










The *ATyS M* range: safe and reliable solutions

Transfer switches

A complete range of automatic and remotely operated transfer switches from 40 to 160 A

| RTSE (Remotely operated) | ATSE (Automatic) | | |
|--|---|--|---|
|  <p data-bbox="231 1254 438 1344">ATyS <i>d</i> M Motorised Transfer Switching Equipment</p> <p data-bbox="247 1467 486 1534">Dual power supply </p> |  <p data-bbox="510 1254 726 1344">ATyS <i>t</i> M Automatic Transfer Switching Equipment</p> <p data-bbox="518 1456 774 1545">Automatic controller to manage mains/ mains applications </p> |  <p data-bbox="821 1254 1029 1344">ATyS <i>g</i> M Automatic Transfer Switching Equipment</p> <p data-bbox="829 1456 1085 1545">Automatic controller to manage mains/ genset applications </p> |  <p data-bbox="1165 1254 1380 1344">ATyS <i>p</i> M Automatic Transfer Switching Equipment</p> <p data-bbox="1109 1456 1428 1545">Mains/mains and mains/genset Tripping function, programmable parameters and communication</p> |

The advantages



Secure operation

- Electrical and mechanical interlocking for optimum safety.
- Positive break indication with two mechanical switch position indicators for clear and secure use.
- Padlocking in the 0 position enables the lockout function on each product.
- Padlocking in 3 positions can also be configured prior to installation.
- Permanent indication of product availability thanks to the Watchdog relay, which constantly monitors the product operating conditions (ATyS g M and ATyS p M).



High performance

- On-load making and isolation for using a single product with any load type, including inductive loads (AC-33).
- Immunity to control voltage fluctuations thanks to stable positions and power supply only required during switching.
- Excellent dynamic withstand for improved safety when closing on a short-circuit.
- Extremely low electrical blackout time (ATyS d M < 90ms) guaranteed thanks to the electromagnetic actuator technology used with rotary self-cleaning contacts.



A fully compact solution

- All-in-one solution, with minimum risk of incorrect mounting or wiring.
- Highly reliable thanks to the compliance with IEC 60947-6-1, the standard governing transfer switching equipment.
- Simplified ordering process: a single reference for the complete solution.



Intuitive use

- Manual emergency control: The product can be operated quickly and safely using an emergency handle.
- Simple selection of operating mode (Auto/Manual) using an integrated selector.



Rapid commissioning

- ATyS d M: No configuration required.
- ATyS t M and ATyS g M: Configuration in just a few minutes using a screwdriver.
- ATyS p M: Simplified configuration (EASY CONFIG software and LCD screen on the device).



Easy to install

- Two switching devices mounted side-by-side for easy access to cabling with installation in a standard 18 module enclosure (product has a very low depth).
- Quick and easy mounting on a DIN rail or back plate.
- Simplified wiring thanks to the cage clamp terminals and dedicated bridging bars that allows a common outgoing connection whilst retaining the cage terminal connections.

Performance

IEC 60947-6-1 / GB 14048-11

- > AC 32B - up to 160 A
- > AC 33B - up to 125 A
- > AC 33IB - up to 160 A

IEC 60947-3

- > AC 23B - up to 160 A

Expert Services

- > Study, definition, advice, implementation, maintenance and training...
- > Our Expert Services team offers customised support to make your project a success.





ATyS d M

Remotely operated Transfer Switching Equipment from 40 to 160 A

Transfer switches



ATyS d M
I-O-II 4P

The solution for

- > Applications with a normal/emergency external controller
- > Building Management System (BMS)



Strong points

- > Secure
- > Superior electrical performance
- > High-speed transfer
- > Immune to voltage fluctuations

Conformity to standards

- > IEC 60947-6,-1
- > IEC 60947-3
- > GB 14048.11



Approvals and certifications



Function

ATyS d M devices are 2 pole or 4 pole transfer switches that are remotely controlled using volt-free contacts from an external controller. They are modular products with positive break indication. They are intended for use in low voltage power supply systems where a brief interruption of the load supply is acceptable during transfer.

Advantages

Secure

ATyS M have both electrical and mechanical interlocks for optimum security. They also feature a positive break indicator, confirming switch position with dual mechanical indicators for increased safety.

Superior electrical performance

ATyS M devices are compliant with IEC 60947-6-1, the standard governing transfer switches. Their AC-33B properties of up to 125 A mean you can use the same product for resistive and inductive loads.

High-speed transfer

ATyS d M devices are based on a coil solution with rotating contacts, therefore ensuring an extremely short black-out duration (< 90ms).

Immune to voltage fluctuations

The power supply of the ATyS d M is only active during transfer. As the product is based on stable positions, it is not affected by network voltage fluctuations.

Operating modes



ATySm_014_c

Easy selection of AUT/MAN mode



ATySm_015_c_1_cat

Manual emergency operation



ATySm_016_c_1_cat

Padlocking facility

What you need to know

Electrical control

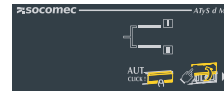
The positions are controlled by dry contacts on any external automated system (e.g. ATyS C30).
These positions are stable even in case of loss of input supply.

Control logic

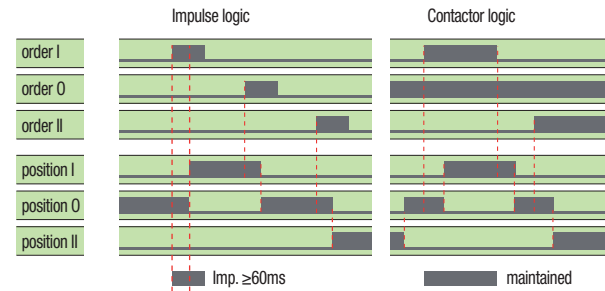
Two types of control logic are offered:

- Pulse logic
 - A switching command of at least 60 ms is necessary to initiate operation.
 - Commands I and II have priority over command 0.
 - The first command received (I or II) has priority as long as it remains present.
- Contactor logic
 - Command 0 must be maintained.
 - If command I or II disappears, the device returns to position 0, so long as the power supply is available.

