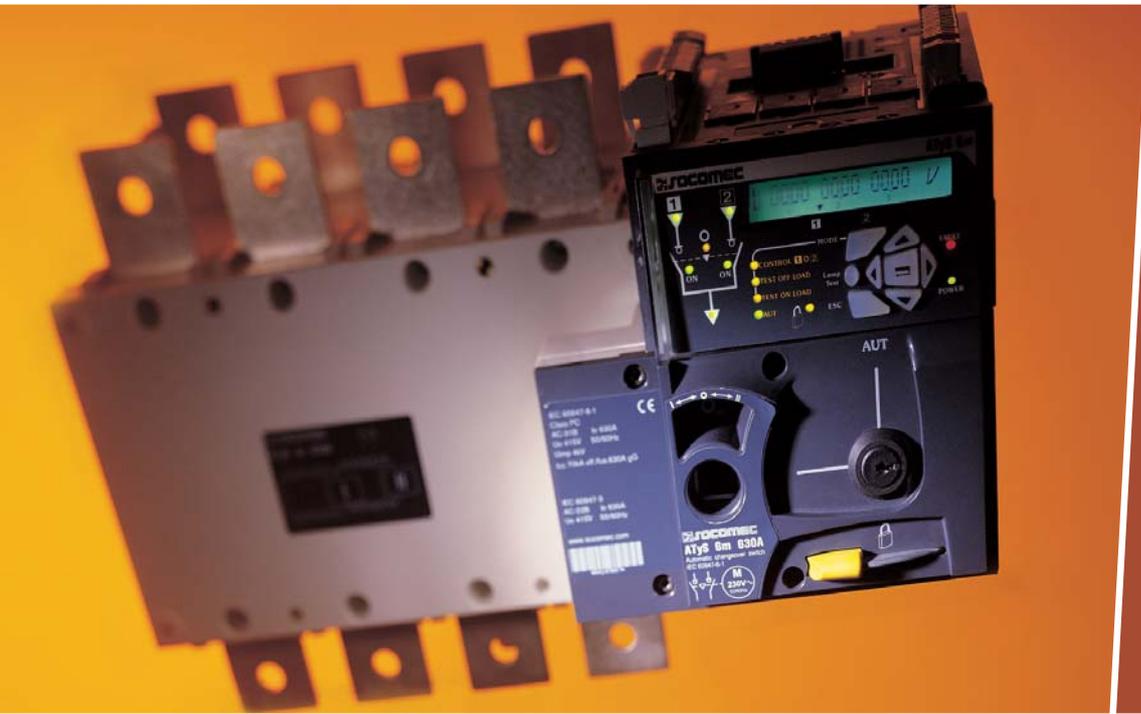


ATyS

Automatic Transfer Switch
from 63 to 3200 A





Modular Automatic Transfer Switch from 63 to 160 A

CHANGEOVER

Two mechanically interlocked power switches.

OPERATION

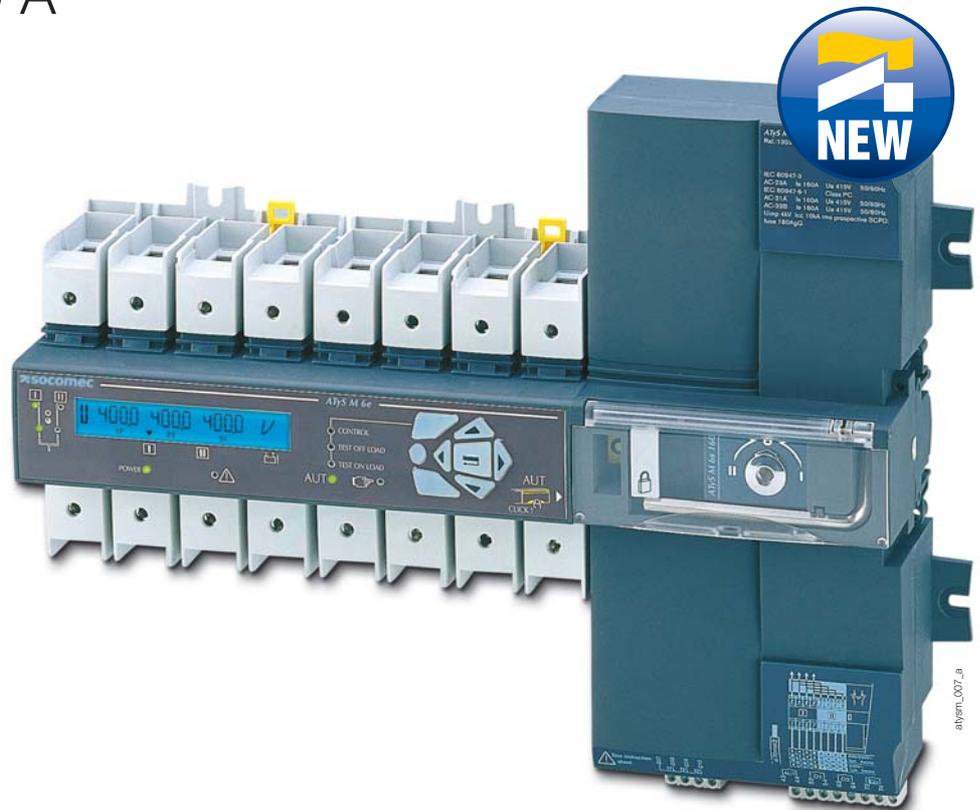
A configurable automatic control associated with an emergency manual operation.

MONITORING & CONTROL

A built-in configuration and control interface, simple or advanced.

INSTALLATION

A modular product adapted to any type of enclosure integration.



ADAPTED RANGE

ATyS M proposes a complete range of products to meet all break before make transfer requirements.

> ATyS M 3s: remote controlled switch



> ATyS M 6s: simple and ergonomic

Configurable automatic transfer switch cycles, with stable positions.



> ATyS M 6e: advanced and programmable

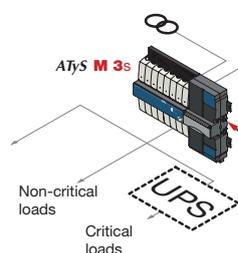
Fully programmable automatic transfer switch cycles ensuring position stability or return to 0 position feature upon loss of network.



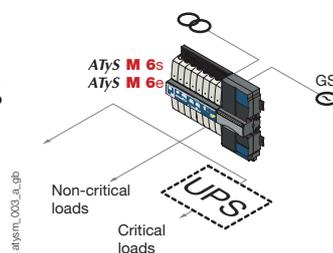
A PRODUCT FOR ALL CHANGEOVER APPLICATIONS FROM 63 TO 160 A

> Network/Generator Set

- Generator set control

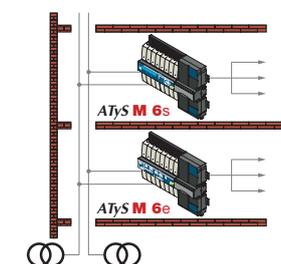


- ATS solution

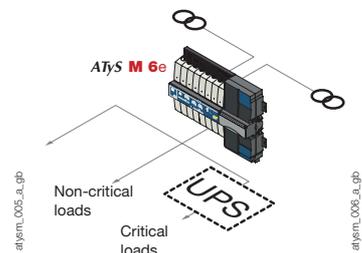


> Network/Network

- Building services



- Control with or without priority





AN OPTIMISED SWITCHING SYSTEM

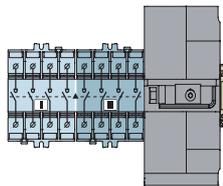
> Switching technology

- An on load switch disconnecter providing safety isolation combined with high making and breaking characteristics
- Safety isolation
- Stable positions



> A new switching module combining

- High dynamic withstand
- Fast operation
- High number of operations



> Two power switches

Mechanically and electrically interlocked

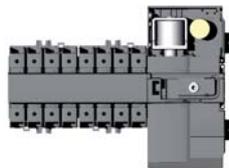
FAST ELECTRICAL OPERATION

> Electromagnetic control

Enables fast I - II switching operation

> An available energy storage device

Enables return to 0 position feature upon loss of network without any power source available



OPERATION

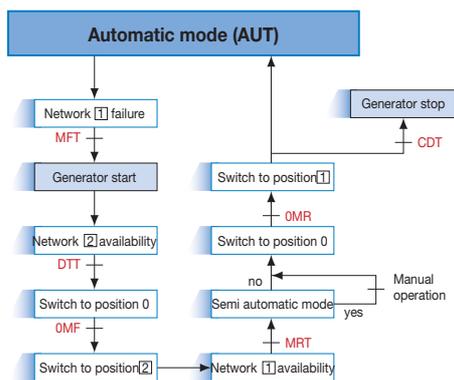


> Automatic/Manual operating mode selection via the protective cover

> Operation using a standard allen key

> Padlocking function configurable in position 0 or in all three positions I - 0 - II

A DEDICATED CONTROL LOGIC



Example (generator application):
 Network 1 : priority power source
 Network 2 : backup power source

A COMPLETE RANGE OF ACCESSORIES

> Voltage tap



atysm_038_a

> Auxiliary contacts



atysm_002_a

> Sealable cover (ATyS M 6s)



atysm_037_a

> Bridging bar



atysm_021_a

atysm_019_a

> Terminal shrouds



atysm_035_a

atysm_027_a

> Remote display (ATyS M 6e)



atysm_033_a_1_cat

atys_565_c

FLEXIBLE INTEGRATION



exppl_177_a



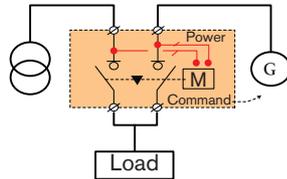
atys_028_e_gp

exppl_179_b

ATyS M integrated into a modular DIN enclosure (Din rail or back plate mounted).

SELECTION GUIDE

ATyS 63 to 3200 A



APPLICATIONS

- Normal/backup transfer with an external automatic control
- Normal/backup transfer with an internal automatic control (ATS)
- Load changeover
- External controller: Main/Main or Genset/Main applications
- External controller: Dual genset application

CHARACTERISTICS

AUXILIARY POWER SUPPLY

- Version 1 AC power supply
- Version 2 AC power supplies
- Version 1 DC power supply

OPERATION

- Volt free auxiliary contacts for the I, 0, II positions
- Automatic for I, 0, II positions
- MAN / AUT selector switch

MONITORING

- Main network : 3U
- Emergency network : 3U
- Main network: 1U
- Emergency network: 1U

CONFIGURATION

- Choice of logic: contactor or impulse
- Upper and lower thresholds, associated hysteresis
- Operating time delays
- Network priority

FRONT DISPLAY

- Status of supplies, positions, commands, faults, padlocking
- U
- F
- 3I, P, Q, S, PF, In monitored

CONTROL / OPERATION

- Position I and II auxiliary contacts
- Position 0 auxiliary contacts
- Padlock and MAN / AUT information auxiliary contacts
- Generator start-up output auxiliary contacts
- Fault relay output auxiliary contacts
- RS485 (JBUS MODBUS®) - accessory
- 2 input / 2 output - accessory

REMOTE INTERFACE (ACCESSORY)

- ATyS D10 display device
- ATyS D20 display and control device

PAGES



ATyS M 3s
63 to 160 A



ATyS M 6s
63 to 160 A



ATyS M 6e
63 to 160 A

see page
A.12

see page
A.12

see page
A.12

The ATyS range

The ATyS range

- ATyS
- ATyS C30 / ATyS C40
- ATyS VISION software
- Other changeover switches

Overview

The **ATyS** remote controlled and automatic transfer switch family proposes a complete range of low voltage compact changeover switches and accessories.

The new **ATyS M** family dedicated to applications below 160 A retains key features and characteristics of the existing **ATyS** product range bringing some innovation.

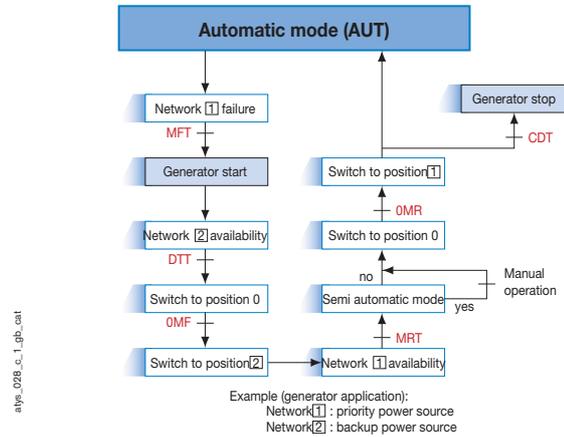
ATyS range is now also available up to 3200A to complete the family for higher current applications.

ATyS are composed of two mechanically and electrically interlocked switches.

All the products are fitted with **emergency manual operation**.

- either **remotely controlled**: **ATyS M 3** and **ATyS 3** products are driven by volt-free dry contacts allowing switching operation between position I, 0 or II, from an external control logic or a plc (control relays type ATyS C30).
- or **automatically controlled**: **ATyS M 6** and **ATyS 6** are dedicated to break before make automatic transfer applications. They integrate control relays, timers and test functions to manage a Normal/Backup switching operation between 2 networks or a generator set and a network.

Operating principle



atyem_008_sc_1_ghc.cat

Normal / Emergency Timers

- MFT: Main failure timer (0-60s)
- DTT: Delay to transfer on Generator set timer (0-60s)
- OMF: 0 position stay before transfer on Generator set (0-20s)
- MRT: Main return timer before retransfer (0-30min.)
- OMR: 0 position stay before re transfer on Main (0-20s)
- CDT: Cool down timer before Generator set shutdown (0-10 min).

ATyS M: Modular automatic transfer switches from 63 to 160 A

Description

ATyS M electrical operation utilises coil technology to achieve fast transfer cycles.

ATyS M 6e brings a new innovative solution allowing the changeover to be driven into 0 position without any power supply available.

Manual operation

AUT/ MAN sealable cover

Opening the front cover disables electrical or automatic operations and enables manual or padlocking facilities.

Indication of the front cover status (opened or closed) is available on the **ATyS M** via a dedicated auxiliary contact.

Emergency manual operation

ATyS M products can be manually operated in any of the three available positions (I,0,II) using a standard allen key provided once the cover is opened.

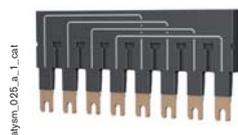
Padlocking facility

It is possible as standard to padlock the **ATyS M** product in 0 position. 3 positions padlocking is configurable on the product before its installation.





► **Main accessories**



atyem_025_a_1_cat

Bridging bar

To provide a common connection point on the load side:
- insulated IP2x
- leaves the cable terminals free by using a dedicated fixing location.



atyem_026_a_1_cat

Single phase voltage sensing tap

Allows up to 2x 1.5 mm². sensing cables connection on main power terminals keeping power cables capacity complete. They can be mounted in any of the power terminals but not simultaneously with the bridging bar.



atyem_027_a_1_cat

Terminal shroud

Provides protection against direct contact with the connection terminals or parts. A specific front hole enables access to terminals' tightening screws for thermographic measurement or voltage sensing.

The same accessory can be mounted on the incoming or outgoing side of the products.



atyem_028_a_1_cat

Auxiliary contacts

Each product can be equipped with 2 auxiliary contacts. It integrates one NO/NC contact per position (I, O, II). Characteristics: 250 VAC - 5A maximum.



atyem_565_c_2_cat

Remote interfaces ATyS D10 or D20

To display source availability and changeover state on the front of a panel. RJ45 cable connection between ATyS M 6e only, and ATyS D10 / D20.



atyem_043_a

Sealable cover

Controls settings cover to avoid ATyS M 6s parameters access due to a sealable facility.

ATyS M 3s: Remote controlled changeover

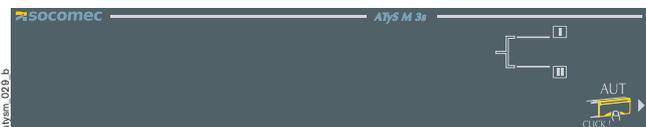
► **Power supply**

ATyS M 3s is equipped with two independent 230 VAC (176-288 VAC), 50/60 Hz (45-65 Hz) power inputs.

- These two supplies can be individually connected to source I and source II power inputs:
- Power supply I must be available to reach position I
- Power supply II must be available to reach position II.

The 0 position is in this type off control scheme only a transitory position.

- Use of a SOCOMEC DPS unit (Double Power Supply), or of an independent power supply will allow control of the product in any of the three positions as soon as power is available on the product power inputs.



atyem_029_b

► **Command**

Positions command is realised via external volt free contacts (example ATyS C30 controller). Position remains stable in case of power supplies loss (switch technology).

