ATyS Bypass

No-break ATS maintenance bypass
from 40 to 3200 A

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Function

ATyS Automatic Transfer Switches automatically transfer to the available source, ensuring continuity of supply to life safety and critical loads such as sprinklers, firefighting/evacuation lifts, water pumps, etc. In addition, the no-break maintenance bypass function ensures continuity of service during inspection, preventative maintenance, and testing; full isolation of the Automatic Transfer Switch ensures that maintenance work can be carried out safely. ATyS Single Line Bypass provide a no-break priority source bypass. In addition to the functions of a Single Line Bypass, ATyS Double Line Bypass allow the alternate source to be selected during maintenance procedures. Source availability, ATS position & status, and source measurements are displayed on the door-mounted D20 interface. Access to configuration parameters, test, and control functions (password protected) is also available via the D20. ATS Bypass are required for compliance with installation standards BS 9999 and BS 8519, where occupation of the building is conditional upon the availability of the life safety and firefighting equipment.

Advantages

Safe maintenance without interruption

In addition to its primary switching function, operation into bypass mode fully isolates the ATS without interruption to the load, enabling safe maintenance and testing operations to be performed.

100% manufacturer certified IEC 61439-2 solution

ATyS Bypass is a reliable and safe solution, certified by independent third party LOVAG/ASEFA in accordance with standard IEC 61439-2. The integrated Socomec products are recognised for their robustness and performance in line with standards IEC 60947-3 and IEC 60947-6-1.

24/7 monitoring

The SoLive* application is available with this solution, allowing users to monitor their equipment in real-time and to schedule maintenance. This application automatically shows the current status of the ATyS Bypass equipment, displays alarms, and sends real-time notifications of unscheduled events.

Option.

Customised solution

Socomec ATyS Bypass solutions can be factory-modified on request to meet specific requirements. Typical modifications include, but are not limited to, the following:

- Factory-fitted thermo-hydrostatically controlled heater
- Increased degree of protection
- Stainless steel enclosure
- Additional volt-free outputs (programmable outputs & switch position auxiliary contacts)
- Surge protection devices on incoming source/ sources
- Enclosure colour (e.g. RAL 3020)
- Pushbutton/keyswitch auxiliary controls
- Narrow solutions for riser installations
- Cable entry/exit
- Power and energy measurement
- ATyS Bypass solution for connection to a Socomec remote life safety indicator panel.

Please contact us for details on any of these options.

General characteristics

- 40 to 3200 A, 4-pole.
- 230/400 VAC ± 20%, 50/60 Hz (ATS is self-powered from incoming sources).
- Class PC Automatic Transfer Switch.
- No-break bypass solution.
- Voltage and frequency monitoring of both sources.
- Phase rotation and neutral position control.
- Bi-stable output relay for genset start/stop command (NO/NC).
- Remote position control (I, 0, II) with dry contact.
- Manual emergency operation.
- Volt-free programmable outputs for BMS/remote indication.
- ATS and bypass switch auxiliary contacts.
- RS485 JBus/Modbus communication (as standard).
- ATS Auto/Manual selector.
- Degree of protection: IP41 as standard (others available on request).
- Hinged door with 3 mm double bar locking.
- Mounting: ≤160A wall-mounted (brackets supplied loose), ≥250A floor-mounted on feet.
- D20 remote interface (door-mounted).
- Mimic panel (3 LEDs for live voltage on source 1, source 2, and load; optional 15/17-LED mimic panel).
- Protection against direct contact for each functional unit.
- Steel enclosure, RAL 7035 epoxy powder coating (others available on request).

The solution for

- Data centres
- Healthcare
- Infrastructure & Transport
- Buildings

Strong points

- Safe maintenance without interruption
- 100% manufacturer certified IEC 61439-2 solution
- 24/7 monitoring
- Customised solution

Conformity to standards

- IEC/BS 61439-2
- IEC/BS 60947-6-1
- IEC/BS 60947-3

For compliance with installation standards:

- BS 9999
- BS 8519

Expert Services

Technical site audit, solution specification, advice, commissioning, maintenance, training, etc.

Our Expert Services extend to a complete offer of customised services to make your project a success.

2 model versions

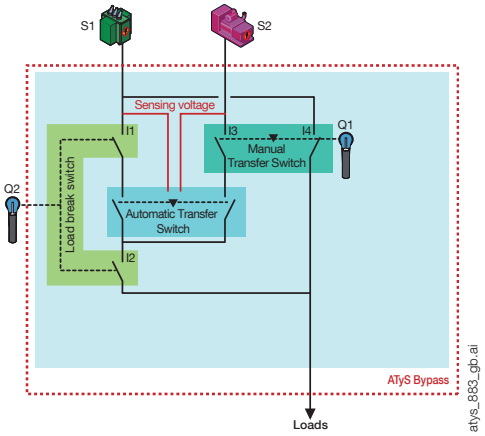
ATyS Single Line Bypass

- Comprises an Automatic Transfer Switch and a priority source bypass line. Bypass and isolation of the ATS can be performed without interruption to the load.