Single-phase interface



Three-phase interface



Power supply

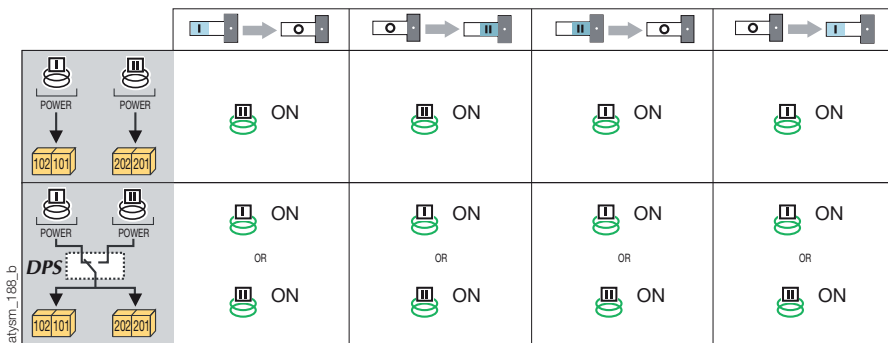
The ATyS d M is equipped with two independent 230 VAC power inputs (176-288 VAC), 50/60 Hz (45/65 Hz).

These two supplies can be connected individually; one to switch I and the other to switch II:

- Power supply 101-102 must be available to reach position I
- Power supply 201-202 must be available to reach position II.

The use of a dual power supply (DPS) or an external supply module secures the command of the 3 positions irrespective of the power supply source.

In this case, both the supply inputs must be connected in parallel.



References

ATyS d M

| Rating (A) | No. of poles | ATyS d M | Bridging bars | Voltage sensing and power supply tap | Terminal shrouds | Auxiliary contact block |
|------------|--------------|-----------|--------------------------------------|--------------------------------------|--------------------------------------|---|
| 40 A | 2 P | 9323 2004 | 2 P 1309 2006 4 P 1309 4006 | 2 pieces 1399 4006 | 2 pieces 2294 4016 ⁽¹⁾ | 1 st unit included 2 nd unit Separate common points 1309 0001 ⁽²⁾ Linked common points 1309 0011 ⁽²⁾ |
| | 4 P | 9323 4004 | | | | |
| 63 A | 2 P | 9323 2006 | | | | |
| | 4 P | 9323 4006 | | | | |
| 80 A | 2 P | 9323 2008 | | | | |
| | 4 P | 9323 4008 | | | | |
| 100 A | 2 P | 9323 2010 | | | | |
| | 4 P | 9323 4010 | | | | |
| 125 A | 2 P | 9323 2012 | | | | |
| | 4 P | 9323 4012 | | | | |
| 160 A | 2 P | 9323 2016 | 1309 2016 | | | |
| | 4 P | 9323 4016 | 1309 4016 | | | |

(1) For the three-phase version, for complete upstream and downstream protection, please order 2x; for the single-phase version please order the part just 1x.

(2) 1 NO/NC contact block for positions I, 0 and II.



ATyS *t* M - ATyS *g* M

Automatic Transfer Switching Equipment

from 40 to 160 A

Transfer switches



ATyS *t* M
I-0-II 4P

atys-tm_001_b_1_cat



ATyS *g* M
I-0-II 2P

atys-gm_001_b_1_cat

The solution for

- > High-rise buildings
- > Data centers
- > Healthcare buildings



Strong points

- > Fast commissioning
- > ATyS *d* M with an integrated controller for dedicated mains/mains or mains/genset functions
- > Secure programming

Conformity to standards

- > IEC 60947-6,-1
- > IEC 60947-3
- > GB 14048.11



Approvals and certifications⁽¹⁾



(1) Product references on request.

Function

ATyS *t* M and ATyS *g* M are modular automatic transfer switches with positive break indication. ATyS *t* M are 4 pole (three-phase) devices and ATyS *g* M are 2 or 4 pole (single or three-phase) devices.

They have all the functions of the ATyS *d* M together with an integrated controller, giving them automatic features dedicated to mains/mains (ATyS *t* M) and mains/genset (ATyS *g* M) applications. They are intended for use in low voltage power supply systems where a brief interruption of the load supply is acceptable during transfer.

Advantages

Quick start

ATyS *t* M and *g* M transfer switches offer significant time saving during commissioning (the process takes 2 to 3 minutes). Thanks to the design that allows commissioning through just one potentiometer (4 on the ATyS *g* M) and four DIP switches, a screwdriver is all that is required to configure the parameters.

ATyS *g* M: dedicated to mains/genset applications

In addition to its single-phase and three-phase voltage & frequency monitoring for both incoming sources, the product's integrated controller also features functions that are specific to mains/genset applications (genset control, test on load, etc.).

ATyS *t* M: dedicated to three-phase mains/mains applications

The ATyS *t* M integrated controller has been designed to provide all the functions necessary for these applications (operation with or without priority, preferred source selection) together with the monitoring of the voltage and frequency of both sources for three-phase networks.

Secure programming

To ensure that the correct configuration is maintained an optional sealable cover can be fitted in order to avoid any unintentional modifications to the programming.

What you need to know

The ATyS t M and ATyS g M are automatic transfer switching equipment that include a fully integrated ATS controller. These products are self powered from incoming supplies: 230 VAC (176-288 VAC), 50/60 Hz (45/65Hz).