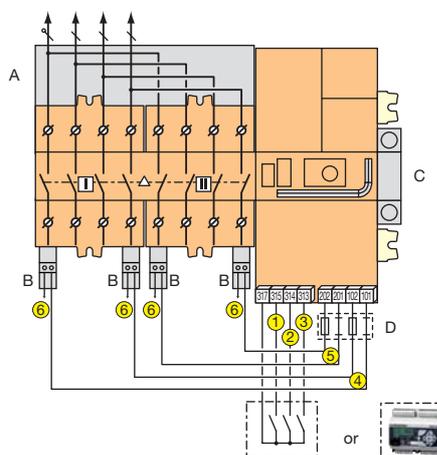
Impulse control mode

- A minimum 30 ms impulse required.
- I and II commands have priority over 0 command (different from ATyS).
- The first command (order) received has priority for its duration.

Contact control mode

- The 0 command must be maintained to enable contactor control mode (strap between 0 / C command and common terminal).
- In case of position I or position II command loss, the product returns to position 0 (only if the required power input to allow the operation is available).

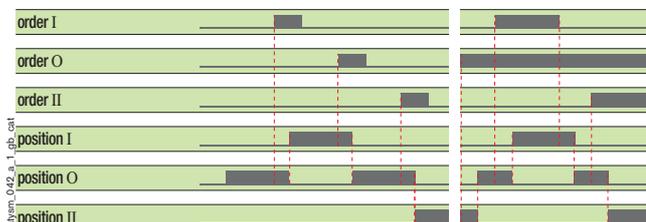
► **Wiring diagram**



atyem_040_c_1_x_cat

- 1: control position I
- 2: control position II
- 3: control position 0 / C
- 4: power supply I (230 VAC)
- 5: power supply II (230 VAC)
- 6: voltage tap

- A: bridging bar (accessories)
- B: single phase voltage sensing tap (accessories)
- C: auxiliary contacts - 1 AC per position I, O, II (accessories)
- D: F1 / F2 = fuse 10 A gG.



atyem_042_a_1_gb_cat

The ATyS range

The ATyS range

- ATyS
- ATyS C30 / ATyS C40
- ATyS VISION software
- Other changeover switches

ATyS M 6: Automatic Transfer Switch

► Characteristics

Power supply

ATyS M 6 products are self power supplied from incoming supplies: 230 VAC (176-288 VAC), 50/60 Hz (45-65 Hz). Two different versions are available:

- 230 / 400 VAC with neutral conductor distributed: product is power supplied between phase and neutral.
- 127 / 230 VAC with or without neutral conductor distributed: product is power supplied between 2 phases.

The neutral conductor can be connected to the left or right side of each switch.

Return to 0 position feature (only on ATyS M 6e)

With ATyS M 6e it is possible to return automatically to the 0 position after a power supply loss.

An energy storage device enables return to the 0 position even with no voltage available on the power supply inputs.

► Operation

ATyS M 6s



4 potentiometers

- Nominal voltage configuration.
- Voltage and frequency thresholds configuration.
- Operating cycles timers configuration: MFT (0 to 60s), DTT (5s), MRT (0 to 30 min), CDT (4 min).

4 dip switches

50 or 60 Hz, single or three phases, 2 seconds 0 position transition during I-II transfer cycles (OMR/OMF), Network / Network or Network / Genset application.

4 leds

Power supply sources availability; Automatic mode (cover opened); Fault (command order and position not reached).

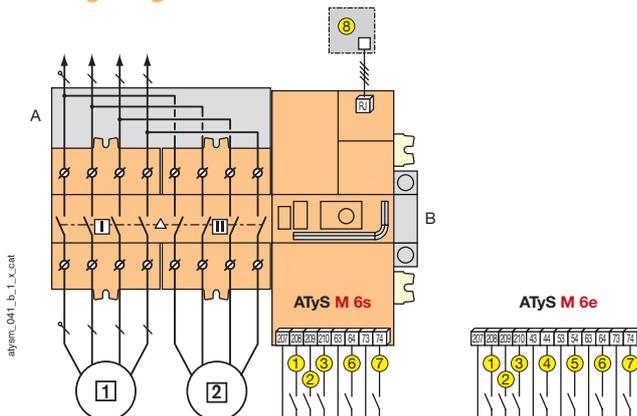
3 external command inputs

- Automatic mode inhibition.
- Remote test on load (or priority change).
- Manual retransfer from emergency source to main source (validation required).

1 NO bi-stable output relay for generator start /stop command (30 VDC / 2 A).

1 NO fault relay (250 VAC / 0,5 A).

► Wiring diagram



Single phase or three phases voltage and frequency control on networks I and II

ATyS M 6s

- Linked over/under voltage and over/under frequency thresholds from 5 to 20% of U_n and 3 to 10% of f_n .
- Hysteresis levels fixed at 80% of the set up threshold.

ATyS M 6e

- Independent over/under voltage and over/under frequency thresholds +/-20% of nominal values.
- Configurable associated hysteresis thresholds.
- Phase rotation and unbalance control.

Metering only on ATyS M 6e

- 3 phases voltage measurement on networks 1 and 2.
- Frequency measurement on networks 1 and 2.
- Timers display and count down.

ATyS M 6e



Display + Keypad

- Parameters configuration (thresholds, timers ...).
- 3 phases voltage and frequency for source I and II, timers, number of cycles and last event display.
- Tests and positions control facilities.

Leds

Power On; Sources availability; Changeover position; "MAN / AUT" mode; Test / Control operation; Fault.

3 configurable inputs

Automatic mode inhibition; Test on load and off load; Manual retransfer; Changeover position control; Network priority change.

1 NO bi-stable output relay for generator start /stop command (30 VDC / 2 A).

2 programmable output relays (250 VAC / 3 A)

Source I or II availability; Load shedding output; Fault relay.

ATyS D10 or D20 remote interface connection.

- 1 priority source
- 2 backup source

ATyS M 6s

- 1: manual retransfer / priority change
- 2: test on load
- 3: automatic mode inhibition
- 6: fault relay
- 7: genset start / stop relay

ATyS M 6e

- 1 - 2 - 3: programmable input
- 4: "non automatic" mode output
- 5 - 6: programmable output
- 7: genset start / stop relay
- 8: RJ 45 ATyS D10/D20 remote interface connection

A: bridging bar (accessory)

B: auxiliary contacts (accessory) - 1 AC per position I, 0, II.



ATyS: from 125 to 3200 A

Description

ATyS products are mechanically interlocked, back to back mounted, load break switches. Their compact design guarantees position stability and high dynamic withstand.

Manual operation



AUT / MAN command

An AUT / MAN selector inhibits automatic operation and allows handle use when positioned in manual mode. This selector is key type on ATyS 3e, 6e and 6m.



Backup manual operation

The product can still be switched without any power source using the manual operation. The handle (supplied with the product) allows direct operation of the changeover shaft. The switch cannot be manually operated in automatic mode (AUT) or padlocked.

Main accessories



Remote control interface

Enables operation, configuration and display of all the functions remotely. It can be connected to an ATyS 6e or 6m via an RJ45 type link. When connected, all features available on the front of the product are inhibited. Maximum connection distance: 3m. 2 models: ATyS D10 (visualisation) and ATyS D20 (visualisation and control).

Power supply

- ATyS 3s: one power input 230 VAC (176-288 VAC), 50/60 Hz (45-65 Hz).
- ATyS 3e, 6e, 6m: two power inputs VAC (176-288 VAC), 50/60 Hz (45-65 Hz), one defined as power source 1 and the other as backup power source 2. Electrical operation of the product is possible as soon as one of the power supplies is available.

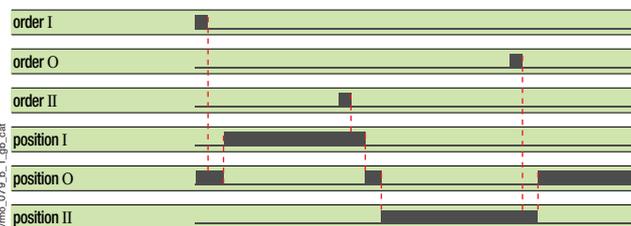
Control logic

General

- The switching operation can be driven by an external dry contact. "Pulsed contact logic" (impulse) or "maintained contact logic" (contactor), are both recognised on the control inputs.
- The type of logic must be selected during configuration (programming).
- Priorities: the first order received has priority as long as it is present. A zero command has always priority, excepted in case of controls inhibition.
- ATyS 3e integrates number of operation counter and allows optional communication or inputs/outputs module connection.

Impulse logic

- The switching command is a pulsed dry contact lasting at least 100 ms.
- When the order disappears, the product remains in position. The impulse can be of infinite duration without causing any disturbance.



Padlocking

Up to three padlocks can be used to lock the device.

When padlocked:

- manual operation is not possible
- electrical controls are disabled.

Padlocking in the 3 positions I, 0 and II, available in option.



Voltage sensing and power supply kit

Allows voltage sensing and power supply connections through a controlled routing of the conductors, in order to avoid the use of specific protection devices (fuse / mcb).

Simplified diagram



Contactor logic

- The transfer command is a maintained dry contact.
- If command I or II disappears, the device returns to zero position, if power supply is available.
- A 0 command drives the device into zero position, irrespective of the status of the I and II commands.



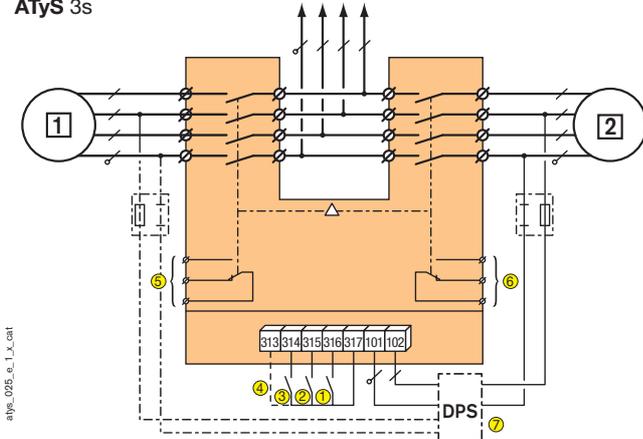
The ATyS range

The ATyS range

- ATyS
- ATyS C30 / ATyS C40
- ATyS VISION software
- Other changeover switches

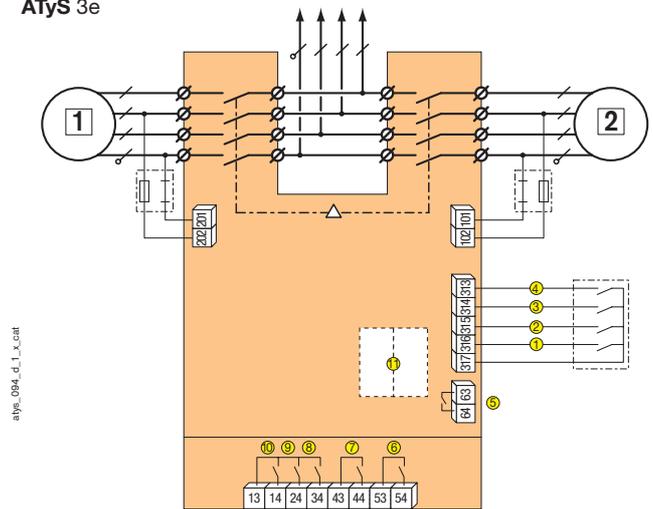
Wiring diagram

ATyS 3s



- power source 1
- power source 2
- 1: control position 0
- 2: control position I
- 3: control position II
- 4: configuration of the control logic
- 5: NO/NC position and pre-breaking contact for position I
- 6: NO/NC position and pre-breaking contact for position II
- 7: Double Power Supply (accessory).

ATyS 3e



- power source 1
- power source 2
- 1: control position 0
- 2: control position I
- 3: control position II
- 4: inhibition of the control position
- 5: fault relays
- 6: auxiliary contact, closed when the switch is padlocked
- 7: auxiliary contact, closed when the switch is in "AUT" mode
- 8: auxiliary contact, closed when the switch is in position 0
- 9: auxiliary contact, closed when the switch is in position II
- 10: auxiliary contact, closed when the switch is in position I
- 11: slots for optional modules.

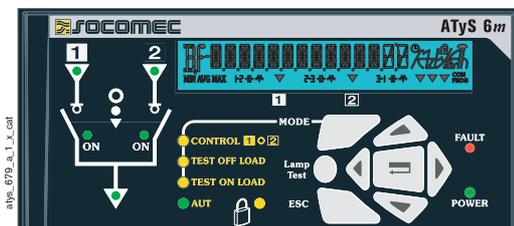
ATyS 6: Automatic Transfer Switches

General features

Single or three phases control on networks I and II

- Independent Under/ Over voltage and Under / Over frequency thresholds: +/- 20% of nominal value.
- Adjustable hysteresis thresholds.
- Phase rotation control.

Operation



Display + keypad

- Setup and Thresholds configuration;
- Timers configuration MFT (0-60 s), DTT (0-60 s), OMF (0-20 s), MRT (0-60 min.), OMR (0-20 s), CDT (0- 10 min.).
- Voltage, Frequency, Timers monitoring.
- Test and positions control operations.

Leds

Power on; Fault; Sources availability; Changeover position; AUT mode; Test and control modes of operation.

Metering

- 3U on network 1 and 2.
- Frequency on network 1 and 2.
- Normal/Emergency timers.
- 3I, In, P, Q, S, PF (3 phases) on ATyS 6m.

1 configurable generator set bi-stable start/stop relay (30 VDC, 5 A, AC1).

1 NO fault relay activated in case of changeover position ordered and not reached (30 VDC, 5 A, AC1).

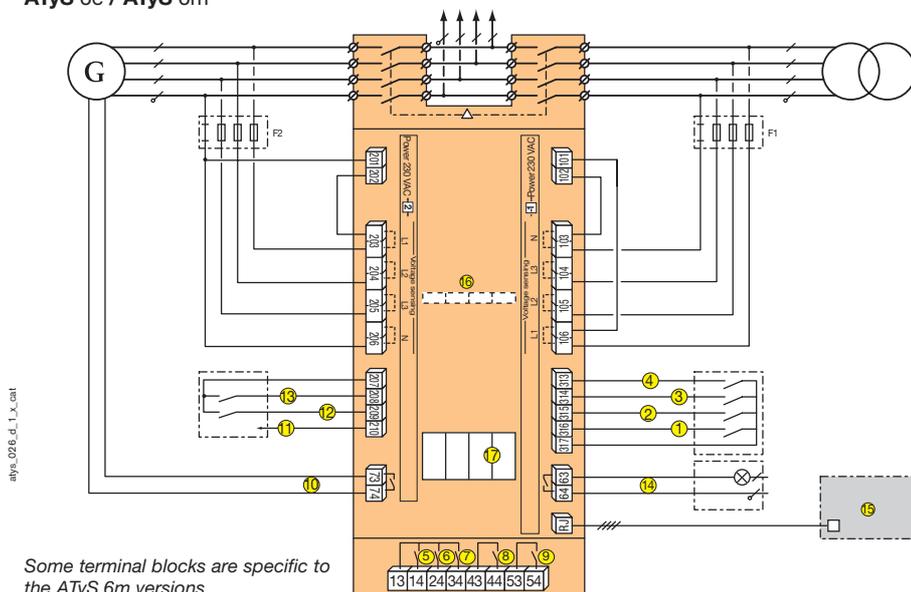
Control modes

- *Test on-load (load transfer)*: allows loss of main's network simulation. The complete automatic cycle is then followed. Can be activated from the keypad of the device or remotely from an external dry contact.
- *Test off-load (without load transfer)*: allows a generator set start and stop operation. Can be activated from the keypad of the device.
- *Control I, 0, II*: allows the product to be driven into one of the positions; the automatic cycle is then no longer active. Can be activated from the keypad of the device's front or using an external dry contact.
- *Semi automatic*: when this mode is active, any transfer back to the main network must be acknowledged on the keypad of the product or via an optional input contact.
- One input to control backup source changeover (when DTT timer = max value). Example: changeover operation on multiple generator sources after their synchronisation.



► **Simplified wiring diagram**

ATyS 6e / ATyS 6m



- 1: control position 0
- 2: control position I
- 3: control position II
- 4: remote command
- 5: auxiliary contact, closed when the switch is in position I
- 6: auxiliary contact, closed when the switch is in position II
- 7: auxiliary contact, closed when the switch is in position 0
- 8: auxiliary contact, closed when the switch is in "AUT" mode
- 9: auxiliary contact, closed when the switch is padlocked
- 10: gen-set start and stop command
- 11: auxiliary power supply (for optional modules control)
- 12: remote "test on-load" input
- 13: DTT inhibit input. Transfer initiated as soon as the input is closed when DTT = max. value.
- 14: fault output
- 15: remote control interface
- 16: current transformers (ATyS 6m only)
- 17: slots for optional modules.

