

ATyS Bypass

Automatic transfer switch without interruption
from 40 to 3200 A



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The solution for

- > Data center
- > Healthcare
- > Building

Strong points

- > Bypass - no outage
- > 100% manufacturer certified solution
- > 24/7 monitoring
- > Customised solution

Conformity to standards

- > IEC 61439-2
- > IEC 60947-6-1
- > IEC 60947-3
- > BS 60947-6-1
- > BS 9999:2017
- > BS 8519:2020

Function

ATyS Bypass Single and Double Line units provide automatic switchover to the available source in the event of electricity network failure. They thereby ensure continuity of power supply, human safety and critical loads such as sprinklers, lifts, water pumps, etc.

In addition, they ensure continuity of service during inspection, maintenance and testing operations, as well as complete isolation of the automatic transfer switches for safe intervention without load interruption.

ATyS bypass Single and Double Line units enable bypass onto the priority source. The ATyS Bypass Double Line version can also be used to bypass onto the backup source.

Advantages

Bypass - no outage

In addition to its primary switching operation function, the ATyS Bypass devices can be used to fully isolate the ATS and ensure service continuity during inspection, maintenance and testing operations, without load outage, in fully safe conditions.

100% manufacturer certified solution

ATyS Bypass is a reliable and safe solution certified by independent third party LOVAG/ASEFA in accordance with standard IEC 61439-2.

The Socomec products used in it are recognised for their robustness and performance in line with standards IEC 60947-3 and IEC 60947-6-1.

24/7 monitoring

The Solve* application is available with this solution and allows users to monitor their equipment in real time and schedule maintenance. This application automatically shows the latest status of all your equipments, displays alarms, and sends real-time notifications of unscheduled events.

*Option.

Customised solution

ATyS enclosures can be adapted in line with your specifications. There are a wide range of options available to meet different needs (connection type, tin-plated bars, monitoring mimic panel, measurements, etc.).

General characteristics

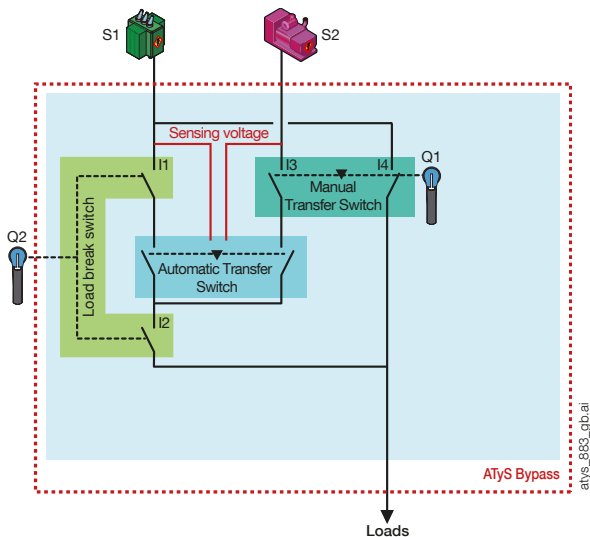
- Automatic PC-class transfer switch, 40A to 3200A, 4 poles.
- 230/400 VAC \pm 20%, 50/60 Hz (ATS self-powered through input sources).
- Control of the voltages and frequencies of both sources, phase rotation and neutral position.
- Communications: JBus/Modbus RS485, genset startup/shutdown, ATS and BYpass switch positions, programmable output.
- Steel enclosure/cabinet, RAL 7035, IP41 (other options on request).
- Protection of each functional unit from direct contact.

2 model versions

ATyS Bypass Single Line

- This consists of 2 components: an automatic changeover switch and a single bypass line connected to the priority source.

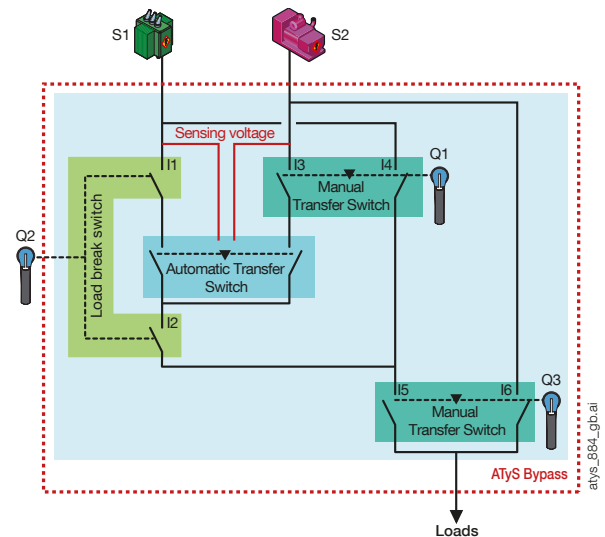
ATyS Bypass - SINGLE LINE



ATyS Bypass Double Line

- This consists of 2 functions: an automatic changeover switch and a double bypass line so the available source can be selected during the bypass periods if there is a mains outage.

ATyS Bypass - DOUBLE LINE



Functions

Normal position:

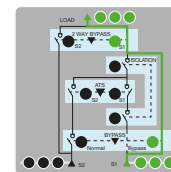
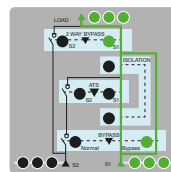
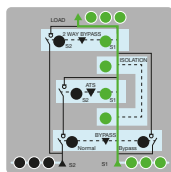
- All changeover functionalities are provided by the ATS. The products providing bypass are disconnected.