References

ATyS t M

| Rating (A) | No. of poles | Network (VAC) | ATyS t M | Bridging bars | Voltage sensing and power supply tap | Terminal shrouds | Auxiliary contact block | Sealable cover |
|------------|--------------|---------------|-----------|------------------|--------------------------------------|--------------------------------------|--|----------------|
| 40 A | 4 P | 230/400 | 9344 4004 | 4 P 1309 4006 | 2 pieces 1399 4006 | 2 pieces 2294 4016 ⁽¹⁾ | 1 unit Separate common points 1309 0001 ⁽²⁾ Linked common points 1309 0011 ⁽²⁾ | 1359 0000 |
| 63 A | 4 P | 230/400 | 9344 4006 | | | | | |
| 80 A | 4 P | 230/400 | 9344 4008 | | | | | |
| 100 A | 4 P | 230/400 | 9344 4010 | | | | | |
| 125 A | 4 P | 230/400 | 9344 4012 | | | | | |
| 160 A | 4 P | 230/400 | 9344 4016 | 1309 4016 | | | | |

(1) For complete upstream and downstream protection please order quantity 2.

(2) 1 NO/NC contact block for positions I, 0 and II.

ATyS g M

| Rating (A) | No. of poles | Network (VAC) ⁽³⁾ | ATyS g M | Bridging bars | Voltage sensing and power supply tap | Terminal shrouds | Auxiliary contact block | Sealable cover |
|------------|--------------|------------------------------|-----------|--------------------------------------|--------------------------------------|--------------------------------------|--|--------------------------------------|
| 40 A | 2 P | 230 | 9353 2004 | 2 P 1309 2006 4 P 1309 4006 | 2 pieces 1399 4006 | 2 pieces 2294 4016 ⁽¹⁾ | 1 unit Separate common points 1309 0001 ⁽²⁾ Linked common points 1309 0011 ⁽²⁾ | 2 P 1359 2000 4 P 1359 0000 |
| | 4 P | 230/400 | 9354 4004 | | | | | |
| 63 A | 2 P | 230 | 9353 2006 | | | | | |
| | 4 P | 230/400 | 9354 4006 | | | | | |
| 80 A | 2 P | 230 | 9353 2008 | | | | | |
| | 4 P | 230/400 | 9354 4008 | | | | | |
| 100 A | 2 P | 230 | 9353 2010 | | | | | |
| | 4 P | 230/400 | 9354 4010 | | | | | |
| 125 A | 2 P | 230 | 9353 2012 | | | | | |
| | 4 P | 230/400 | 9354 4012 | | | | | |
| 160 A | 2 P | 230 | 9353 2016 | 1309 2016 | | | | |
| | 4 P | 230/400 | 9354 4016 | 1309 4016 | | | | |

(1) 4 pole version - for complete upstream and downstream protection please order quantity 2; for 2 pole version order quantity 1.

(2) 1 NO/NC contact block for positions I, 0 and II.

(3) For 127/230VAC networks, please contact your supplier.



ATyS p M

Automatic Transfer Switching Equipment from 40 to 160 A

Transfer switches



ATyS p M
I-0-II 4P

The solution for

- > High-rise buildings
- > Data centres
- > Healthcare buildings
- > Banks and insurance companies
- > Transport (airports, tunnels, etc.)



Strong points

- > Flexible programming
- > Trip function
- > Communication and configuration
- > Remote control interface

Conformity to standards

- > IEC 60947-6,-1
- > IEC 60947-3
- > GB 14048.11



Approvals and certifications



Function

ATyS p M are single-phase or three-phase modular automatic transfer switches with positive break indication.

Functions include ATyS t M and ATyS g M capability, with additional programmable parameters and a tripping function. A product model with communication is available. They are intended for use in low voltage power supply systems where a brief interruption of the load supply is acceptable during transfer.

Advantages

Flexible programming

ATyS p M time delays and inputs/outputs are completely configurable, hence enabling the easy monitoring of specific applications (load shedding, test...) and the definition of an operating cycle specifically adapted to your application.

Trip function

ATyS p M features a function for returning to the 0 position in case of the loss of both power supply sources (tripping). This protects the load from issues due to source instability.

Communication and configuration

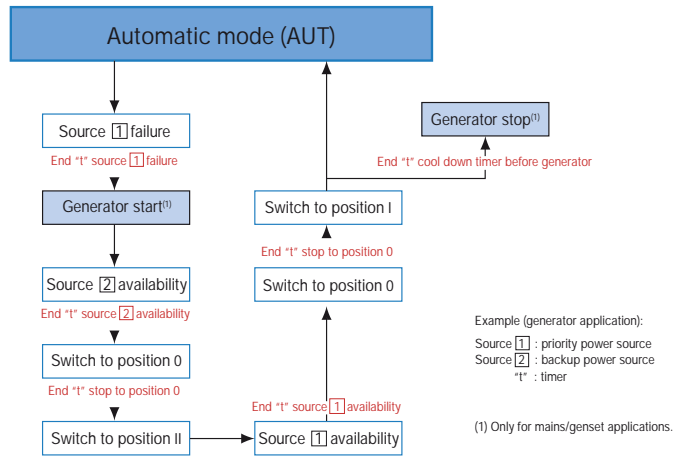
A specific version of ATyS p M is available with integrated Modbus communication. This gives access to most product data (status, voltages, frequencies...). A user friendly configuration software is also available free (Easyconfig) to configure, view and save all the parameters in the ATyS p M.

Remote control interface

Specifically designed for installations where the product is enclosed, the remote interface displays product status on the front panel (D10) or displays and controls with access to programming (D20).

What you need to know

The ATyS p M are automatic transfer switching equipment that include a fully integrated ATS controller. These products are self powered from incoming supplies: 230 VAC (160-305 VAC), 50/60 Hz (45/65Hz). Automatic products are all equipped with a sequence logic. Here is an example of the sequence logic in case of loss and return of the preferred source.



atys_028_h_1_gb_cat

Easyconfig

Easyconfig software is the ideal solution to save time and simplify complex configuration.