► **ATyS enclosed range**

Enclosed ATS solution



Product range

- From 63 to 1600 A.
- 230/400 VAC +/- 20%.
- 3 or 4 wires applications.

Range

The ATyS 3s, 6e and 6m enclosed range offer the following features:

- Non-Automatic Transfer Switch (ATyS 3s)
- Automatic Transfer Switch - ATS (ATyS 6e)
- Single or dual by-pass automatic transfer switch (ATyS 6m).

Features

- Compact design.
- Mechanically interlocked switching.

Enclosed dual by-pass solution



Cable entry

- Top or bottom cable entry as standard from 63 to 250 A.
- Bottom cable entry as standard from 400 to 1600 A.
- Specific cable entry requirements available upon request.
- Neutral position located on the right as standard.
- Alternative options available upon request.

Main accessories

- Double (Self) power supply for ATyS 3 only.
- 2nd position auxiliary contact.
- Solid neutral.
- 400 / 230 VAC transformers (on each network) for 3 phases 400 VAC applications.
- Panel mounted ATyS D10 or D20 remote interfaces and indication meter.

ATyS

63 to 3200 A

The ATyS range

▶ **ATyS**

ATyS C30 / ATyS C40

ATyS VISION software

Other changeover switches

ATyS M 3s



atyem_013_a_1_cat



ATyS M 6e

atyem_007_a_1_cat



ATyS 3s

atys_003_a_1_cat



ATyS 6m

atys_102_a_1_cat



Functions

ATyS products are 3 and 4-pole switches **remotely controlled by volt free contacts** (ATyS 3) or **automatic transfer switches** (ATyS 6).

They are a combination of two load-break switches mounted back to back electrically and mechanically interlocked.

They provide manual switching or remote controlled source inversion or changeover under load, of two low voltage power circuits.

Conformity to standards

- IEC 60947-3
- EN 60947-3
- NBN EN 60947-3
- BS EN 60947-3
- GB 14048
- IEC 60947-6-1
- EN 60947-6-1
- NBN EN 60947-6-1
- BS EN 60947-6-1

General characteristics

- Isolation with positive break indication
- On load switching
- Manual emergency operation
- 3 stable positions (I, 0, II) or overlapping contacts on request (I, I+II, II)
- Padlocking in 0 or in all three positions (I, 0, II)
- AUTO / MANU selector.



Illustrations

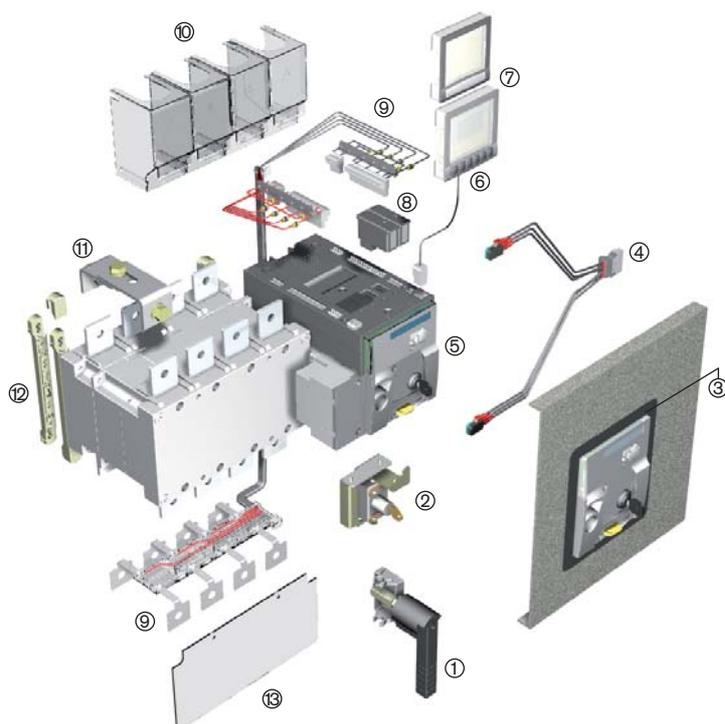
ATyS **M** from 63 to 160 A



Overview (for further details, please see the installation instructions supplied with each device).

1. ATyS D10 or D20 remote interfaces (ATyS **M 6e** only)
2. 1 or 2 auxiliary contacts
3. Terminal shrouds
4. Voltage sensing and power supply tap
5. Bridging bars.

ATyS from 125 to 3200 A



1. Backup handle and support (included with device)
2. Handle key interlocking accessories
3. Door protective surround
4. Additional auxiliary contacts
5. Standard device
6. Connecting cable for ATyS D10 or D20 remote interfaces (ATyS 6)
7. ATyS D10 or D20 interfaces (ATyS 6)
8. Plug-in optional modules (not for ATyS 3s)
9. Voltage sensing and power supply kit (ATyS 6)
10. Terminal shrouds
11. Bridging bars
12. Mounting spacers
13. Terminal screens.

atym_052_a_1_x_cat

atys_615_a_1_x_cat

ATyS 63 to 3200 A

The ATyS range

ATyS

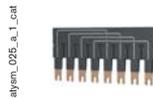
ATyS C30 / ATyS C40

ATyS VISION software

Other changeover switches

References

► **ATyS M 3**



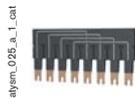
Rating (A)	No. of poles	ATyS M 3s ⁽¹⁾	Bridging bars	Voltage sensing and power supply tap	Terminal shrouds ⁽²⁾	Auxiliary contacts ⁽³⁾
63	4 P	1323 4006	1309 4006	pair 1399 4006	pair 2294 4016	1309 0001
80	4 P	1323 4008				
100	4 P	1323 4010				
125	4 P	1323 4012	1309 4016			
160	4 P	1323 4016				

(1) Power-supply voltage 230 VAC.

(2) 2 pieces: top and bottom.

(3) 1 contact block for I, 0 and II positions.

► **ATyS M 6**



Rating (A)	No. of poles	Network (VAC)	ATyS M 6s	ATyS M 6e	Bridging bars	Voltage sensing and power supply tap	Terminal shrouds ⁽¹⁾	Auxiliary contacts ⁽²⁾	Remote interface ⁽³⁾	Sealable cover ⁽⁴⁾
63	4 P	127 / 230	1353 4006	1363 4006	1309 4006	pair 1399 4006	pair 2294 4016	1309 0001	ATyS D10 1599 2010	1359 0000
	4 P	230 / 400	1354 4006	1364 4006						
80	4 P	127 / 230	1353 4008	1363 4008						
	4 P	230 / 400	1354 4008	1364 4008						
100	4 P	127 / 230	1353 4010	1363 4010						
	4 P	230 / 400	1354 4010	1364 4010						
125	4 P	127 / 230	1353 4012	1363 4012						
	4 P	230 / 400	1354 4012	1364 4012						
160	4 P	127 / 230	1353 4016	1363 4016	1309 4016					
	4 P	230 / 400	1354 4016	1364 4016						

(1) To shroud front switch top and bottom 2 references required.

(2) 1 contact block for I, 0 and II positions.

(3) For ATyS M 6e only.

(4) For ATyS M 6s only.



References

► ATyS 3



Rating (A)	No. of poles	ATyS 3s	ATyS 3e	Bridging bars	Terminal shrouds ⁽¹⁾⁽²⁾	Terminal screens ⁽³⁾
125	3 P	1523 3012	1533 3012	1 P 4109 0019	3 P 2694 3014	3 P 1509 3012
	4 P	1523 4012 ⁽⁴⁾	1533 4012		4 P 2694 4014	4 P 1509 4012
160	3 P	1523 3016	1533 3016	1 P 4109 0025	3 P 2694 3021	3 P 1509 3025
	4 P	1523 4016 ⁽⁴⁾	1533 4016		4 P 2694 4021	4 P 1509 4025
250	3 P	1523 3025	1533 3025	1 P 4109 0039	3 P 2694 3051	3 P 1509 3063
	4 P	1523 4025 ⁽⁴⁾	1533 4025		4 P 2694 4051	4 P 1509 4063
400	3 P	1523 3040	1533 3040	1 P 4109 0080	-	3 P 1509 3080
	4 P	1523 4040 ⁽⁴⁾	1533 4040			4 P 1509 4080
630	3 P	1523 3063	1533 3063	1 P 4109 0120	-	3 P 1509 3160
	4 P	1523 4063 ⁽⁴⁾	1533 4063			4 P 1509 4160
800	3 P	1523 3080	1533 3080	1 P 4109 0160	-	3 P 1509 3200
	4 P	1523 4080 ⁽⁴⁾	1533 4080			4 P 1509 4200
1000	3 P	1523 3100	1533 3100	See page A.18 "Copper bars connection kits"	-	3 P 1509 3250
	4 P	1523 4100 ⁽⁴⁾	1533 4100			4 P 1509 4250
1250	3 P	1523 3120	1533 3120	-	-	3 P 1509 3320
	4 P	1523 4120 ⁽⁴⁾	1533 4120			4 P 1509 4320
1600	3 P	1523 3160	1533 3160	-	-	3 P 1509 3200
	4 P	1523 4160 ⁽⁴⁾	1533 4160			4 P 1509 4200
1800	3 P	1523 3180	-	-	-	3 P 1509 3200
	4 P	1523 4180	-			4 P 1509 4200
2000	3 P	-	1533 3200	-	-	3 P 1509 3200
	4 P	-	1533 4200			4 P 1509 4200
2500	3 P	-	1533 3250	-	-	3 P 1509 3200
	4 P	-	1533 4250			4 P 1509 4200
3200	3 P	-	1533 3320	-	-	3 P 1509 3200
	4 P	-	1533 4320			4 P 1509 4200

+ OTHER ACCESSORIES

	Rating (A)	Plug-in optional modules	Auxiliary contacts ⁽⁵⁾	Control voltage transformer 400/230 VAC	DC power supply	Padlocking ⁽⁵⁾	Handle key interlocking accessories ⁽⁵⁾	Door protective surround	Mounting spacers	DPS - Double power supply	
ATyS 3s	125 ... 160	-	1599 1002	1599 4063	12 VDC 1599 5012	1599 0003	1509 1006	1529 0012	1509 0001	1599 4001	
	250 ... 400		1599 1012								
	630		1599 1022								
	800 ... 1800		1599 1032								1599 4120
ATyS 3e	125 ... 160	RS485 1599 2000 2 inputs / 2 outputs 1599 2001	1599 0002	1599 4063	24 VDC 1599 5112	1599 0003	1509 1006	1539 0012	1509 0001	-	
	250 ... 400		1599 0012								
	630		1599 0022								
	800 ... 1600		1599 0032								1599 4120
	2000 ... 3200		1599 0042								1599 4200

(1) To shroud front switch top and bottom 2 references required. (2) To fully shroud front and rear / top and bottom 4 references required. (3) 1 set: top and bottom. (4) Available enclosed (see page A.24 "ATyS 3s in enclosure"). (5) Factory fitted.

ATyS 63 to 3200 A

The ATyS range

ATyS

ATyS C30 / ATyS C40

ATyS VISION software

Other changeover switches

References

► **ATyS 6**



Rating (A)	No. of poles	ATyS 6e	ATyS 6m	Bridging bars	Voltage sensing kit	Terminal shrouds ⁽¹⁾⁽²⁾	Terminal screens ⁽³⁾	
125	3 P	1563 3012	1573 3012	1 P 4109 0019	3 P 1559 3012		3 P 2694 3014	3 P 1509 3012
	4 P	1563 4012 ⁽⁴⁾	1573 4012		4 P 1559 4012 ⁽⁵⁾	4 P 1559 4013 ⁽⁶⁾	4 P 2694 4014	4 P 1509 4012
160	3 P	1563 3016	1573 3016	1 P 4109 0025	1559 3025		3 P 2694 3021	3 P 1509 3025
	4 P	1563 4016 ⁽⁴⁾	1573 4016		1559 4025 ⁽⁵⁾	1559 4026 ⁽⁶⁾		
250	3 P	1563 3025	1573 3025	1 P 4109 0039	1559 3040		4 P 2694 4021	4 P 1509 4025
	4 P	1563 4025 ⁽⁴⁾	1573 4025		1559 4040 ⁽⁵⁾	1559 4041 ⁽⁶⁾		
400	3 P	1563 3040	1573 3040	1 P 4109 0063	1559 3063		2694 3051	1509 3063
	4 P	1563 4040 ⁽⁴⁾	1573 4040		1559 4063 ⁽⁵⁾	1559 4064 ⁽⁶⁾		
630	3 P	1563 3063	1573 3063	1 P 4109 0080	3 P 1559 3080		3 P 1509 3080	3 P 1509 3080
	4 P	1563 4063 ⁽⁴⁾	1573 4063		4 P 1559 4080 ⁽⁵⁾	4 P 1559 4081 ⁽⁶⁾		
800	3 P	1563 3080	1573 3080	1 P 4109 0120	1559 3120		1509 3160	1509 3160
	4 P	1563 4080 ⁽⁴⁾	1573 4080		1559 4120 ⁽⁵⁾	1559 4121 ⁽⁶⁾		
1000	3 P	1563 3100	1573 3100	1 P 4109 0160	1559 3160		1509 4160	1509 4160
	4 P	1563 4100 ⁽⁴⁾	1573 4100		1559 4160 ⁽⁵⁾	1559 4161 ⁽⁶⁾		
1250	3 P	1563 3120	1573 3120	See page A.18 "Copper bars connection kits"	3 P 1559 3200		3 P 1509 3200	3 P 1509 3200
	4 P	1563 4200	1573 4200		4 P 1559 4200 ⁽⁵⁾	4 P 1559 4201 ⁽⁶⁾		
1600	3 P	1563 3160	1573 3160	1559 4200 ⁽⁵⁾	1559 4201 ⁽⁶⁾	1509 4200	1509 4200	
	4 P	1563 4160 ⁽⁴⁾	1573 4160					
2000	3 P	1563 3200	1573 3200	1559 4200 ⁽⁵⁾	1559 4201 ⁽⁶⁾	1509 4200	1509 4200	
	4 P	1563 4200	1573 4200					
2500	3 P	1563 3250	1573 3250	1559 4200 ⁽⁵⁾	1559 4201 ⁽⁶⁾	1509 4200	1509 4200	
	4 P	1563 4250	1573 4250					
3200	3 P	1563 3320	1573 3320	1559 4200 ⁽⁵⁾	1559 4201 ⁽⁶⁾	1509 4200	1509 4200	
	4 P	1563 4320	1573 4320					

+ OTHER ACCESSORIES

Rating (A)	Plug-in optional modules	Remote control interface	RJ45 connecting cable	Auxiliary contacts ⁽⁷⁾	Control voltage transformer 400/230 VAC	DC power supply	Padlocking ⁽⁷⁾	Handle key interlocking accessories ⁽⁷⁾	Door protective surround	Mounting spacers
125 ... 160	RS485 1599 2000	ATyS D10 1599 2010	1599 2009	1599 0002	1599 4063	12 VDC 1599 5012	1599 0003	1509 1006	1539 0012	1509 0001
250 ... 400				1599 0012		24 VDC 1599 5112				
630				1599 0022		48 VDC 1599 5212				
800 ... 1600	2 inputs / 2 outputs 1599 2001	ATyS D20 1599 2020	1599 0032	1599 0032	1599 4120	-	1599 0004	1509 1004	1539 0080	-
2000 ... 3200				1599 0042	1599 4200					

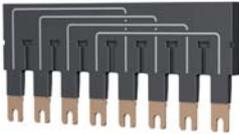
(1) To shroud front switch top and bottom 2 references required. (2) To fully shroud front and rear / top and bottom 4 references required. (3) 1 set: top and bottom. (4) Available enclosed (see page A.25 "ATyS 6e in enclosure"). (5) Neutral on the right. (6) Neutral on the left. (7) Factory fitted.



ATyS M - Accessories

Bridging bars

atym_025_a_1_cat



Use
To provide common point on either incoming or outgoing terminals.

References

Rating (A)	No. of poles	Reference
63 ... 125	4	1309 4006
160	4	1309 4016

Voltage sensing and power supply tap

atym_026_a_1_cat



Use
Allows up to 2 x $\leq 1.5 \text{ mm}^2$ voltage sensing or power cables connection. To be mounted in any terminal cage when bridging bar not used.