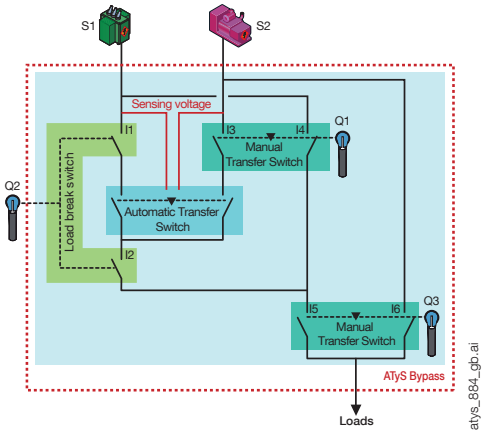
ATyS Double Line Bypass

- Comprises an Automatic Transfer Switch, a priority source bypass line and an alternate source bypass line. Priority source bypass, and isolation of the ATS, can be performed without interruption to the load.
- The addition of the secondary bypass line allows the alternate source to be selected during maintenance work, should there be a priority source outage. ATyS Double Line Bypass provide an extra layer of power availability for the most critical applications.

ATyS Bypass - SINGLE LINE



ATyS Bypass - DOUBLE LINE



Functions

Normal position:

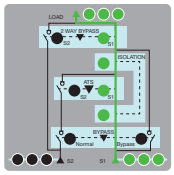
- The load is supplied by the priority source. In the event of priority source failure, the ATS will automatically transfer to the alternate source when it is available.

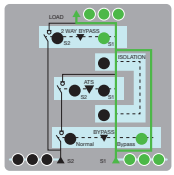
Bypass position:

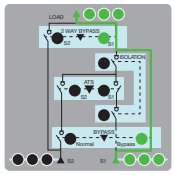
- The priority source bypasses the ATS without interruption to the load. The alternate source can be selected for bypass (Double Line solution only).

Isolation/Test position test:

- The ATS is isolated and can be safely tested and maintained without interrupting the load.







References

Standard solution - with ATyS p M

Current (A)	N° of poles(1)	Single line Reference	Double line Reference
40	4 P	1785 **4004**	1786 **4004**
63	4 P	1785 **4006**	1786 **4006**
80	4 P	1785 **4008**	1786 **4008**
100	4 P	1785 **4010**	1786 **4010**
125	4 P	1785 **4012**	1786 **4012**

(1) Standard ATyS Bypass require a distributed neutral to power the ATS and other components (230 VAC). If no neutral is available, please contact us for a solution.

Standard solution - with ATyS p

Current (A)	No. of poles(1)	Single line Reference	Double line Reference
160	4 P	1785 **4016**	1786 **4016**
250	4 P	1785 **4025**	1786 **4025**
400	4 P	1785 **4040**	1786 **4040**
630	4 P	1785 **4063**	1786 **4063**
800	4 P	1785 **4080**	1786 **4080**
1000	4 P	1785 **4100**	1786 **4100**
1,250	4 P	1785 **4120**	1786 **4120**
1,600	4 P	1785 **4160**	1786 **4160**
2000	4 P	1785 **4200**	1786 **4200**
2500	4 P	1785 **4250**	1786 **4250**
3 200	4 P	1785 **4320**	1786 **4320**

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Options and accessories

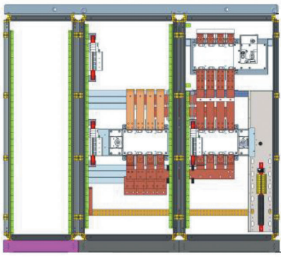
The following options are available for factory installation. Please contact us for more information on these and any other requirements.

Installation

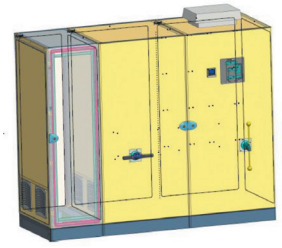
Cable entry
To allow for any cable entry and exit configuration.

Extension cabinet
Enables customised connection management, with a very simple routing space for cables/bars for all connection types.

Increased connection capacity
For the connection of multiple or oversized cables.



Elevated base
Facilitates routing and connection of cables from the bottom.



Protection

Tinned copper busbars

Under harsh environmental conditions, it is necessary to tin copper busbars to prevent oxidation.

Opaque IP2X protection screens
Opaque IP2x protection screens can be provided. Screens are transparent as standard.

Increased degree of protection
For environments at risk of dust or water spray penetration, ingress protection can be increased (IP54/IP55).