You can configure the following parameters:

- application type,
- voltage and frequency thresholds,
- timers,
- inputs/outputs...



atys_849_b_gb

ATyS p M

| Rating (A) | No. of poles | Network (VAC) ⁽³⁾ | ATyS p M | ATyS p M + com | Bridging bars | Voltage sensing and power supply tap | Terminal shrouds | Auxiliary contact block | Remote interface |
|------------|--------------|------------------------------|-----------|----------------|------------------|--------------------------------------|--------------------------------------|--|--------------------------------------|
| 40 A | 4 P | 230/400 | 9364 4004 | 9384 4004 | 4 P 1309 4006 | 2 pieces 1399 4006 | 2 pieces 2294 4016 ⁽¹⁾ | 1 piece | D10 9599 2010 D20 9599 2020 |
| 63 A | 4 P | 230/400 | 9364 4006 | 9384 4006 | | | | Separate common points 1309 0001 ⁽²⁾ | |
| 80 A | 4 P | 230/400 | 9364 4008 | 9384 4008 | | | | Linked common points 1309 0011 ⁽²⁾ | |
| 100 A | 4 P | 230/400 | 9364 4010 | 9384 4010 | | | | | |
| 125 A | 4 P | 230/400 | 9364 4012 | 9384 4012 | | | | | |
| 160 A | 4 P | 230/400 | 9364 4016 | 9384 4016 | 1309 4016 | | | | |

(1) For complete upstream and downstream protection please order quantity 2.

(2) 1 NO/NC contact block for positions I, 0 and II.

(3) For 127/230VAC networks, please contact us.



ATyS M range

ATyS *d* M, ATyS *t* M, ATyS *g* M, ATyS *p* M
from 40 to 160 A

Transfer switches

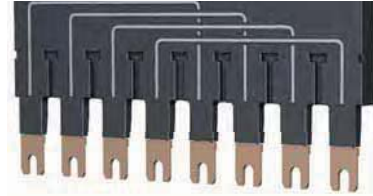
Accessories

Bridging bars

Use

Used to bridge the outgoing common connection between switch I and switch II. The bridging bar does not reduce the connection capacity of the cage terminals.

| Rating (A) | No. of poles | Reference |
|------------|--------------|-----------|
| 40 ... 125 | 2 P | 1309 2006 |
| 160 | 2 P | 1309 2016 |
| 40 ... 125 | 4 P | 1309 4006 |
| 160 | 4 P | 1309 4016 |



atysm_025_a

Voltage sensing and power supply tap

Use

It allows connection of $2 \times \leq 1.5 \text{ mm}^2$ voltage sensing or power cables.

The single-pole voltage sensing tap can be mounted in any of the terminals (incoming) without reducing their connecting capacity.



atysm_026_a

| Rating (A) | Pack | Reference |
|------------|----------|-----------|
| 40 ... 160 | 2 pieces | 1399 4006 |

Terminal shrouds

Use

Protection against direct contact with terminals or connecting parts.
Advantages of the terminal shrouds
Perforations allow remote thermographic inspection without the need to remove the shrouds. Possibility of sealing.

Mounting

For complete upstream and downstream protection of 4 pole products, please order quantity 2; for 2 pole products please order quantity 1.



atysm_027_a

| Rating (A) | Position | Reference |
|------------|--------------|--------------------------|
| 40 ... 160 | top / bottom | 2294 4016 ⁽¹⁾ |

(1) Reference composed of 2 pieces.

Auxiliary contact

Use

A maximum of two auxiliary contact blocks can be fitted to each product. Each auxiliary contact block integrates 3 NO/NC auxiliary contacts (I, O, II).

The ATyS *d* M is delivered as standard with 1 block with separate common points.

Characteristics:

250 VAC / 5 A maximum.

24 VDC / 2 A maximum.



access_352_a

access_398_a

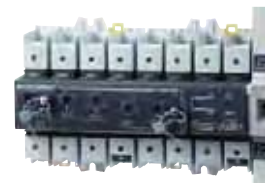
| Rating (A) | Type | Reference |
|------------|------------------------|-----------|
| 40 ... 160 | Separate common points | 1309 0001 |
| 40 ... 160 | Linked common points | 1309 0011 |

Sealable cover

Use

Prevents access to the ATyS *t* M and ATyS *g* M configuration panels.

| Rating (A) | No. of poles | Reference |
|------------|--------------|-----------|
| 40 ... 160 | 2 P | 1359 2000 |
| 40 ... 160 | 4 P | 1359 0000 |



atysm_313_a

Polycarbonate enclosure

Use

Dedicated to the installation of a three-phase ATyS M, it enables easy integration of a compact transfer switch solution.

| Rating (A) | H x W x D (mm) | Reference |
|------------|-----------------|-----------|
| 40 ... 160 | 385 x 385 x 193 | 1309 9006 |



atysm_036_b_1_cat

Extension unit

Use

Combined with the polycarbonate enclosure, the extension unit provides additional space in order to connect 70 mm² cables to the ATyS M with ease.

| Rating (A) | Reference |
|------------|-----------|
| 40 ... 160 | 1309 9007 |



atysm_039_a_1_x_cat

Residential enclosure

Use

Dedicated to the implementation of a single-phase ATyS M, the plastic enclosure provides a compact IP41 transfer switch solution with easy integration.

| Rating (A) | H x W x D (mm) | Reference |
|------------|-----------------|-----------|
| 40 ... 160 | 410 x 305 x 150 | 1309 9056 |



atysm_196_a_1_cat

Double power supply - DPS

Use

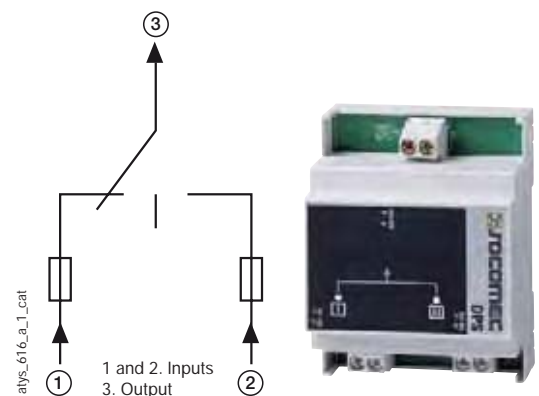
Allows an ATyS *d* M to be supplied by two 230 VAC 50/60 Hz networks.