Reference

Rating (A)	No. of parts	Reference
63 ... 160	Pair	1399 4006 ⁽¹⁾

⁽¹⁾ 2 parts per reference.

Terminal shrouds

atym_027_a_1_cat



Use
Protection against direct contact with the connection terminals or parts.

Advantages
Perforations enabling remote thermographic inspection without dismantling.

Reference

Rating (A)	No. of parts	Position	Reference
63 ... 160	Pair	Top and bottom	2294 4016 ⁽¹⁾

⁽¹⁾ To shroud front switches top and bottom 2 references required.

Auxiliary contacts

atym_028_a_1_cat



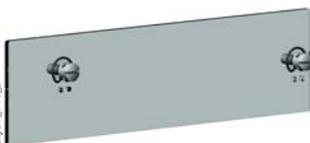
Use
Up to 2 auxiliary contacts accessory per product. Each accessory integrates 3 NOC auxiliary contacts, one per position I, 0, II. Characteristics: 250 VAC / 5 A maximum.

Reference

Rating (A)	Reference
63 ... 160	1309 0001

Sealable cover

atym_043_a



Use
Controls settings cover to prevent ATyS M 6s parameters access due to a sealable facility.

Reference

Rating (A)	Reference
63 ... 160	1359 0000

ATyS 63 to 3200 A

The ATyS range

ATyS

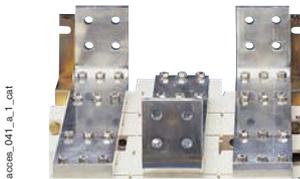
ATyS C30 / ATyS C40

ATyS VISION software

Other changeover switches

ATyS - Accessories

Bridging bars



Use

To provide common point on either incoming or outgoing terminals.

References

Rating (A)	No. of poles	Section (mm)	Reference
125 ... 160	1	20 x 2.5	4109 0019
250	1	25 x 2.5	4109 0025
400	1	32 x 5	4109 0039
630	1	50 x 5	4109 0063
800 ... 1000	1	50 x 6	4109 0080
1250	1	60 x 8	4109 0120
1600 ... 1800	1	90 x 10	4109 0160

Copper bars connection kits

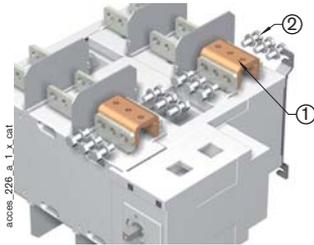


Fig.1

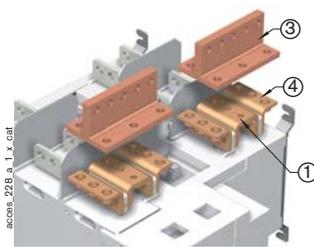


Fig.2

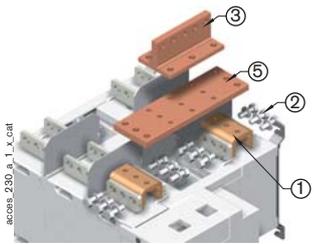


Fig.3

Use

To allow:

- connection between the two power terminals from a same pole for 2000 to 3200 A ratings (Fig. 1 and Fig 2)
- top or bottom bridging connection (Fig. 3).

For 3200 A rating, the two power terminals are delivered bridged from factory.

Bolt sets must be ordered separately.

Dimensions

See page A.35, for connection kit assembly.

Technical notice for these specific accessories is downloadable from www.socomec.com.

References

Top or bottom flat connection - Fig. 1

Rating (A)	Part	Qty to order per pole ⁽¹⁾	Reference
2000 ... 2500	Connection - part 1	2	2619 1200
2000 ... 2500	Bolt set - part 2	2	2699 1200
3200	Connection - part 1	/	standard
3200	Bolt set - part 2	2	2699 1200

Top or bottom edgewise connection - Fig. 2

Rating (A)	Part	Qty to order per pole ⁽¹⁾	Reference
2000 ... 2500	Connection - part 1	2	2619 1200
2000 ... 2500	T piece - part 3	2	2629 1200 ⁽²⁾
2000 ... 2500	Right angle - part 4	2	2639 1200 ⁽²⁾
3200	Connection - part 1	/	standard
3200	T piece - part 3	2	2629 1200 ⁽²⁾
3200	Right angle - part 4	2	2639 1200 ⁽²⁾

Top or bottom bridging connection - Fig. 3

Rating (A)	Part	Qty to order per pole ⁽¹⁾	Reference
2000 ... 2500	Connection - part 1	2	2619 1200
2000 ... 2500	Bolt set - part 2	2	2699 1200
2000 ... 2500	Bar - part 5	1	4109 0250 ⁽²⁾
2000 ... 2500	T piece - part 3	1	2629 1200 ⁽²⁾
3200	Connection - part 1	/	standard
3200	Bolt set - part 2	2	2699 1200
3200	Bar - part 5	1	4109 0320 ⁽²⁾
3200	T piece - part 3	1	2629 1200 ⁽²⁾

(1) Example for 3-pole device: order 3 times the quantities.
(2) Bolt set is provided with the accessories.



ATyS - Accessories

Voltage sensing and power supply kit



From 125 to 630 A.



From 800 to 3200 A.

Use

For ATyS 6 power supply and voltage measurement (4 wires, three phases).

Routing of the conductors is controlled, which means that no specific protective device is necessary for these connections.

The kit can be fitted on the top or the bottom of the switch.
NB: the 3-pole version does not integrate the power supply.

References

For ATyS 6 - 3 pole

Rating (A)	Reference
125 ... 160	1559 3012
250	1559 3025
400	1559 3040
630	1559 3063
800 ... 1000	1559 3080
1250	1559 3120
1600	1559 3160
2000 ... 3200	1559 3200

For ATyS 6 - 4 pole

Rating (A)	Neutral on the right	Neutral on the left
	Reference	Reference
125 ... 160	1559 4012	1559 4013
250	1559 4025	1559 4026
400	1559 4040	1559 4041
630	1559 4063	1559 4064
800 ... 1000	1559 4080	1559 4081
1250	1559 4120	1559 4121
1600	1559 4160	1559 4161
2000 ... 3200	1559 4200	1559 4201

Plug-in optional modules



atys_016_a_1_cat

Use

No. 1: COM module control and state feedback of the changeover switch via a 2 or 3-wire RS485 link with JBUS/MODBUS protocol® and transmission speed up to 38,400 baud.

No. 2: module with 2 inputs/ 2 outputs

- For ATyS 3e:
2 inputs: changeover control + backup network availability;
2 outputs: a load shedder relay + fault relay.
- For ATyS 6e and 6m: 2 inputs/ 2 outputs, programmable.

References

Description of accessories	Reference
COM RS485 (No. 1)	1599 2000
2 inputs/2 outputs (No. 2)	1599 2001

Terminal shrouds



accres_206_a_1_cat

Use

Protection against direct contact with the connection terminals or parts.

Advantages

Perforations enabling remote thermographic inspection without dismantling.

References

Rating (A)	No. of poles	Position	Reference
125 ... 160	3	top / bottom / front (I) / rear (II)	2694 3014 ⁽¹⁾⁽²⁾
125 ... 160	4	top / bottom / front (I) / rear (II)	2694 4014 ⁽¹⁾⁽²⁾
250 ... 400	3	top / bottom / front (I) / rear (II)	2694 3021 ⁽¹⁾⁽²⁾
250 ... 400	4	top / bottom / front (I) / rear (II)	2694 4021 ⁽¹⁾⁽²⁾
630	3	top / bottom / front (I) / rear (II)	2694 3051 ⁽¹⁾⁽²⁾
630	4	top / bottom / front (I) / rear (II)	2694 4051 ⁽¹⁾⁽²⁾

(1) To shroud front switch top and bottom 2 references required.

(2) To fully shroud front and rear / top and bottom 4 references required.

ATyS 63 to 3200 A

The ATyS range

▶ **ATyS**

ATyS C30 / ATyS C40

ATyS VISION software

Other changeover switches

ATyS - Accessories

Terminal screens



Use

Incoming and outgoing protection against direct contacts with the connection terminals or parts.

References

Rating (A)	No. of poles	Position	Reference
125 ... 160	3	top / bottom	1509 3012
125 ... 160	4	top / bottom	1509 4012
250 ... 400	3	top / bottom	1509 3025
250 ... 400	4	top / bottom	1509 4025
630	3	top / bottom	1509 3063
630	4	top / bottom	1509 4063
800 ... 1250	3	top / bottom	1509 3080
800 ... 1250	4	top / bottom	1509 4080
1600 ... 1800	3	top / bottom	1509 3160
1600 ... 1800	4	top / bottom	1509 4160
2000 ... 3200	3	top / bottom	1509 3200
2000 ... 3200	4	top / bottom	1509 4200

Inter phase barriers



Use

Safety isolating separation between the terminals, essential for use at 690 VAC or in a dusty atmosphere.

The terminal shrouds also provide phase separation for ATyS from 125 to 630 A.

References

Rating (A)	No. of poles	Reference
125 ... 160	3	2998 0033
125 ... 160	4	2998 0034
250 ... 400	3	2998 0023
250 ... 400	4	2998 0024
630	3	2998 0013
630	4	2998 0014
800 ... 3200	3 / 4	standard

Auxiliary contacts



Use

Pre-breaking and signalling of positions I and II: 1 extra NO / NC auxiliary contact in each position (factory fitted).

Low level AC: please consult us.

References

For ATyS 3s

Rating (A)	Reference
125 ... 160	1599 1002
250 ... 400	1599 1012
630	1599 1022
800 ... 1800	1599 1032

For ATyS 3e, 6e and 6m

Rating (A)	Reference
125 ... 160	1599 0002
250 ... 400	1599 0012
630	1599 0022
800 ... 1600	1599 0032
2000 ... 3200	1599 0042

Control voltage transformer

Use

Enables a 230 VAC device to be supplied with 400 VAC.

References

Rating (A)	Reference
125 ... 630	1599 4063
800 ... 1800	1599 4120
2000 ... 3200	1599 4200



ATyS - Accessories

DC power supply

Use

Allows standard ATyS, to be DC power supplied.

To be positioned as close as possible from DC power supply source.

Not available for ratings from 2000 A to 3200 A.

References

Rating (A)	Voltage	Reference
125 ... 1800	12 VDC / 230 VAC	1599 5012
125 ... 1800	24 VDC / 230 VAC	1599 5112
125 ... 1800	48 VDC / 230 VAC	1599 5212

Padlocking in the 3 positions I-0-II



Atys_125_a_1_cat

Use

Allows locking of the operation in the 3 positions I, 0 and II.

Factory fitted.

References

Rating (A)	Reference
125 ... 630	1599 0003
800 ... 3200	1599 0004

Handle key interlocking accessories



Atys_101_a_1_cat

Use

Locking the electrical control and the backup control in position 0 using a RONIS EL11AP lock.

Factory fitted.

As standard, locking in position 0. Optional padlocking in 3 positions: 0, I and II.

References

Rating (A)	Reference
125 ... 630	1509 1006
800 ... 3200	1509 1004

Mounting spacers



Atys_009_a_1_cat

Use

Raises the device's terminals 10 mm away from the bottom of the enclosure or frame on which the device is mounted.

This may also be used to replace the original mounting spacers.

Reference

Rating (A)	Description of accessories	Reference
125 ... 630	1 set of 2 spacers	1509 0001

Door protective surround



Atys_595_a_1_cat

Use

Door finishing surround for protecting ATyS application.

References

For ATyS 3s

Rating (A)	Reference
125 ... 630	1529 0012
800 ... 1800	1529 0080

For ATyS 3e, 6e and 6m

Rating (A)	Reference
125 ... 630	1539 0012
800 ... 3200	1539 0080

ATyS 63 to 3200 A

The ATyS range

ATyS

ATyS C30 / ATyS C40

ATyS VISION software

Other changeover switches

ATyS - Accessories

Remote interfaces for ATyS M 6e and ATyS 6e, 6m, C30



aty_s584_c_1_cat

Use

Dedicated to applications where the ATyS is back panel mounted.

Interfaces are self powered from the ATyS.

Maximum connection distance: 3 m.

ATyS D10

To display source availability and changeover state on the cabinet front panel.

Reference

Description of accessories

ATyS D10 interface

ATyS D20 interface

Reference

1599 2010

1599 2020



aty_s585_c_1_cat

ATyS D20

In addition to the ATyS D10 allows displays, operation and configuration on the cabinet front panel.

Door mounting

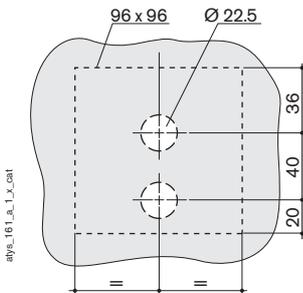
2 holes Ø 22.5.

Master ATyS connection via RJ45 cable, not isolated.



aty_s597_a

RJ45 link for ATyS connection.



aty_s161_a_1_x_cat

Drilled holes.



ATyS - Accessories

Connecting cable for remote interfaces D10 / D20



atys_209_a_1_cat

Use

Connection between interface (type D10 or D20) and ATyS **M 6e** or ATyS 6e, 6m, C30. Characteristics: RJ45 8 wires not insulated straight connection, 3 meters length.

Reference

For ATyS **M 6e** and ATyS 6e, 6m, C30

Type	Length	Reference
RJ45 cable	3 m	1599 2009

Double power supply - DPS



atys_612_a_2_cat

Use

Allows an ATyS 3s to be supplied by two 230 VAC 50/60 Hz networks.

Inputs

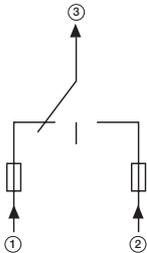
- The input is considered as "active" from 200 VAC
- Max. voltage: 280 VAC
- Internal protection: each input is fuse protected
- Connection on terminals: max. 6 mm²
- Modular device: 4 modules width.

Reference

For ATyS

Description of accessories	Reference
Double Power Supply (DPS)	1599 4001

Input 1	Input 2	Output
230 VAC	0 VAC	230 VAC (Input 1)
0 VAC	230 VAC	230 VAC (Input 2)
230 VAC	230 VAC	230 VAC (Input 1)
0 VAC	0 VAC	0 VAC



atys_616_a

1 and 2. Voltage inputs.
3. Voltage output.

ATyS

63 to 3200 A

The ATyS range

ATyS

ATyS C30 / ATyS C40

ATyS VISION software

Other changeover switches

Enclosed ATyS 3s

Steel enclosure



Functions

- Non-Automatic Transfer Switch
- Compact design
- Mechanically interlocked switching
- Connection ready for external logic control.

Conformity to standards

- IEC 60439-1

General characteristics

- Adapted to mechanical risk and dust hazard
- Protection degree: IP54 (standard device)
- Colour: RAL 7035
- Cable gland plate: top and bottom from 63 to 250 A, bottom from 400 to 1600 A
- Material: steel thickness 2 mm
- Coating: epoxy polyester powder
- Wall mounting: 4 wall mounting brackets supplied - not mounted (rating ≤ 400 A), floor standing feet (rating ≥ 630 A)
- Door: solid with hinges
- Locking system: 3 mm double-bar key (key supplied)
- Miscellaneous: 2 earth connection points, neutral on the right.
- Accessories: double power supply, 2nd auxiliary contact, solid neutral, 400/230 VAC transformers (on each network), 3 positions padlocking, ...

Available on request

- Enclosures and specific connections: neutral on the left, ...

