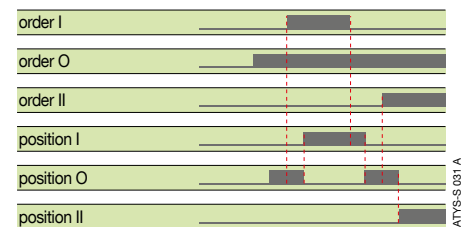
• Impulse logic (316/317 open)



60 ms = maintained
Tables exclude transfer times. (I-O-II < 700 ms).

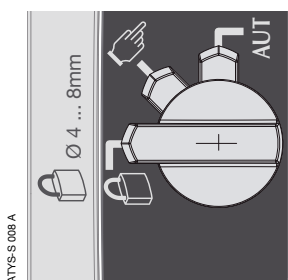
The ATyS S is driven to a stable position after receiving an impulse order of > 60 ms. Orders I and II have priority over O.

• Contactor logic (316/317 closed)



The ATyS S is driven to a specific position (I or II) for as long as the position order is maintained. With the control supply available, when order I or II disappears, the switch returns to the 0 position.

Three operating modes: Auto, Manual and Locked



• AUTO Mode

In this mode, transfer is controlled remotely through contacts 314 to 317 whilst use of the manual operation handle is made impossible.

• MANUAL Mode

Ideal in emergency situations, this mode inhibits all remote operation, and retains the switching performance.

• LOCKED Mode

In this mode safety is increased during maintenance as it is only allowed to lock in the zero position whilst making remote/auto as well as local/manual operation inhibited.

This position allows to operate the built in robust padlocking system that accepts up to 3 off 4-8 mm padlocks as standard.

Selection guide

What current rating?

What power supply

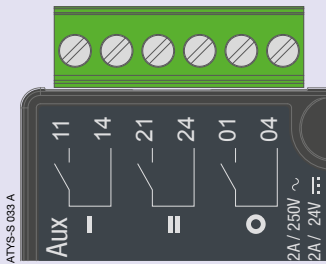
		ATyS S	ATyS S	ATyS S	ATyS Sd
POWER SUPPLY		12 Vdc (9 - 15 Vac)	24/48 Vdc (17 - 62 Vac)	230 Vac (160 - 310 Vac)	2x 230 Vac (160 - 310 Vac)
RATED CAPACITY					
4 x 40 A	≤ 28 kVA (415 V)	9505 4004	9506 4004	9503 4004	9513 4004
4 x 63 A	≤ 45 kVA (415 V)	9505 4006	9506 4006	9503 4006	9513 4006
4 x 80 A	≤ 57 kVA (415 V)	9505 4008	9506 4008	9503 4008	9513 4008
4 x 100 A	≤ 70 kVA (415 V)	9505 4010	9506 4010	9503 4010	9513 4010
4 x 125 A	≤ 90 kVA (415 V)	9505 4012	9506 4012	9503 4012	9513 4012

Accessories

SUPPLY SIDE TERMINAL SHROUDS X 2	LOAD SIDE TERMINAL SHROUDS X 2	VOLTAGE TAPPING KIT	4 MODULE DIN RAIL	BRIDGING BARS 4P	SECURE CONNECTOR BRACKET X 2	POWER TRANSFORMER 400V -> 230VAC
9594 4012	9594 9012	9599 4001	9599 4002	9509 4012	9599 4003	9599 4004

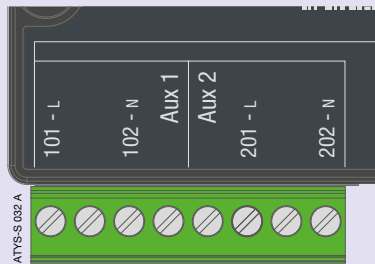
FAQ

• Fully integrated auxiliary contacts



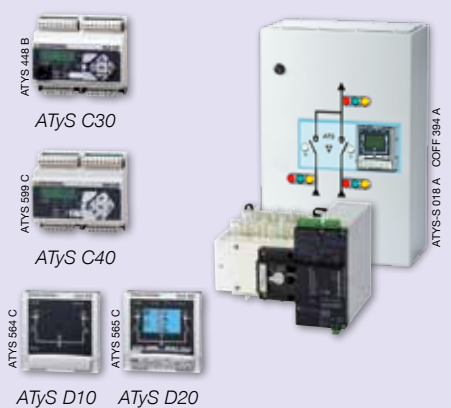
All ATyS S products include three fully independent position auxiliary contacts as standard through a six pin terminal.

• Dual Power Supply (DPS)



The ATyS Sd model includes for a dual control power supply (DPS) rated at 230 Vac +/- 30% providing redundant control power to the motorisation module. (Two separate supplies). This added functionality is fully integrated within the same compact product.

• Enclosed solutions



The ATyS S has a simple interface compatible with virtually any make of genset controller having an integrated ATS or an external AMF controller such as the ATyS C30 and the ATyS C40. SOCOMEC design and build 12 Vdc, 24/48 Vdc, 230 Vac and dual 230 Vac supply complete AMF/ATS enclosed solutions specific to individual needs. **Contact your usual SOCOMEC sales representative for details.**

The ATyS family: your complete range of Transfer Switching Equipment (TSE)

“The ATyS range is Trusted by Major Players Worldwide”
With over 400 000 motorised changeover switches in service since 1990.

Today the ATyS line includes a complete range of remote operated (RTSE) and automatic (ATSE) transfer switching equipment up to 3200 A. Selecting the right ATyS will depend on the application as well as the nature of installation in which the ATyS will be installed. An overview of the complete ATyS range is presented below. (Contact your usual SOCOMEC sales representative for more details and availability).

Just the right ATyS for your application...

ATyS: small footprint (back to back configuration)



from 125 A to 3200 A

- ATyS p** Power/Genset Management
- ATyS g** Simple Genset Management
- ATyS t** Transformer Management
- ATyS d** Dual Power Supply (DPS)
- ATyS** RTSE

ATyS S: small footprint (back to back configuration)



from 40 A to 125 A

- ATyS Sd** Small Genset with DPS
- ATyS S** (RTSE) Small Genset

ATyS M: modular profile (side by side configuration)



from 40 A to 160 A

- ATyS M6e** Evolved Genset Management
- ATyS M6s** Simple Genset Management
- ATyS M6b** Transformer (building) Management
- ATyS M3s** RTSE

Manually Operated Transfer Switching Equipment (MTSE)

- SIRCO M 25 A - 125 A (I-O-II)/(I-I+II-II)
- SIRCOVER (I-O-II): 125 - 3200 A (I-I+II-II): 125 - 1800 A
- SIRCOVER BY-PASS 125 A - 1600 A
- ATS BY-PASS 125 A - 1600 A
- ATS By-Pass Solution 40 A - 3200 A



GAMME 285 A

For further information on the SOCOMEC range of TSE please visit our website on:

www.socomec.com/en/changeover



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