Input

- The input is considered as "active" from 200 VAC.
- Maximum voltage: 288 VAC.
- Internal protection: each input is fuse protected (3.15 A).
- Connection on terminals: max. 6 mm².
- Modular product: the width of 4 modules.

| Description of accessories | Reference |
|----------------------------|-----------|
| 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_cat

atys_612_a_2_cat

ATyS M range

ATyS d M, ATyS t M, ATyS g M, ATyS p M

from 40 to 160 A

Accessories (continued)

Auto-transformer

Use

For use with ATyS M in 400 VAC three-phase applications that have no distributed neutral.

The ATyS M includes integrated sensing and power supply circuits, therefore a neutral connection is required for 400 VAC three-phase applications. When no neutral connection is available this autotransformer (400/230 VAC, 400 VA) provides the 230 VAC required for the ATyS to function.

| Rating (A) | Reference |
|------------|-----------|
| 40 ... 160 | 1599 4121 |



trafo_165_b_1

Remote interfaces for ATyS p M

Use

To remotely display source availability and position indication on the front of a panel when the ATyS M is enclosed.

The remote interface is powered directly from the ATyS M via the RJ45 connection cable.

Maximum cable length: 3 m.

D10

To display source availability and position indication on the front panel of an enclosure.

Protection degree: IP21.

D20

In addition to the functions of the D10, the D20 displays measurements and enables control and configuration from the front of the display panel.

Protection degree: IP21.

Door mounting

2 holes Ø 22.5.

ATyS M connection via RJ45 cable, not isolated.

Cable not provided.



atys_564_c_1_cat

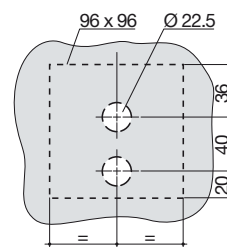


atys_565_c_1_cat



atys_597_a_1_cat

RJ45 to connect to ATyS p M



Drillings

atys_161_a_1_x_cat

| Description of accessories | Reference |
|----------------------------|-----------|
| D10 | 9599 2010 |
| D20 | 9599 2020 |

Connecting cable for remote interfaces

Use

To connect between a remote interface (type D10 or D20) and a control product (ATyS p M).

Characteristics:

RJ45 8 wire straight-through, non isolated cable. Length 3 m.

| Type | Length | Reference |
|------------|--------|-----------|
| RJ45 cable | 3 m | 1599 2009 |



access_209_a_2_cat

Cage-terminal interface

Use

The power connection terminals allow conversion of the cage clamp terminals into bolt-on type connection terminals, enabling connection of up to two 35 mm² cables or one 70 mm² cable. Compatible with aluminium terminals. Each power connection terminal is provided with separation screens.

| Rating (A) | Reference |
|------------|--------------------------|
| 40 ... 160 | 1399 4017 ⁽¹⁾ |

(1) For complete conversion, order quantity 3.



access_252_a_1_cat

Polycarbonate enclosed solution

General characteristics

- From 40 to 160 A.
- 230 VAC [176 VAC-288 VAC] 50 Hz network or 60 Hz [45 Hz-65 Hz]
- Protection degree: IP 55, IK08.
- Colour: RAL 7035.
- Material: transparent cover, enclosure base: polycarbonate.
- Mounting: 4 holes on the rear of the enclosure.
- Flame resistant to 650°C.

References

ATyS d M single-phase model (2 P)

| Rating (A) | Reference |
|------------|-----------|
| 40 | 1823 2004 |
| 63 | 1823 2006 |
| 80 | 1823 2008 |
| 100 | 1823 2010 |
| 125 | 1823 2012 |
| 160 | 1823 2016 |

ATyS g M single-phase model (2 P)

| Rating (A) | Reference |
|------------|-----------|
| 40 | 1854 2004 |
| 63 | 1854 2006 |
| 80 | 1854 2008 |
| 100 | 1854 2010 |
| 125 | 1854 2012 |
| 160 | 1854 2016 |



atysm_251_a_1_cat

Accessories

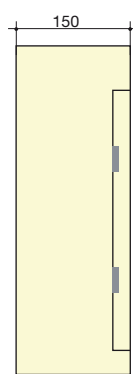
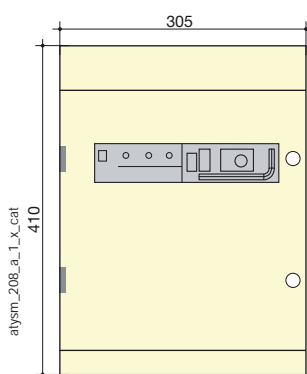
Customer fit

| Description | Reference |
|--|-----------|
| Auxiliary contact | 1309 0001 |
| Voltage sensing and power supply tap (2 per reference) | 1399 4006 |

For model ATyS d M only

| Description | Reference |
|-----------------------|-----------|
| ATyS C30 relay driver | 1599 3030 |
| ATyS C40 relay driver | 1599 3040 |
| Dual power supply | 1599 4001 |

Dimensions



- Weight: 5.5 kg.
- Connection: recommended cable size (Cu): 25 to 70 mm² according to rating (max. cable size: 70 mm²).

ATyS M range

ATyS d M, ATyS t M, ATyS g M, ATyS p M

from 40 to 160 A

Solutions with steel enclosure

General characteristics

- Adapted to mechanical risk and dust hazard.
- Integrated bridging bar.
- Protection degree: IP3x or IP54.
- Colour: RAL 7035.
- Cable gland plates: top and bottom.
- Material: 1.2 mm thick steel.
- Coating: epoxy polyester powder.
- Mounting: 4 wall mounting brackets - not fitted.
- Door: hinged, cut-out 327.4x47.6 mm.
- Door lock: 3 mm double bar (key included).