Standard device - 230 VAC

Rating (A)	No. of poles	Reference
63	4	1723 4006
100	4	1723 4010
125	4	1723 4012
160	4	1723 4016
250	4	1723 4025
400	4	1723 4040
630	4	1723 4063
800	4	1723 4080
1000	4	1723 4100
1250	4	1723 4120
1600	4	1723 4160

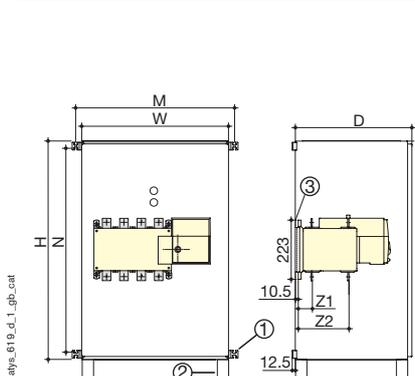
Factory fitted accessories

Description	Reference
Double power supply	1599 9001
2 nd auxiliary contact: from 63 to 630 A	1599 9002
2 nd auxiliary contact: from 800 to 1600 A	1599 9012
400 / 230 VAC transformer	consult us
3 positions padlocking	1599 9003

Customer fitted accessories

Solid neutral	Reference
63 ... 160 A	1599 1006
250 A	1599 1025
400 A	1599 1040
630 A	1599 1063
800 A	1599 1080
1000 A	1599 1100
1250 A	1599 1120
1600 A	1599 1160

Dimensions



Rating (A)	Connection		H	W	D	M	N	Z1	Z2	Weight (kg)
	section (mm ²)	Max. connection section (mm ²)								
63 ... 100	-	50	650	400	300	448	608	-	-	-
125	-	50	650	400	300	448	608	38	134	25
160	70	95	650	400	300	448	608	38	134	25
250	120	150	1000	650	475	698	958	39.5	134.5	45
400	240	240	1000	650	475	698	958	39.5	134.5	50
630	2 x 185	2 x 240	1000	650	475	-	-	53	190	70
800	2 x 240	2 x 300	1200	800	660	-	-	66.5	253.5	135
1000	4 x 150	2x300 / 4x240	1200	800	660	-	-	66.5	253.5	140
1250	4 x 185	2x300 / 4x240	1600	1000	830	-	-	66.5	253.5	270
1600	4 x 240	6x185 / 4x300	1600	1000	830	-	-	67.5	253.5	375

- (1) Wall mounting brackets delivered up to 400 A.
 (2) Floor standing feet from 630 A (add 200 mm for feet, at H dimension).
 (3) Mounting spacers.



Enclosed ATyS 6e

Steel enclosure

conf_306_a_1_cat



Functions

- Automatic Transfer Switch - ATS
- Compact design
- Mechanically interlocked switching
- Connection ready for external logic control.

Conformity to standards

- IEC 60947-6-1
- IEC 60439-1

General characteristics

- Adapted to mechanical risk and dust hazard
- Protection degree: IP54 (standard device)
- Colour: RAL 7035
- Cable gland plate: top and bottom from 63 to 250 A, bottom from 400 to 1600 A
- Material: steel thickness 2 mm
- Coating: epoxy polyester powder
- Wall mounting: 4 wall mounting brackets supplied - not mounted (rating ≤ 400 A), floor standing feet (rating > 630 A)
- Door: solid with hinges
- Locking system: 3 mm double-bar key (key supplied)
- Miscellaneous: 2 earth connection points, neutral on the right.
- Accessories: 2nd auxiliary contact, solid neutral, 400/230 VAC transformers (on each network), 3 positions padlocking, ...

Available on request

- Enclosures and specific connections: neutral on the left, ...

Standard device - 230 VAC

Rating (A)	No. of poles	Reference
63	4	1763 4006
100	4	1763 4010
125	4	1763 4012
160	4	1763 4016
250	4	1763 4025
400	4	1763 4040
630	4	1763 4063
800	4	1763 4080
1000	4	1763 4100
1250	4	1763 4120
1600	4	1763 4160

Factory fitted accessories

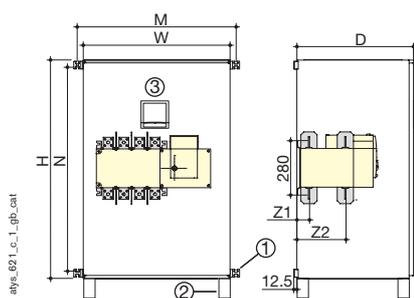
Description	Reference
2 nd auxiliary contact: from 63 to 630 A	1599 9022
2 nd auxiliary contact: from 800 to 1600 A	1599 9032
400 / 230 VAC transformer	consult us
3 positions padlocking	1599 9003

Customer fitted accessories

Description	Reference
ATyS D10	1599 2010
ATyS D20	1599 2020
RJ45 connection cable ⁽¹⁾	1599 2009
Communication RS485 MODBUS	1599 2000
2 inputs / 2 outputs	1599 2001
Solid neutral (see page A.24 "ATyS 3s in enclosure")	-

⁽¹⁾ "RJ45 connection" cable is required.

Dimensions



Rating (A)	Connection		H	W	D	M	N	Z1	Z2	Weight (kg)
	section (mm ²)	Max. connection section (mm ²)								
63 ... 100	-	50	650	400	300	448	608	-	-	-
125	-	50	650	400	300	448	608	38	134	25
160	70	95	650	400	300	448	608	38	134	25
250	120	150	1000	650	475	698	958	39.5	134.5	45
400	240	240	1000	650	475	698	958	39.5	134.5	50
630	2 x 185	2 x 240	1000	650	475	-	-	53	190	70
800	2 x 240	2 x 300	1200	800	660	-	-	66.5	253.5	135
1000	4 x 150	2x300 / 4x240	1200	800	660	-	-	66.5	253.5	140
1250	4 x 185	2x300 / 4x240	1600	1000	830	-	-	66.5	253.5	270
1600	4 x 240	6x185 / 4x300	1600	1000	830	-	-	67.5	253.5	375

⁽¹⁾ Wall mounting brackets delivered up to 400 A.

⁽²⁾ Floor standing feet from 630 A (add 200 mm for feet, at H dimension).

⁽³⁾ ATyS D10 or D20 interfaces.

ATyS 63 to 3200 A

The ATyS range

ATyS

ATyS C30 / ATyS C40

ATyS VISION software

Other changeover switches

Enclosed ATyS 6 with isolation by-pass

Steel enclosure



Functions

- ATyS 6m Automatic Transfer Switch provides all functions required for break before make ATS applications
- The SOCOMEC by-pass system allows complete ATS isolation. Top and bottom isolation is achieved using the SOCOMEC 12+4 pole by-pass switch up to 630 A
- For the double line version during the ATS isolation, supply, selection remains possible thanks to a manual changeover
- ATyS 6m associated to a ATyS D20 remote display allows configuration, operation and measurement from outside the panel (adjustable time/transfer delays and control level (U,F), generator start/stop control,...)
- Different optional accessories are available.

Conformity to standards

- IEC 60947-6-1
- IEC 60439-1
- IEC 60529

General characteristics

Product range

- From 63 to 1600 A, 4 pole, 3 or 4 wires applications
- 400/230 VAC +/- 20%, 50/60 Hz; self supplied from incoming sources

Main features

- ATS logic control sequence (dual source automatic changeover)
- 3 phases voltage and frequency detection & phase rotation control of both sources
- Generator start / stop relay output
- ATS I, 0, II electrical control by volt free dry contacts
- ATS Emergency manual operation
- ATS position 0
- Isolation by-pass and manual changeover 0, I, II auxiliary contacts
- ATS Auto / Manual key selector with auxiliary contact.

Enclosure

- IP 41 protection rating as standard
- Hinged door, double bar locking system
- Wall mounting brackets delivered up to 400 A
- Floor standing feet from 630 to 1600 A rating
- Terminals protection screen
- Steel enclosure
- RAL 7035.

Cable entry

- Bottom cable entry as standard
- Specific cable entry requirements available upon request
- Neutral position located on the right as standard
- Alternative options available upon request.

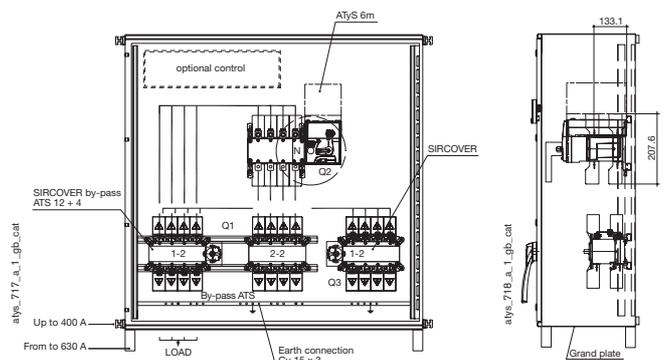
Standard device - 230 VAC		Single line	Double line
Rating (A)	No. of poles	Reference	Reference
63	4	1773 4007	1774 4007
100	4	1773 4011	1774 4011
125	4	1773 4013	1774 4013
160	4	1773 4016	1774 4016
250	4	1773 4025	1774 4025
400	4	1773 4040	1774 4040
630	4	1773 4063	1774 4063
800	4	1773 4080	1774 4080
1000	4	1773 4100	1774 4100
1250	4	1773 4120	1774 4120
1600	4	1773 4160	1774 4160

Factory fitted accessories

Description	Reference
2 nd auxiliary contact (1 per position)	1599 9022
400 / 230 VAC transformer (1 per network)	consult us
3 positions padlocking	1599 9003
Clock exerciser with datalogging	consult us
3 current transformers (CTs)	consult us

Customer fitted accessories

Description	Reference
Communication RS485 MODBUS	1599 2000
2 inputs / 2 outputs	1599 2001
Solid neutral	consult us



Example: ATyS 6m 400 A - double line version with isolation by-pass in enclosure.



Enclosed ATyS 6 with isolation by-pass (continued)

Steel enclosure

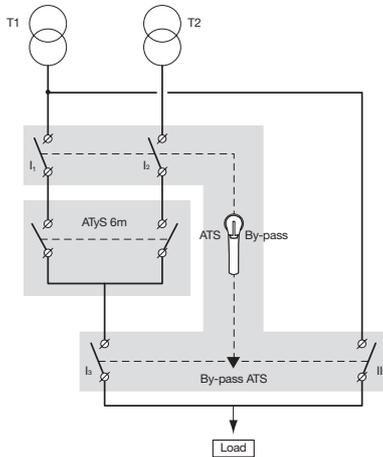
Illustrations

Operation

- ATS position:
 - I₁, I₂, I₃: closed
 - II: opened
- By-pass position:
 - I₁, I₂, I₃: opened
 - II: closed

For the double line version, I₄ or II₂ closed depending on supply source required.

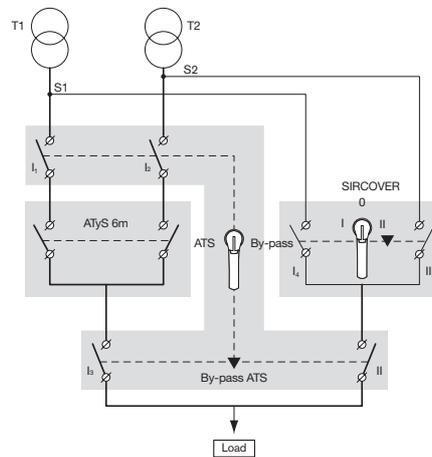
ATyS from 125 to 630 A - SINGLE LINE



atys_713_a_1_gpb_cat

- 1 ATyS 6m
- 1 SIRCOVER 12 + 4 poles

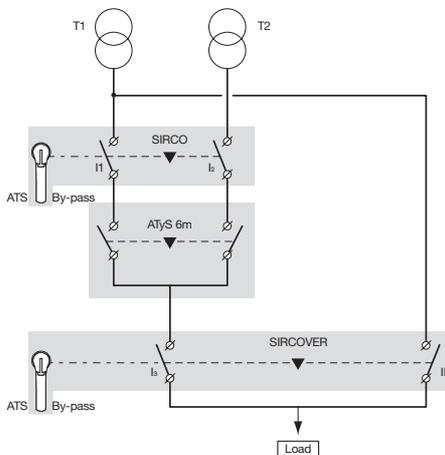
ATyS from 125 to 630 A - DOUBLE LINE



atys_714_a_1_gpb_cat

- 1 ATyS 6m
- 1 SIRCOVER 12 + 4 poles
- 1 SIRCOVER 4 poles

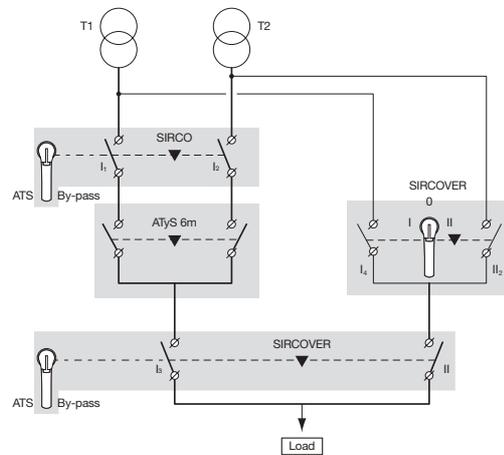
ATyS from 800 to 1600 A - SINGLE LINE



atys_715_a_1_gpb_cat

- 1 ATyS 6m
- 1 SIRCO 8 poles and
- 1 SIRCOVER 4 poles

ATyS from 800 to 1600 A - DOUBLE LINE



atys_716_a_1_gpb_cat

- 1 ATyS 6m
- 1 SIRCO 8 poles and
- 1 SIRCOVER 4 poles
- 1 SIRCOVER 4 poles

ATyS 63 to 3200 A

The ATyS range

ATyS

ATyS C30 / ATyS C40

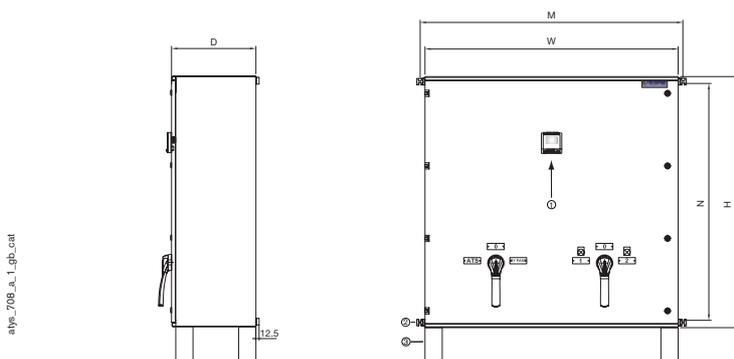
ATyS VISION software

Other changeover switches

Enclosed ATyS 6 with isolation by-pass (continued)

Steel enclosure

Dimensions



1. Remote interface ATyS D20
2. Up to 400 A
3. From 630 A

Single line version

Wall mounting - Bottom

Rating (A)	Connection section (mm ²)	Max. connection section (mm ²)	H	W	D	M	N
63	-	50	1000	800	400	848	958
100	-	50	1000	800	400	848	958
125	-	50	1000	800	400	848	958
160	70	95	1000	800	400	848	958
250	120	150	1200	800	400	848	1158
400	240	240	1200	800	400	848	1158

Floor standing - Bottom

Rating (A)	Connection section (mm ²)	Max. connection section (mm ²)	H	W	D	M	N
630	300	300	1600	1000	400	-	-
800	2 x 185	2 x 300	2200	1000	1000	-	-
1000	2 x 240	2 x 400	2200	1000	1000	-	-
1250	-	4 x 185	2200	1000	1000	-	-
1600	-	4 x 400	2200	1000	1000	-	-

Double line version

Wall mounting - Bottom

Rating (A)	Connection section (mm ²)	Max. connection section (mm ²)	H	W	D	M	N
63	-	50	1000	1000	400	1048	958
100	-	50	1000	1000	400	1048	958
125	-	50	1000	1000	400	1048	958
160	70	95	1000	1000	400	1048	958
250	120	150	1200	1200	400	1248	1158
400	240	240	1200	1200	400	1248	1158

Floor standing - Bottom

Rating (A)	Connection section (mm ²)	Max. connection section (mm ²)	H	W	D	M	N
630	2 x 150	2 x 300	1600	1200	550	-	-
800	2 x 185	2 x 300	2200	1400	800	-	-
1000	2 x 240	2 x 400	2200	1400	1000	-	-
1250	-	4 x 185	2200	1600	1000	-	-
1600	-	4 x 400	2200	1600	1000	-	-



Enclosed ATyS 6 with isolation by-pass (continued)