Surge protection
Type 1 or type 2 surge protection for either or both incoming sources.

Condensation protection
A thermo-hydrostatically controlled heater is available for external/damp installations.

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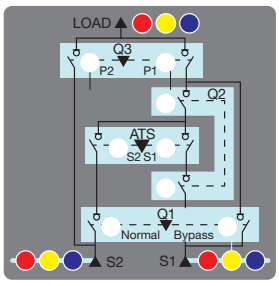
Monitoring

Enhanced mimic panel
Providing a full overview of the equipment status, an enhanced mimic panel indicates the following on the enclosure door:
- Voltage presence per phase for sources and load
- Position of the ATS
- Position of the bypass line switches



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24/7 remote monitoring

With the SoLive app and a series of IoT sensors, multiple ATyS Bypass systems can be remotely monitored.

A real-time 'mimic panel' display of signals provides the status of ATSs and bypass lines.

Critical parameters such as the availability of sources or temperature and overloading of equipment, generate alarms in the event of failure

Load measurement

A measurement device (e.g. DIRIS A or COUNTIS P) can be installed to monitor electrical parameters downstream of the ATyS Bypass, with values (voltage, current, power, energy, etc.) displayed locally on the enclosure door, and with remote access via communication.

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Generator test management

A standard feature for ≥160A; for ATyS Bypass units ≤125A, the addition of a programmable timer enables generator exercise scheduling.

Additional volt-free outputs

Additional position auxiliary contacts and programmable outputs (≥160A), wired to easy-access connection terminals.

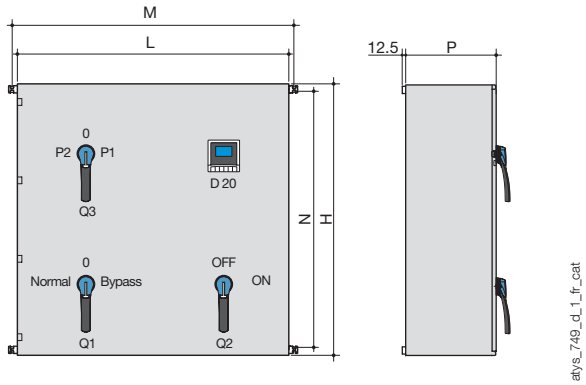
Expert services

Assessment, specifications, consulting, implementation, maintenance, training, etc.

Our Expert Services extend to a complete offer of customised services to make your project a success.

Dimensions

40 to 160 A



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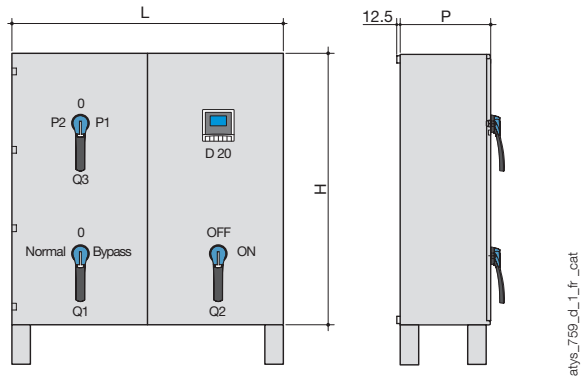
≥ 250 A



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Wall-mounted

Current (A)	Recommended cross-section (mm²)	H (mm)	L (mm)	D (mm)	M (mm)	N (mm)	Weight (kg)
40	10	800	800	300	848	752	80
63	16	800	800	300	848	752	80
80	25	800	800	300	848	752	80
100	35	1000	800	300	848	752	80
125	50	1000	800	300	848	752	80
160	70	1000	800	400	848	752	160

Floor-mounted

Current (A)	Recommended connection cross-section (mm²)	H (mm)	L (mm)	D (mm)	Weight (kg)
250	120	1200 (1)	1000	550	180
400	240	1200 (1)	1000	550	200
630	2 X 185	1600 (2)	1200	600	600
800	2 x 240	1800 (2)	1,600	800	1000
1000	4 x 150	1800 (2)	1,600	800	1000
1250	4 x 185	2000 (3)	2000	1000	2000
1600	4 x 240	2000 (3)	2000	1000	2000
2000	8 x 150	2000 (4)	2200	1000	2500
2500	8 x 185	2000 (4)	2200	1000	2500
3200	8 x 240	2000 (4)	2200	1000	2500

(1) Add 200 mm for the base feet.
(2) Add 100 mm for the base feet.
(3) Add 125 mm for the base feet.
(4) Add 120 mm for the base feet (allow for an additional 160 mm for roof fan).

Connection (input/output)

- Standard cable entry and exit is at the bottom. Other configurations may, according to cable size, require specific mounting brackets (≤160 A) or a factory-fitted side extension cabinet (≥250 A). Please contact us for more information.