References

ATyS d M models

| Rating (A) | No. of poles | IP 3X Reference | IP 54 Reference |
|------------|--------------|-----------------|-----------------|
| 40 | 4 P | 1823 4004 | 1823 4005 |
| 63 | 4 P | 1823 4006 | 1823 4007 |
| 80 | 4 P | 1823 4008 | 1823 4009 |
| 100 | 4 P | 1823 4010 | 1823 4011 |
| 125 | 4 P | 1823 4012 | 1823 4013 |
| 160 | 4 P | 1823 4016 | 1823 4017 |

ATyS g M models

| Rating (A) | No. of poles | IP 3X Reference | IP 54 Reference |
|------------|--------------|-----------------|-----------------|
| 40 | 4 P | 1854 4004 | 1854 4005 |
| 63 | 4 P | 1854 4006 | 1854 4007 |
| 80 | 4 P | 1854 4008 | 1854 4009 |
| 100 | 4 P | 1854 4010 | 1854 4011 |
| 125 | 4 P | 1854 4012 | 1854 4013 |
| 160 | 4 P | 1854 4016 | 1854 4017 |

ATyS p M + COM RS485 models

| Rating (A) | No. of poles | IP 3X Reference | IP 54 Reference |
|------------|--------------|-----------------|-----------------|
| 40 | 4 P | 1884 4004 | 1884 4005 |
| 63 | 4 P | 1884 4006 | 1884 4007 |
| 80 | 4 P | 1884 4008 | 1884 4009 |
| 100 | 4 P | 1884 4010 | 1884 4011 |
| 125 | 4 P | 1884 4012 | 1884 4013 |
| 160 | 4 P | 1884 4016 | 1884 4017 |



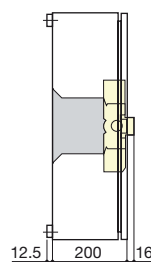
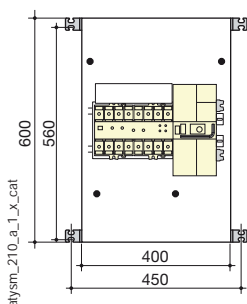
conf_366_b

Accessories

Customer fit

| Description | Reference |
|---------------|-----------|
| Solid neutral | 1309 9008 |
| IP54 kit | 1399 4016 |

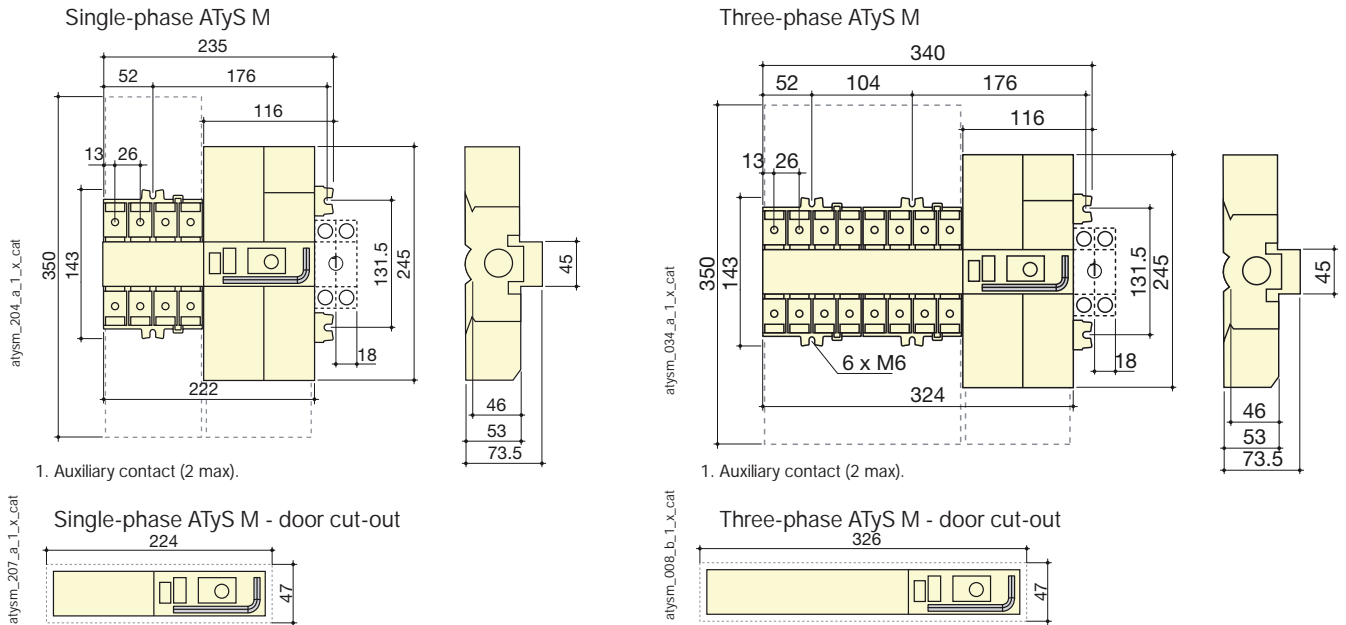
Dimensions



- Weight (without accessories): 15 kg.
- Connection (without cage/terminal interface): min. Cu 10 mm², max. 70 mm².