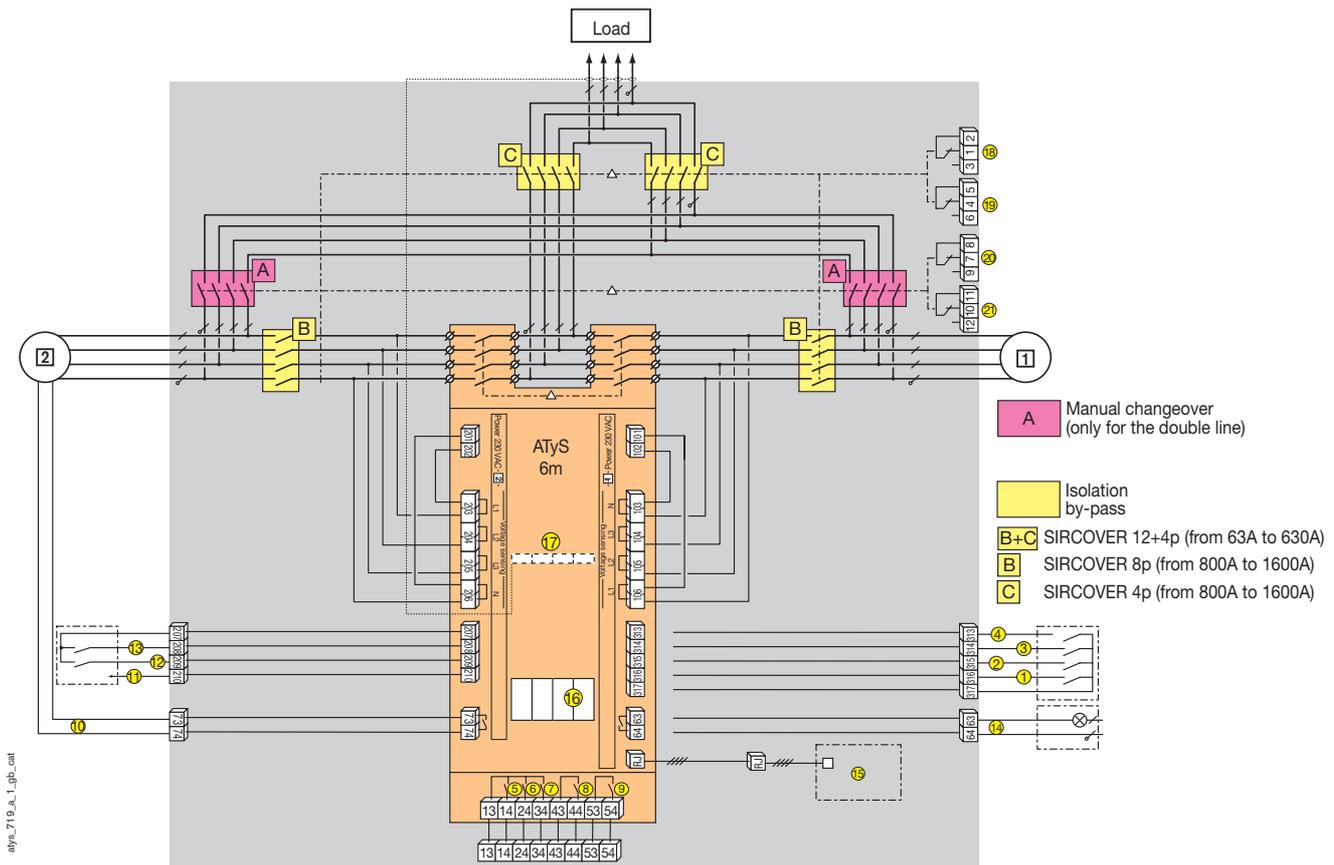
Steel enclosure

Environment

The complete enclosure meets the following environmental requirements:

- Operating temperature: -10 to +40 °C without de-rating.
- Operating temperature: +40 to +65 °C with de-rating.
- Maximum storage is one year.
- 80 % humidity non condensing at +55 °C.
- 95 % humidity non condensing at +40 °C.
- Maximum operating altitude without switch de-rating is 2000 m above sea level.

Functional diagram



- 1 Priority source
- 2 Backup source
- 1: position 0 control
- 2: position I control
- 3: position II control
- 4: position control inhibition inputs (0-I-II)
- 5: auxiliary contact, closed when the switch is in position I
- 6: auxiliary contact, closed when the switch is in position II
- 7: auxiliary contact, closed when the switch is in position 0
- 8: auxiliary contact, closed when the switch is on "AUT" mode
- 9: auxiliary contact, closed when the switch is padlocked
- 10: gen-set start command
- 11: auxiliary power supply (for optional modules control)
- 12: remote "test on-load" input

- 13: DTT inhibit input. Transfer initiated as soon as the input is closed when DTT = max. value.
- 14: fault output
- 15: remote control interface
- 16: slots for optional modules
- 17: 3 current transformers (Cts) for ATyS metering
- 18: by-pass position
- 19: ATS position
- 20: 1 Priority source used
- 21: 2 Backup source used
- 101 - 102: supply 1 220 -20% / 240 +20%
- 201 - 202: supply 2 220 -20% / 240 +20%

ATyS

63 to 3200 A



The ATyS range

ATyS

ATyS C30 / ATyS C40

ATyS VISION software

Other changeover switches

ATyS M - Characteristics (according to IEC 60947)

Thermal current I_{th} (40°C)	63 A	80 A	100 A	125 A	160 A
Rated insulation voltage U_i (V) (power circuit)	800	800	800	800	800
Rated impulse withstand voltage U_{imp} (kV) (power circuit)	6	6	6	6	6
Rated insulation voltage U_i (V) (operation circuit)	300	300	300	300	300
Rated impulse withstand voltage U_{imp} (kV) (operation circuit)	4	4	4	4	4

Rated operational currents I_e (A)

According to IEC 60947-3

Rated voltage	Load duty category	A/B ⁽¹⁾				
415 VAC	AC-21 A / AC-21 B	63/63	80/80	100/100	125/125	160/160
	AC-22 A / AC-22 B	63/63	80/80	100/100	125/125	160/160
	AC-23 A / AC-23 B	63/63	80/80	100/100	125/125	125/160
690 VAC ⁽²⁾	AC-21 A / AC-21 B	63/63	80/80	100/100	125/125	160/160
	AC-22 A / AC-22 B	63/63	80/80	80/80	100/125	100/125
	AC-23 A / AC-23 B	63/63	63/63	80/80	80/80	80/80

According to IEC 60947-6-1

415 VAC	AC-31 A / AC-31 B	63/63	80/80	100/100	100/125	100/160
	AC-32 A / AC-32 B	63/63	80/80	100/100	100/125	100/160
	AC-33 A / AC-33 B	-/63	-/80	-/80	-/80	-/80

Overload capacity

Rated short-time withstand current 1 s. I_{cw} (kA rms)	4	4	4	4	4
Short-circuit making capacity (kA peak) ⁽³⁾	17	17	17	17	17
Prospective short-circuit current (kA rms) ⁽³⁾	50	50	50	50	50
Associated fuse rated (A) ⁽³⁾	63	80	100	125	160

Connection

Minimum Cu cable section (mm ²)	6	6	6	6	6
Maximum Cu cable section (mm ²)	70	70	70	70	70
Tightening torque min / max (Nm)	4/6	4/6	4/6	4/6	4/6

Switching time (nominal voltage)

I - 0 or II - 0 (ms) ⁽⁴⁾	50	50	50	50	50
I - II or II - I (ms) ⁽⁴⁾	180	180	180	180	180
Duration of "electrical blackout" I - II (ms) minimum (ATyS M 3s)	60	60	60	60	60
Duration of "electrical blackout" I - II (ms) minimum (ATyS M 6s or 6e)	90	90	90	90	90

Power-supply tolerance

Supply 230 VAC min / max (VAC)	176/288	176/288	176/288	176/288	176/288
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Control supply power demand

Max current under 230 VAC (A)	30	30	30	30	30
Nominal power (VA)	6	6	6	6	6

Mechanical characteristics

Endurance (number of operating cycles)	10 000	10 000	10 000	10 000	10 000
Weight switch (kg)	3.5	3.5	3.5	3.5	3.5

(1) A/B: Category with index A = frequent operation / Category with index B = infrequent operation.

(2) With terminal shrouds or phase barrier.

(3) For a rated operating voltage $U_e = 400$ VAC.

(4) Between the order given and the arrival in position (under the nominal conditions).



ATyS - Characteristics (according to IEC 60947)

Thermal current I_{th} (40°C)	125 A	160 A	250 A	400 A	630 A	800 A	1000 A
Rated insulation voltage U_i (V)	800	800	800	800	1000	1000	1000
Rated impulse withstand voltage U_{imp} (kV)	8	8	8	8	12	12	12

Rated operational currents I_e (A)

According to IEC 60947-3

Rated voltage	Load duty category	A/B ⁽¹⁾						
415 VAC	AC-21 A / AC-21 B	125/125	160/160	250/250	400/400	630/630	800/800	1000/1000
	AC-22 A / AC-22 B	125/125	160/160	250/250	400/400	630/630	800/800	1000/1000
	AC-23 A / AC-23 B	125/125	160/160	250/250	250/250	500/500	800/800	1000/1000
690 VAC ⁽²⁾	AC-20 A / AC-20 B	125/125	160/160	250/250	400/400	630/630	800/800	1000/1000
	AC-21 A / AC-21 B	125/125	160/160	200/250	200/250	500/500	800/800	800/800
	AC-22 A / AC-22 B	125/125	125/125	125/160	125/160	315/315	800/800	800/800
220 VDC	AC-23 A / AC-23 B	63/80	63/80	100/125	100/125	160/200	200/250	200/250
	DC-20 A / DC-20 B	125/125	160/160	250/250	400/400	630/630	800/800	1000/1000
	DC-21 A / DC-21 B	125/125	160/160	250/250	250/250	630/630	800/800	1000/1000
440 VDC	DC-22 A / DC-22 B	125/125	160/160	250/250	250/250	500/500	800/800	1000/1000
	DC-23 A / DC-23 B	125/125	125/125	200/200	200/200	500/500	800/800	1000/1000
	DC-20 A / DC-20 B	125/125	160/160	250/250	400/400	630/630	800/800	1000/1000
440 VDC	DC-21 A / DC-21 B	125 ⁽³⁾ /125 ⁽³⁾	125 ⁽³⁾ /125 ⁽³⁾	200 ⁽³⁾ /200 ⁽³⁾	200 ⁽³⁾ /200 ⁽³⁾	500 ⁽³⁾ /500 ⁽³⁾	800 ⁽⁴⁾ /800 ⁽⁴⁾	1000 ⁽⁴⁾ /1000 ⁽⁴⁾
	DC-22 A / DC-22 B	125 ⁽³⁾ /125 ⁽³⁾	125 ⁽³⁾ /125 ⁽³⁾	200 ⁽³⁾ /200 ⁽³⁾	200 ⁽³⁾ /200 ⁽³⁾	500 ⁽³⁾ /500 ⁽³⁾	800 ⁽⁴⁾ /800 ⁽⁴⁾	1000 ⁽⁴⁾ /1000 ⁽⁴⁾
	DC-23 A / DC-23 B	125 ⁽⁴⁾ /125 ⁽⁴⁾	125 ⁽⁴⁾ /125 ⁽⁴⁾	200 ⁽⁴⁾ /200 ⁽⁴⁾	200 ⁽⁴⁾ /200 ⁽⁴⁾	500 ⁽⁴⁾ /500 ⁽⁴⁾	800 ⁽⁴⁾ /800 ⁽⁴⁾	1000 ⁽⁴⁾ /1000 ⁽⁴⁾

According to IEC 60947-6-1

415 VAC	AC-31 B	125	160	250	400	630	800	1000
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Overload capacity

Rated short-time withstand current 1 s. I_{cw} (kA rms)	7	7	9	9	13	26	35
Rated peak withstand current (kA peak) ⁽⁵⁾	20	20	30	30	45	55	80
Prospective short-circuit current (kA rms) ⁽⁵⁾	100	100	50	18	70	50	100
Associated fuse rated (A) ⁽⁶⁾	125	160	250	400	630	800	1000

Connection

Minimum Cu cable section (mm ²)	35	50	95	185	2 x 150	2 x 185	2 x 240
Minimum Cu busbar section (mm ²)	-	-	-	-	2 x 30 x 5	2 x 40 x 5	2 x 50 x 5
Maximum Cu cable section (mm ²)	50	95	150	240	2 x 300	2 x 300	4 x 185
Maximum Cu busbar width (mm)	25	25	32	32	50	63	63
Tightening torque min / max (Nm)	9/13	9/13	20/26	20/26	20/26	-	-

Switching time

I - II or II - I (s) ⁽⁶⁾	0.75	0.75	1.3	1.3	1.3	2.6	2.6
I - 0 or II - 0 (s) ⁽⁶⁾	0.45	0.45	0.85	0.85	0.85	1.6	1.6
Duration of "electrical blackout" I - II (s)	0.3	0.3	0.6	0.6	0.6	1.5	1.5

Power-supply tolerance

Supply 230 VAC min / max (VAC)	176/288	176/288	176/288	176/288	176/288	176/288	176/288
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Control supply power demand

Supply 230 VAC inrush / nominal (VA)	420/80	420/80	420/100	420/100	420/110	450/120	450/120
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Mechanical characteristics

Endurance (number of operating cycles)	10 000	10 000	8 000	8 000	5 000	4 000	4 000
Weight of 3 p switch (ATyS 3) (kg)	3.2	3.3	3.7	4.7	5.2	19.6	23.1
Weight of 4 p switch (ATyS 3) (kg)	3.3	3.4	3.8	5.2	5.7	23.1	24.6
Weight of 3 p switch (ATyS 6) (kg)	4	4.1	4.5	5.5	6	20.4	23.9
Weight of 4 p switch (ATyS 6) (kg)	4.1	4.2	4.6	6	6.5	23.9	25.4

(1) A/B: Category with index A = frequent operation / Category with index B = infrequent operation. (2) With terminal shrouds or phase barrier. (3) 3-pole device with 2 pole in series for the + and 1 pole for the -. (4) 4-pole device with 2 pole in series by polarity. (5) For a rated operating voltage $U_e = 400$ VAC. (6) Between the order given and the arrival in position (under the nominal conditions).

ATyS

63 to 3200 A

The ATyS range

ATyS

ATyS C30 / ATyS C40

ATyS VISION software

Other changeover switches

ATyS - Characteristics (according to IEC 60947)

Thermal current I_{th} (40°C)	1250 A	1600 A	1800 A	2000 A	2500 A	3200 A
Rated insulation voltage U_i (V)	1000	1000	1000	1000	1000	1000
Rated impulse withstand voltage U_{imp} (kV)	12	12	12	12	12	12

Rated operational currents I_e (A)

According to IEC 60947-3

Rated voltage	Load duty category	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾
415 VAC	AC-21 A / AC-21 B	1250/1250	1600/1600	1800/1800	-/2000	-/2500	-/3200
	AC-22 A / AC-22 B	1250/1250	1600/1600	1800/1800	-/2000	-/2500	-/3200
	AC-23 A / AC-23 B	1250/1250	1250/1250	1250/1250	-/1600	-/1600	-/1600
690 VAC ⁽²⁾	AC-20 A / AC-20 B	1250/1250	1600/1600	1800/1800	-/-	-/-	-/-
	AC-21 A / AC-21 B	800/800	1000/1000	1000/1000	-/-	-/-	-/-
	AC-22 A / AC-22 B	800/800	1000/1000	1000/1000	-/-	-/-	-/-
220 VDC	AC-23 A / AC-23 B	200/250	500/500	500/500	-/-	-/-	-/-
	DC-20 A / DC-20 B	1250/1250	1600/1600	1800/1800	-/-	-/-	-/-
	DC-21 A / DC-21 B	1250/1250	1250/1250	1250/1250	-/-	-/-	-/-
440 VDC	DC-22 A / DC-22 B	1250/1250	1250/1250	1250/1250	-/-	-/-	-/-
	DC-23 A / DC-23 B	1250/1250	1250/1250	1250/1250	-/-	-/-	-/-
	DC-20 A / DC-20 B	1250/1250	1600/1600	1800/1800	-/-	-/-	-/-
	DC-21 A / DC-21 B	1250 ⁽³⁾ /1250 ⁽³⁾	1250 ⁽³⁾ /1250 ⁽³⁾	1250 ⁽³⁾ /1250 ⁽³⁾	-/-	-/-	-/-
	DC-22 A / DC-22 B	1250 ⁽³⁾ /1250 ⁽³⁾	1250 ⁽³⁾ /1250 ⁽³⁾	1250 ⁽³⁾ /1250 ⁽³⁾	-/-	-/-	-/-
	DC-23 A / DC-23 B	1250 ⁽³⁾ /1250 ⁽³⁾	1250 ⁽³⁾ /1250 ⁽³⁾	1250 ⁽³⁾ /1250 ⁽³⁾	-/-	-/-	-/-

According to IEC 60947-6-1

415 VAC	AC-31 B	1250	1600	1800	2000	2500	3200
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Overload capacity

Rated short-time withstand current 1 s. I_{cw} (kA rms)	35	50	50	55	55	55
Rated peak withstand current (kA peak) ⁽⁴⁾	80	110	110	120	120	120
Prospective short-circuit current (kA rms) ⁽⁴⁾	100	100	100	-	-	-
Associated fuse rated (A) ⁽⁴⁾	1250	1600	1800	-	-	-