Bypass position:

- Power is bypassed to the load without interruption. The load is powered by source 1 or source 2 via the ATS or manual changeover switch.

Test position test:

- The load is not powered via the ATS but via the bypass line. The ATS is isolated and can be safely tested and maintained without disturbance on the load. The load is powered by Source 1 or Source 2 via the manual changeover switch.



References

System without options - 230 VAC with ATyS p M

Current (A)	N° of Poles	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

System without options - 230 VAC 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 (contact us)

Installing

Cable entry

Connection adapted according to the location of input and output cables for the installation. Can be selected from above or from below, with installation of connection terminals.

Extension enclosure

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

Position of neutral

Depending on the constraints of standards, use and installation, the neutral position can be on the right or the left.

Marking of cables

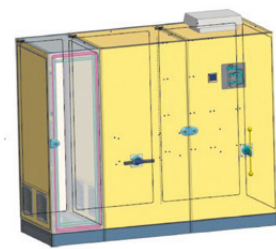
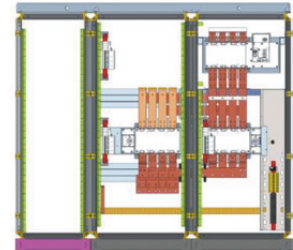
Cables are marked by labels and coloured sleeves, for quick simple identification. Customisation is offered to adapt to local constraints.

Large clamps

For the connection of larger cross-section cables with larger clamps, an adapted connection terminal enables easy connection.

Spacers

Facilitates routing and connection of cables from the bottom.



Protection

Tinned copper busbars

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

Tint of IP2X protection covers

Depending on usage, the protection against direct contact (IP2X) covers may be transparent or opaque.

IP54 reinforced cabinet

For environments at risk of dust or water spray penetration, a cabinet with reinforced IP54 protection is available.

Surge suppressor.

Protect your equipment against surges with a type 1 and type 2 surge protector kit.

Condensation protection

To confront in-cabinet condensation risks, a heating resistance may be installed to control the temperature



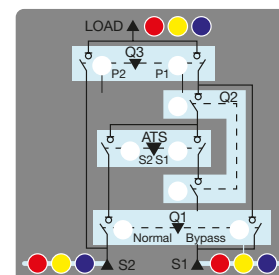
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Monitoring

Signalling mimic panel

Providing a full overview of equipment status, an indicator light mimic panel is available to signal, as selected:

- Voltage present on sources and loads, per phase if needed
- Position of the main switch (ATS)
- Position of the bypass line switches



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24/7 remote monitoring

Thanks to the SoLive app and a series of IoT sensors, multiple equipment items can be monitored remotely.

Real-time mimic panel display of signals provides the status of ATySs and bypass lines.

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

Load measurement

For monitoring of electrical parameters downstream of the ATyS Bypass, a Smart measurement unit is available, with the possibility of local readout on a door panel display (DIRIS A) or with no display (DIRIS B).

Generator test management

Function offered natively on ATyS > 250A, but requiring a programmable timer for ATyS Bypass units < 250A. The addition of a programmable timer enables management of periodic launching of generator tests.

Additional position information

Additional outputs available to transmit data on the position of ATySs: I, O or II. As standard, one normally open auxiliary contact is available on the ATyS changeover switch. An additional auxiliary contact provides a NO/NC contact for positions I and II. Up to 2 auxiliary contacts can be fitted



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Expert services

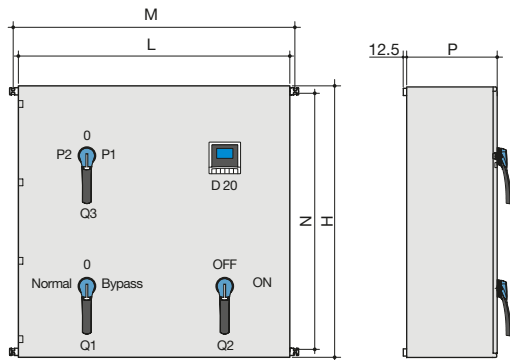
Assessment, specifications, consulting, implementation, maintenance, training, etc.

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



Dimensions

40 to 160 A

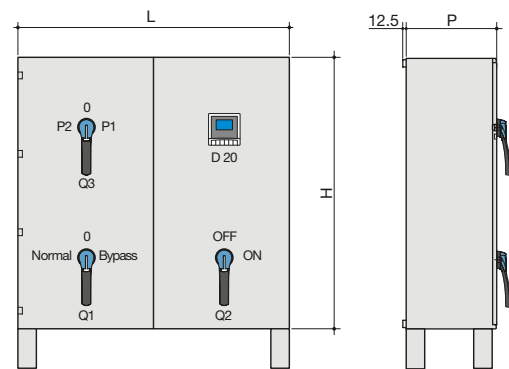


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Wall-mounted - downstream

Current (A)	Recommended cross-section (mm ²)	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

≥ 250 A



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Floor-mounted - downstream

Current (A)	Recommended connection cross-section (mm ²)	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
1,250	4 x 185	2000 ⁽³⁾	2000	1000	2000
1,600	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
3 200	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.

Connection (input/output)

- 40 to 125 A (L/L or H/L or H/H or L/H).
- 160 to 400 A (L/L or L/H).
- 630 A (L/L).
- ≥ 800 A (contact us).