Dimensions

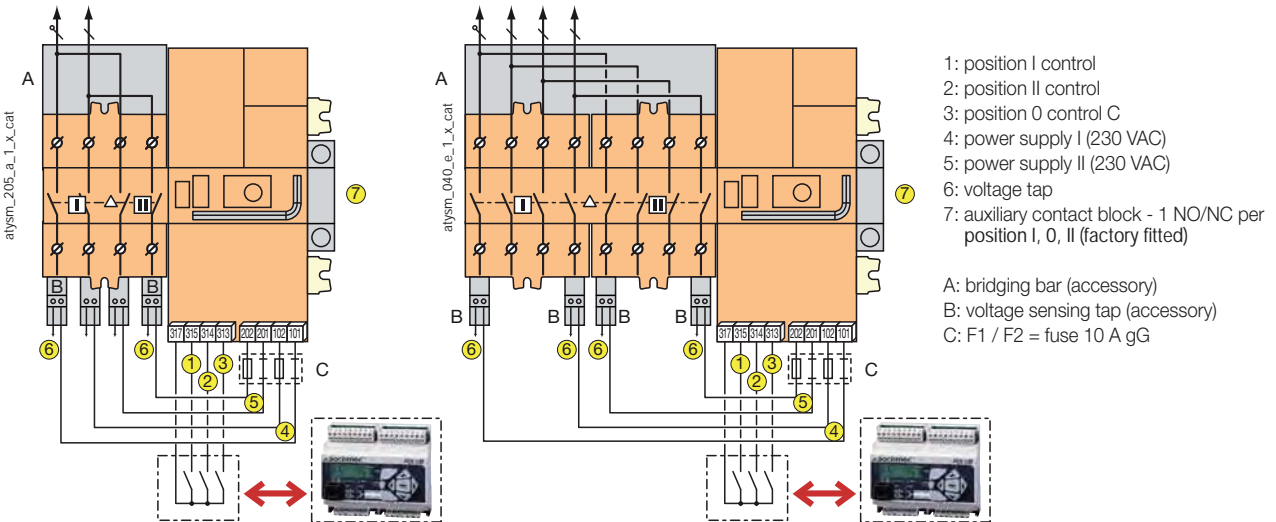
ATyS M 40 to 160 A



Terminals and connections

Single-phase ATyS d M

Three-phase ATyS d M



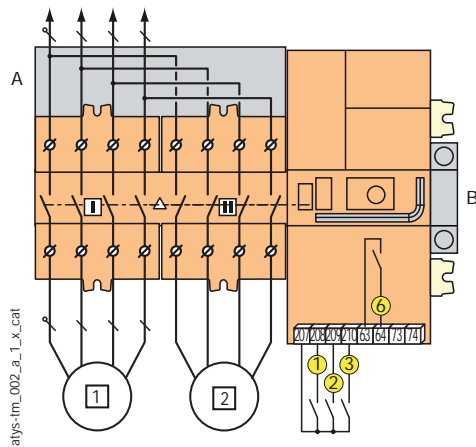
ATyS M range

ATyS *d* M, ATyS *t* M, ATyS *g* M, ATyS *p* M

from 40 to 160 A

Terminals and connections (continued)

Three-phase ATyS *t* M

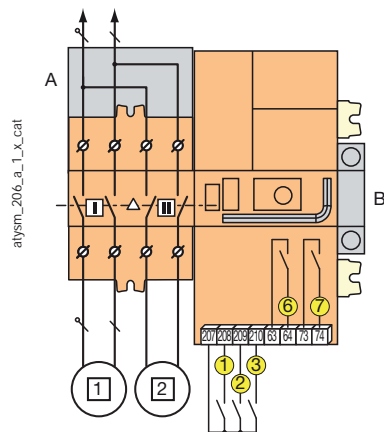


- 1 primary source (network)
- 2 backup source (network)

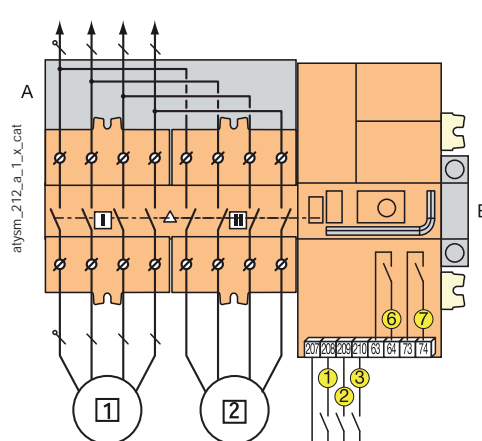
- 1: position 0 control
- 2: preferred source selection
- 3: automatic mode inhibition
- 6: availability S1 or S2

A: bridging bar (accessory)
 B: auxiliary contact block - 1 NO/NC per position I, 0, II (accessory)

Single-phase ATyS *g* M



Three-phase ATyS *g* M

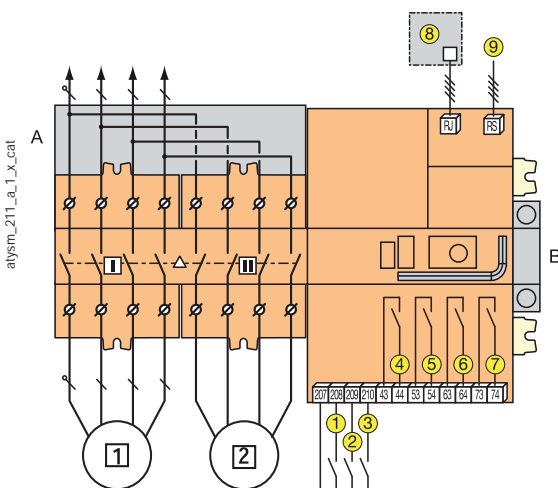


- 1 primary source
- 2 backup source

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

A: bridging bar (accessory)
 B: auxiliary contact block - 1 NO/NC per position I, 0, II (accessory)

Three-phase ATyS *p* M



- 1 primary source
- 2 backup source

- 1 - 2 - 3: programmable inputs
- 4 - 5 - 6: programmable outputs
- 7: genset start / stop control
- 8: RJ45 for connecting a D10/D20 remote interface.
- 9: RS485 for communication on versions with COM.