Connection

Minimum Cu busbar section (mm ²)	2 x 60 x 5	2 x 80 x 5	3 x 100 x 5	2 x 100 x 10	2 x 100 x 10	2 x 100 x 10
Maximum Cu cable section (mm ²)	4 x 185	6 x 185	6 x 185	-	-	-
Maximum Cu busbar width (mm)	63	100	100	100	100	100
Tightening torque min / max (Nm)	20/26	40/45	40/45	40/45	40/45	40/45

Switching time

I - II or II - I (s) ⁽⁵⁾	2.6	2.6	2.6	2	2	2
I - 0 or II - 0 (s) ⁽⁵⁾	1.6	1.6	1.6	1	1	1
Duration of "electrical blackout" I - II (s)	1.5	1.6	1.6	1	1	1

Power-supply tolerance

Supply 230 VAC min / max (VAC)	176/288	176/288	176/288	176/288	176/288	176/288
--------------------------------	---------	---------	---------	---------	---------	---------

Control supply power demand

Supply 230 VAC inrush / nominal (VA)	450/120	450/120	450/120	550/390	550/390	550/390
--------------------------------------	---------	---------	---------	---------	---------	---------

Mechanical characteristics

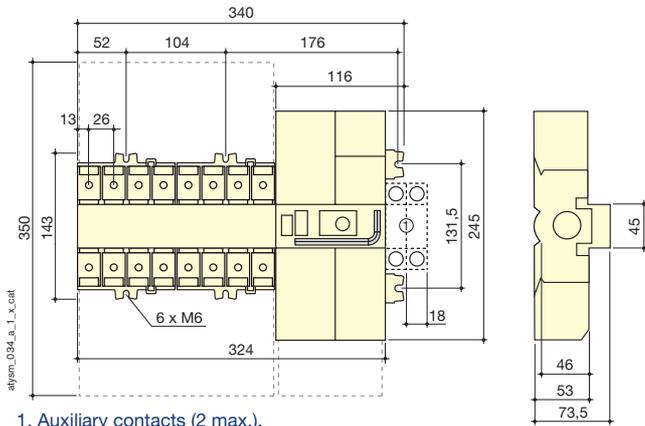
Endurance (number of operating cycles)	4 000	3 000	3 000	3 000	3 000	3 000
Weight of 3 p switch (ATyS 3) (kg)	24.6	36.1	36.1	47 ⁽⁶⁾	51 ⁽⁶⁾	59 ⁽⁶⁾
Weight of 4 p switch (ATyS 3) (kg)	29.6	42.1	42.1	57 ⁽⁶⁾	61 ⁽⁶⁾	69 ⁽⁶⁾
Weight of 3 p switch (ATyS 6) (kg)	25.4	36.9	-	47 ⁽⁶⁾	51 ⁽⁶⁾	59 ⁽⁶⁾
Weight of 4 p switch (ATyS 6) (kg)	30.4	42.9	-	57 ⁽⁶⁾	61 ⁽⁶⁾	69 ⁽⁶⁾

(1) A/B: Category with index A = frequent operation / Category with index B = infrequent operation. (2) With terminal shrouds or phase barrier. (3) 4-pole device with 2 pole in series by polarity. (4) For a rated operating voltage $U_e = 400$ VAC. (5) Between the order given and the arrival in position (under the nominal conditions). (6) Weight for ATyS 3e, 6e and 6m.



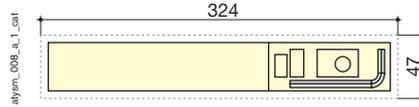
Dimensions

• ATyS M 63 to 160 A

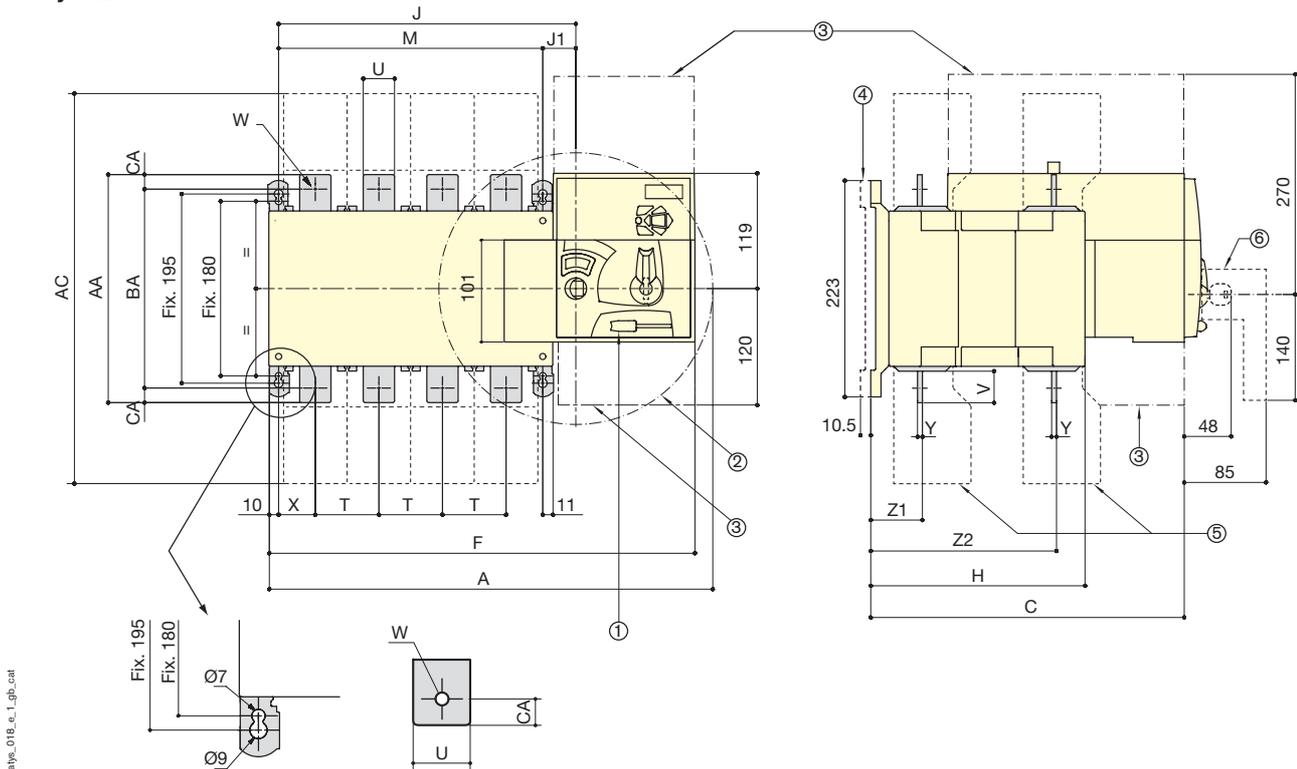


1. Auxiliary contacts (2 max.).

• Cut out dimension



• ATyS 125 to 630 A



- 1. Locking bracket with 3 padlocks max.
- 2. Maximum handle radius, operating angle 2 x 90°.
- 3. Connection and disconnection area.

- 4. Mounting spacers.
- 5. Terminal shrouds.
- 6. Handle.

Rating (A)	Overall dimensions			Terminal shrouds		Switch body					Switch mounting				Connection terminals									
	A 3p.	A 4p.	C	AC	F 3p.	F 4p.	H	J 3p.	J 4p.	J1	M 3p.	M 4p.	T	U	V	W	X 3p.	X 4p.	Y	Z1	Z2	AA	BA	CA
125	304	340	244	235	286.5	322.5	151	154	184	34	120	150	36	20	25	9	28	22	3.5	38	134	135	115	10
160	304	340	244	235	286.5	322.5	151	154	184	34	120	150	36	20	25	9	28	22	3.5	38	134	135	115	10
250	345	395	244.5	280	328	378	153	195	245	35	160	210	50	25	30	11	33	33	3.5	39.5	134.5	160	130	15
400	345	395	244.5	280	328	378	153	195	245	35	160	210	50	35	35	11	33	33	3.5	39.5	134.5	170	140	15
630	394	459	320.5	400	377	437	221	244	304	34	210	270	65	45	50	13	42.5	37.5	5	53	190	260	220	20

ATyS 63 to 3200 A

The ATyS range

ATyS

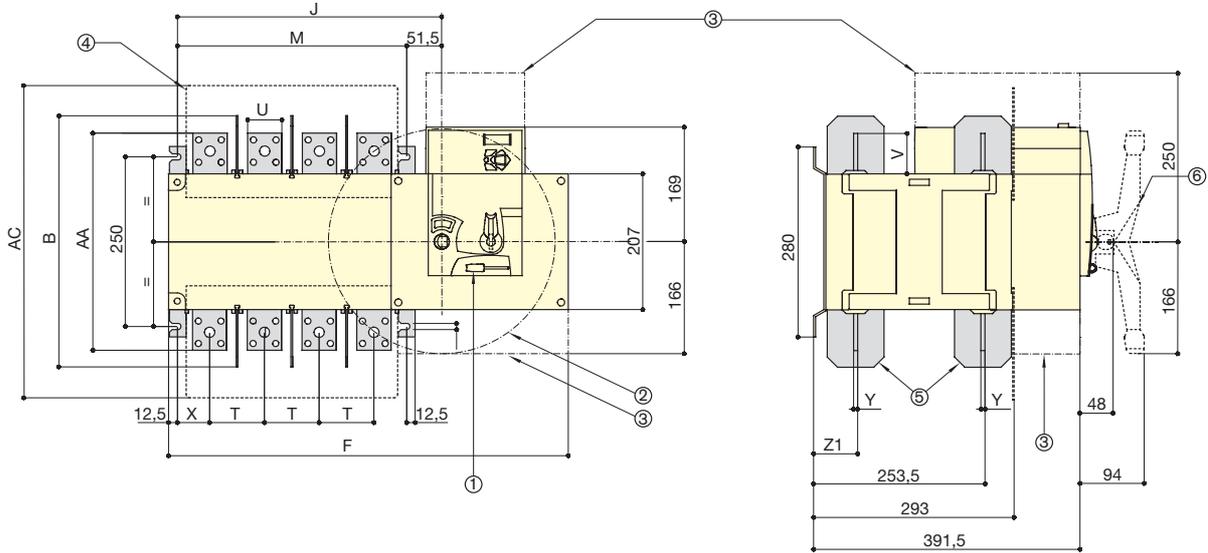
ATyS C30 / ATyS C40

ATyS VISION software

Other changeover switches

Dimensions

• ATyS 800 to 1800 A



1. Locking bracket with 3 padlocks max.

2. Maximum handle radius, operating angle 2 x 90°.

3. Connection and disconnection area.

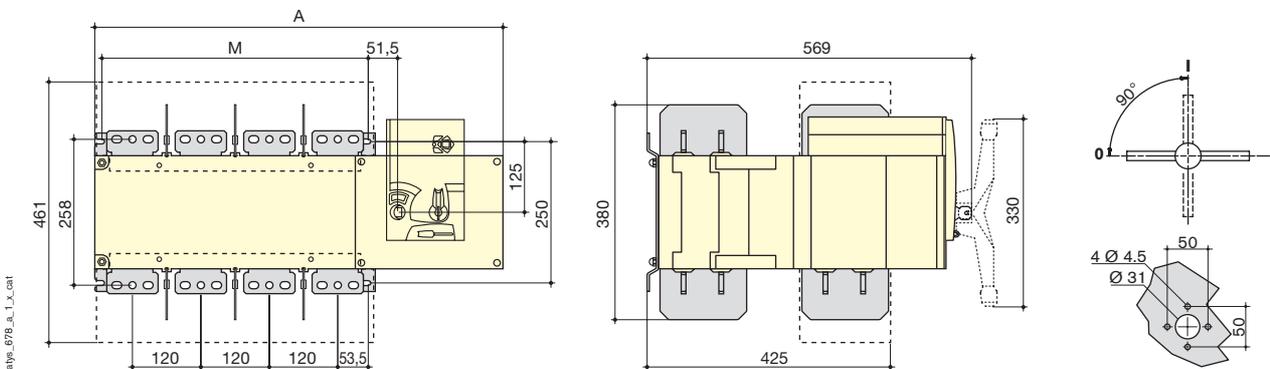
4. Terminal screens.

5. Phase barrier shield.

6. Handle.

Rating (A)	Overall dimensions		Terminal shrouds				Switch body				Switch mounting				Connection terminals			
	B	AC	F 3p.	F 4p.	J 3p.	J 4p.	M 3p.	M 4p.	T	U	V	X	Y	Z1	AA			
800	370	461	504	584	306.5	386.5	255	335	80	50	60.5	60	7	66.5	321			
1000	370	461	504	584	306.5	386.5	255	335	80	50	60.5	60	7	66.5	321			
1250	370	461	504	584	306.5	386.5	255	335	80	60	65	60	7	66.5	330			
1600	380	481	596	716	398.5	518.5	347	467	120	90	44	66	8	67.5	288			
1800	380	481	596	716	398.5	518.5	347	467	120	90	44	66	8	67.5	288			

• ATyS 2000 to 3200 A



Rating (A)

Overall dimensions

Switch mounting

	A 3p.	A 4p.	M 3p.	M 4p.
2000 ... 3200	596	716	347	467

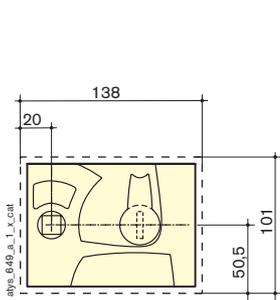


Dimensions

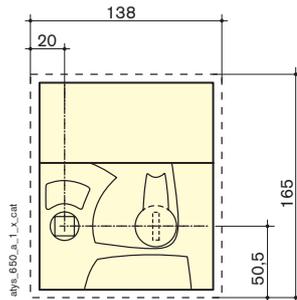
Cut out dimension

• ATyS 125 to 630 A

ATyS 3s

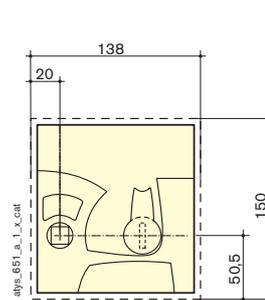


ATyS 3e, 6e, 6m

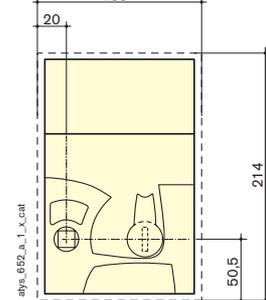


• ATyS 800 to 1800 A

ATyS 3s

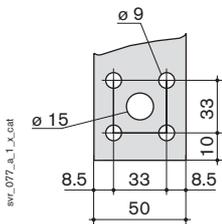


ATyS 3e, 6e, 6m

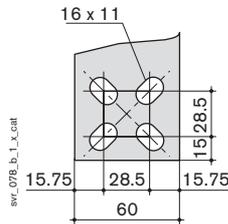


Connection terminals

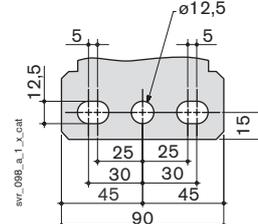
• ATyS 800 to 1000 A



• ATyS 1250 A

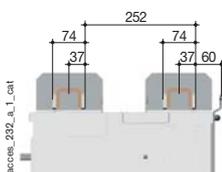
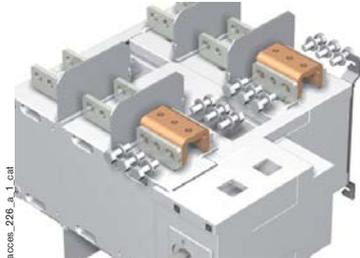


• ATyS 1600 to 3200 A

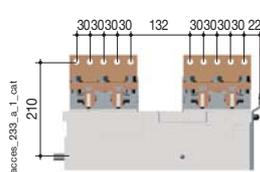
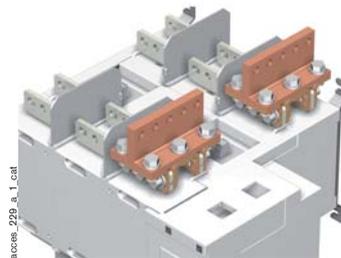


Copper bars connection kits

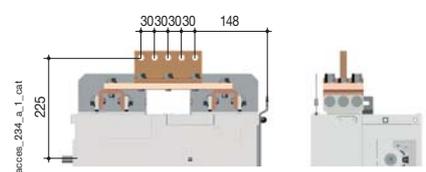
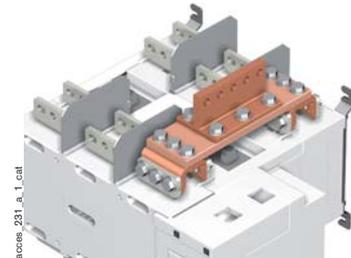
• Fig. 1



• Fig. 2



• Fig. 3



ATyS C30

ATyS C40

The ATyS range
ATyS

▶ **ATyS C30 / ATyS C40**

ATyS VISION software

Other changeover switches



aty_s_448_b_1_cat



aty_s_598_b_1_cat

Functions

ATyS C30 / C40 allows any type of changeover control: ATyS 3, SMV, contactors, circuit breakers or other motorised switches.

Conformity to standards

- IEC 61010-1
- IEC 61000-4-2
- IEC 61000-4-3
- IEC 61000-4-4
- IEC 61000-4-5
- IEC 61000-4-6
- IEC 61000-4-8
- IEC 61000-4-11
- IEC 60068-2-6
- IEC 60068-2-11
- IEC 60068-2-30

General characteristics

- Modular design (6 modules)
- DIN rail mounting
- 2 outputs relays for changeover control.

ATyS C30

- ATyS D10 or D20 possible connection
- Inputs for auxiliary contacts position
- Metering 3U on network 1
- Metering 1U on network 2
- 1 start/stop generator contact
- Programmable inputs
- Programmable outputs.

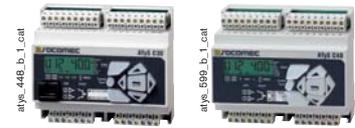
ATyS C40

- Dual gensets controller with a redundant genset application cycle
- Single phase sensing on Gen1 & Gen 2
- Programmable inputs
- Programmable output
- 2 start Gen contacts (Gen1 & Gen2).



References

	ATyS C30	ATyS C40
Supplied from measurement circuit	Reference	Reference
Power supply DC	1599 3030	-
	1599 3031	1599 3040

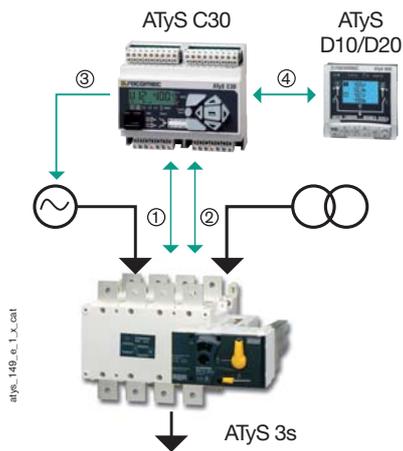


Characteristics

Supplied from measurement circuit	110 ... 400 VAC
Power supply DC	< 9 ... 30 VDC
Measurement range	110 ... 400 VAC / ± 10 %
Fréquence	50 / 60 Hz
Accuracy	± 1 %

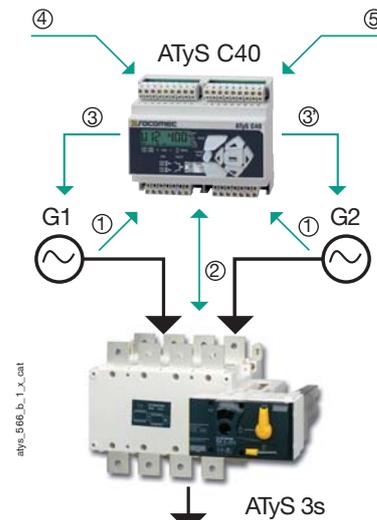
Applications

ATyS C30



1. Measurement and power supply.
2. Control and position information feedback.
3. Generating set "start/stop".
4. ATyS interface connection.

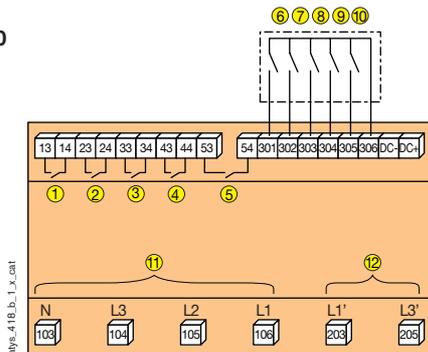
ATyS C40



- 1 & 1'. Generating sets measurement.
2. Control and position information feedback.
- 3 & 3'. Generating set "start/stop" control.
4. External "start/stop" command for basic cycle.
5. DC power supply.

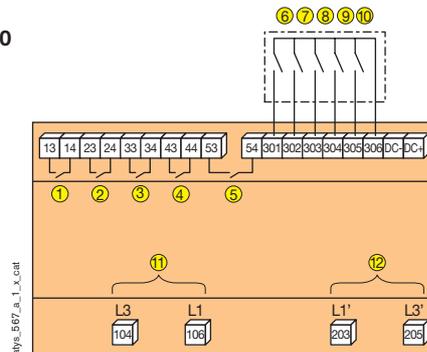
Terminals

ATyS C30



1. Generator 1 start / stop control
2. Pos 1: control
3. Pos 2: control
4. O1 programmable output
5. O2 programmable output
6. CA1: auxiliary contact position 1
7. CA0 : auxiliary contact position 0
8. CA2 : auxiliary contact position 2
9. I1 : programmable input
10. I2 : programmable input
11. 3 U network 1 and alimention measurement
12. 1 U network 2 and alimention measurement

ATyS C40



1. Generator 1 start / stop control
2. Pos 1: control
3. Pos 2: control
4. O1 programmable output
5. Generator 2 start / stop control
6. CA1: auxiliary contact position1
7. I3 : programmable input
8. CA2 : auxiliary contact position2
9. I1 : programmable input
10. I2 : programmable input
11. Metering 1U + frequency generator 1
12. Metering 1U + frequency generator 2

ATyS VISION software

The ATyS range
 ATyS
 ATyS C30 / ATyS C40
 ▶ **ATyS VISION software**
 Other changeover switches



conv_128_a_1_cat

Functions

ATyS VISION is the monitoring and control software for ATyS 3e, 6e and 6m ranges. It operates in a Windows® 98, NT4 (pack 6), Millenium, 2000 or XP environment with a minimum PC configuration of: Pentium® II, 64 Mb RAM, hard disk space of at least 200 Mb, one or more RS232 or RS485 serial ports, a 17" VGA 1024 x 768 screen.

General characteristics

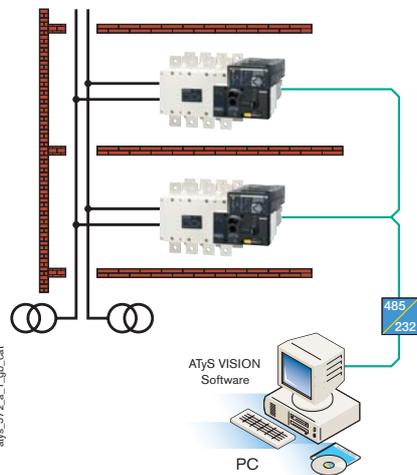
- The **ATyS VISION** software allows you to visualise:
- product status
 - all instantly measured electrical values
 - product configuration parameters
 - timer values
 - input and output status.

For each ATyS, you can export the configuration parameters to EXCEL.

ATyS VISION is available in a multilingual version with the following languages:

- English
- French
- German
- Italian
- Spanish
- Chinese
- Polish.

Versions and characteristics



aty_s_5772_a_1_gb_cat

ATyS VISION displays all the electrical values measured, configures the ATyS parameters and allow remote testing. The user will also be able to import or export the configuration parameters with EXCEL.

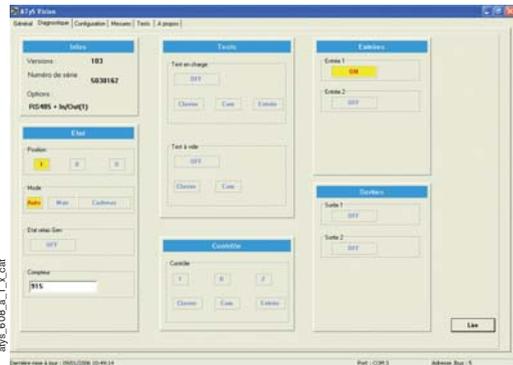


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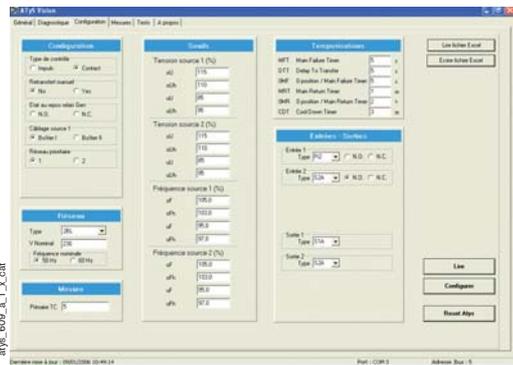
Find on the SOCOMEC Web Site www.socomec.com



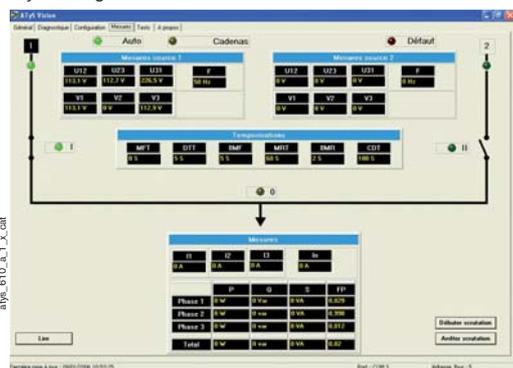
Specification



ATyS status.



ATyS configuration.



Measurement.



Remote testing & control.

Settings:

- communication parameters
- automatic recognition product.

Display:

- ATyS software version
- serial number
- connected input/output modules
- input/output status
- product status
- test status.

Configuration:

- product configuration
- network type
- voltage and frequency thresholds
- timers
- inputs/outputs
- Excel import or export capability.

Measurement:

- normal and backup sources voltage and frequency measurement
- current measurement I1, I2, I3 I_n (measurement ATyS 6m only)
- power P, Q, S per phase and total (measurement ATyS 6m only)
- power factor per phase (measurement ATyS 6m only)
- timer values and countdown
- source status, switch position.

Test:

- on load (with load transfer)
- off load (remote starting and stopping of generating set)
- product monitoring in position I, 0 or II.



Find on the SOCOMEK Web Site www.socomec.com

Other changeover switches

The ATyS range
 ATyS
 ATyS C30 / ATyS C40
 ATyS VISION software

▶ **Other changeover switches**



bd_03_04_01

SOCOMEc provides a wide range of standard or adapted manual and motorised changeover & by-pass switches.

Do not hesitate to consult us.

Conformity to standards

- IEC 60947-3
- BS EN 60947-3
- EN 60947-3
- NBN EN 60947-3
- VDE 0660 Part 107 (1992)

SIRCO VM1



commut_004_a_1_cat

Functions

They are manually operated three or four pole switches.

They provide switching, source inversion and changeover under load of two low voltage power circuits, as well as their safety isolation.

General characteristics

- 63 to 125A ratings, 3 and 4 pole
- 3 stable positions (I, 0, II or I, I+II, II) and facility to switch from one to the other under load (AC22 and AC23)
- Fully visible breaking
- Double visible breaking.

SIRCOVER



svr_09b_a_2_cat

Functions

SIRCOVER products are manually operated multipolar switches.

They ensure switching, transfer of sources or transfer of two low voltage circuits as well as their safety disconnection.

General characteristics

- 125 to 3200A, 3 and 4 pole
- 3 stable positions (I, 0, II or I, I+II, II)
- High electrical characteristics (AC23)
- Fully visible breaking.

SIRCOVER by-pass



svr_119_a_1_cat

Functions

SIRCOVER by-pass products are manually operated changeover switches.

They are a combination of three interlocked switches enabling the use with 3+6 poles or 4-8 poles.

They insulate by providing simultaneous safety loads or low voltage circuits mainly during maintenance operation.

General characteristics

- 125 to 1600A, 3+6 or 4+8 poles
- 3 stable positions (I, 0, II or I, I+II, II)
- High electrical performance (AC23)
- Fully visible breaking.



ATS by-pass switches

swr_194_a_1_x_cat



Functions

They are used to isolate a changeover switching device and changeover the load to an emergency supply.

General characteristics

- 125 and 1600 A, 4 pole only
- 3 stable positions.

Enclosed manual changeover switches

cof_288_a_2_cat



Functions

Enclosures equipped with manual changeover switches provide emergency breaking and changeover switching, for maintenance or safety isolation in the vicinity of any low voltage final circuit.

General characteristics

- Steel or polyester enclosure
- From 63 to 1600A, 4 pole
- Fully visible breaking
- Double door locking
- Triple locking of the handle.

Motorised mixed pole changeover switches

alya_795_a_1_cat

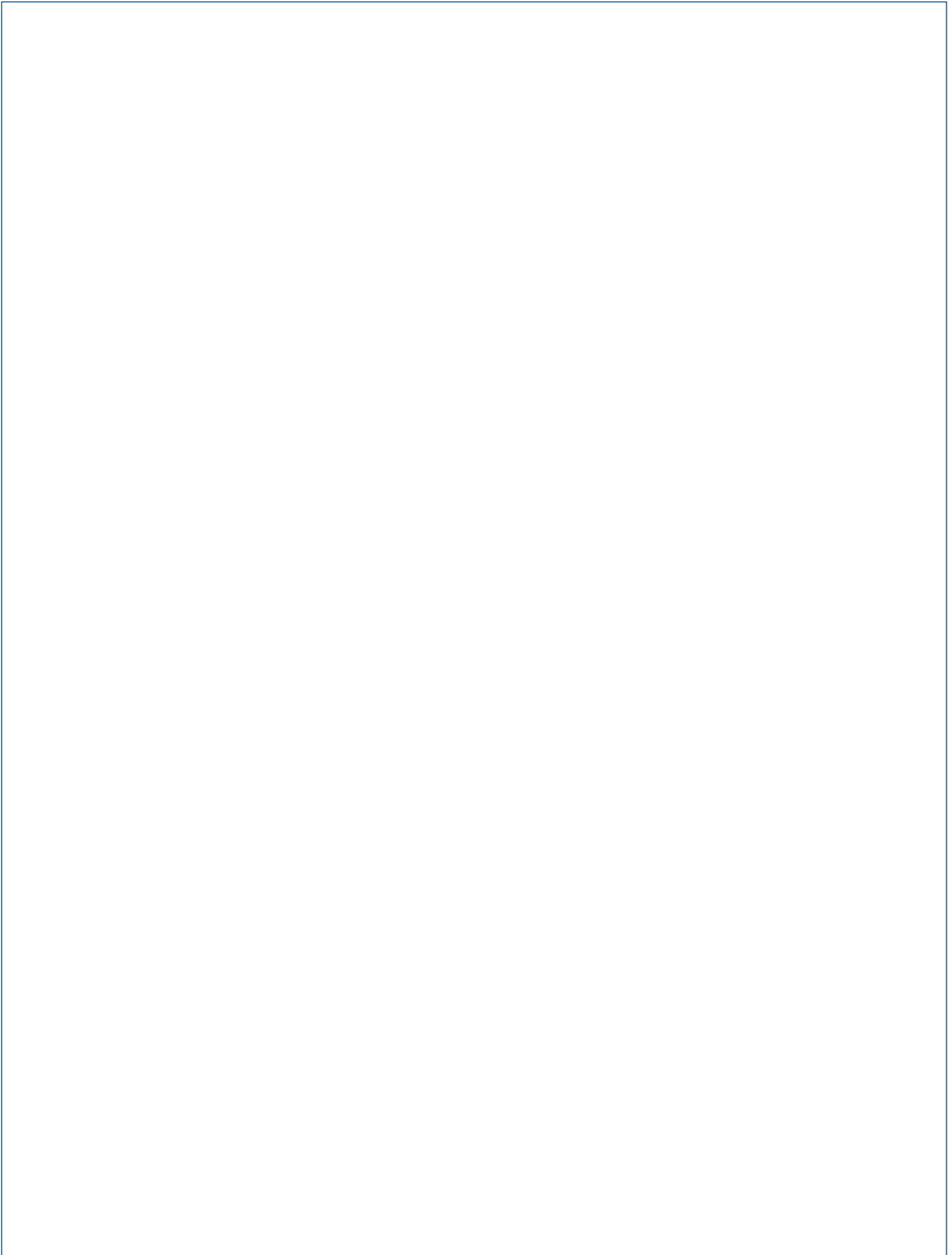


Functions

They provide switching and source inversion for low voltage sources of different power ratings.

General characteristics

- 1250 to 3200A ratings, 3 and 4 pole.



Socomec worldwide

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