A: bridging bar (accessory)
 B: auxiliary contact block - 1 NO/NC per position I, 0, II (accessory)

Characteristics according to IEC 60947-3 and IEC 60947-6-1

40 to 160 A

| | | | | | | |
|--|------|------|------|-------|-------|-------|
| Thermal current I_{th} at 40°C | 40 A | 63 A | 80 A | 100 A | 125 A | 160 A |
| Rated insulation voltage U_i (V) (power circuit) | 800 | 800 | 800 | 800 | 800 | 800 |
| Rated impulse withstand voltage U_{imp} (kV) (power circuit) | 6 | 6 | 6 | 6 | 6 | 6 |
| Rated insulation voltage U_i (V) (control circuit) | 300 | 300 | 300 | 300 | 300 | 300 |
| Rated impulse withstand voltage U_{imp} (kV) (control circuit) - ATyS d M | 4 | 4 | 4 | 4 | 4 | 4 |
| Rated impulse withstand voltage U_{imp} (kV) (control circuit) - ATyS t M, g M and p M | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |

Rated operational currents I_e (A) according to IEC 60947-6-1

| Rated voltage | Utilisation category | A/B ⁽¹⁾ | A/B ⁽¹⁾ | A/B ⁽¹⁾ | A/B ⁽¹⁾ | A/B ⁽¹⁾ | A/B ⁽¹⁾ |
|---------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 415 VAC | AC-31 A / AC-31 B | 40/40 | 63/63 | 80/80 | 100/100 | 100/125 | 100/160 |
| 415 VAC | AC-32 A / AC-32 B | 40/40 | 63/63 | 80/80 | 100/100 | 100/125 | 100/160 |
| 415 VAC | AC-33 A / AC-33 B | -/40 | -/63 | -/80 | -/100 | -/125 | -/125 |

Rated operational currents I_e (A) according to IEC 60947-3

| Rated voltage | Utilisation category | A/B ⁽¹⁾ | A/B ⁽¹⁾ | A/B ⁽¹⁾ | A/B ⁽¹⁾ | A/B ⁽¹⁾ | A/B ⁽¹⁾ |
|---------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 415 VAC | AC-20 A / AC-20 B | 40/40 | 63/63 | 80/80 | 100/100 | 125/125 | 160/160 |
| 415 VAC | AC-21 A / AC-21 B | 40/40 | 63/63 | 80/80 | 100/100 | 125/125 | 160/160 |
| 415 VAC | AC-22 A / AC-22 B | 40/40 | 63/63 | 80/80 | 100/100 | 125/125 | 160/160 |
| 415 VAC | AC-23 A / AC-23 B | 40/40 | 63/63 | 80/80 | 100/100 | 125/125 | 125/160 |
| 690 VAC | AC-21 A / AC-21 B | 40/40 | 63/63 | 80/80 | 100/100 | 125/125 | 160/160 |
| 690 VAC | AC-22 A / AC-22 B | 40/40 | 63/63 | 80/80 | 80/80 | 100/125 | 100/125 |
| 690 VAC | AC-23 A / AC-23 B | 40/40 | 63/63 | 63/63 | 80/80 | 80/80 | 80/80 |

Current rated as conditional short-circuit with fuse gG DIN

| | | | | | | |
|--|----|----|----|-----|-----|-----|
| Conditional short-circuit current (kA rms) | 50 | 50 | 50 | 50 | 50 | 40 |
| Associated fuse rating (A) | 40 | 63 | 80 | 100 | 125 | 160 |

Current rated as conditional short-circuit with any brand of circuit breaker that ensures tripping in less than 0.3s ⁽⁴⁾

| | | | | | | |
|--|---|---|---|---|---|---|
| Current rated as short-time withstand I_{cw} 0.3s (kA rms) | 7 | 7 | 7 | 7 | 7 | 7 |
|--|---|---|---|---|---|---|

Short-circuit operation (switch only)

| | | | | | | |
|---|----|----|----|----|----|----|
| Current rated as short-time withstand I_{cw} 1s (kA rms) ⁽²⁾ | 4 | 4 | 4 | 4 | 4 | 4 |
| Rated peak withstand current (kA peak) ⁽²⁾ | 17 | 17 | 17 | 17 | 17 | 17 |

Connection

| | | | | | | |
|---|----|----|----|----|----|----|
| Min. connection cross-section | 10 | 10 | 10 | 10 | 10 | 10 |
| Minimum Cu cable cross-section (mm ²) | 70 | 70 | 70 | 70 | 70 | 70 |
| Tightening torque (Nm) | 5 | 5 | 5 | 5 | 5 | 5 |

Switching time⁽⁵⁾

| | | | | | | |
|---|-----|-----|-----|-----|-----|-----|
| I - 0 or II - 0, following a command (ms) | 45 | 45 | 45 | 45 | 45 | 45 |
| Transfer time I - II or II - I, following a command (ms) | 180 | 180 | 180 | 180 | 180 | 180 |
| I-0 or II-0, after outage (s) | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| I-II or II-I transfer time, after outage (s) | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| Contact transfer time ("black-out") I-II min. (ms) ⁽³⁾ | 150 | 150 | 150 | 150 | 150 | 150 |

Power supply

| | | | | | | |
|--|---------|---------|---------|---------|---------|---------|
| Min./max. supply (VAC) (ATyS d M, t M and g M) | 176/288 | 176/288 | 176/288 | 176/288 | 176/288 | 176/288 |
| Min./max. supply (VAC) (ATyS p M) | 160/305 | 160/305 | 160/305 | 160/305 | 160/305 | 160/305 |

Control supply power demand

| | | | | | | |
|---|----|----|----|----|----|----|
| Rated power (VA) | 6 | 6 | 6 | 6 | 6 | 6 |
| Max. intensity at 230 VAC (A) - ATyS d M, t M and g M | 30 | 30 | 30 | 30 | 30 | 30 |
| Max. intensity at 230 VAC (A) - ATyS p M | 20 | 20 | 20 | 20 | 20 | 20 |

Mechanical specifications

| | | | | | | |
|--|--------|--------|--------|--------|--------|--------|
| Durability (number of operating cycles) | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 |
| Weight of single-phase models - non-packaged (kg) | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |
| Weight of single-phase models - including packaging (kg) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| Weight of three-phase models - non-packaged (kg) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| Weight of three-phase models - including packaging (kg) | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 |

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

(2) For a rated operational voltage $U_e = 400$ VAC.

(3) 5% tolerance.

(4) Value for coordination with any circuit breaker that ensures tripping in less than 0.3s.

For coordination with specific circuit-breaker references, higher short-circuit current values are available. Please contact us.

(5) At rated voltage - excluding time delays, where applicable.