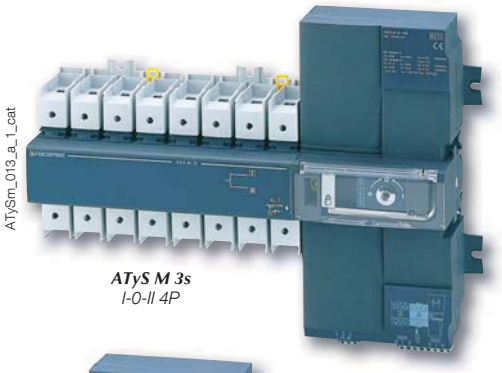
# ATyS M

## Motorised and automatic changeover switches
from 40 to 160 A




*ATyS M 3s*
*I-0-II 4P*


*ATyS M 6e*
*I-0-II 4P*


*ATyS M 6s*
*I-0-II 2P*

## Function

**ATyS M** is a range of single-phase or three-phase modular motorised changeover switches with positive break indication. They enable on load changeover switching of two supply sources in remote control, automatic or manual mode. They are intended for use in low voltage power systems where interruption of the load supply is acceptable during transfer.

## Advantages

### Proven technology
Two mechanically interlocked SIRCO MV load break switches provide rapid switching, excellent dynamic withstand and a high number of operations.

### Stable positions
The ATyS M has three stable positions which are not affected by voltage drops or vibrations, thus protecting your load against network interference.

### Secure operation
ATyS M provide positive break indication, confirming switch position, and a back-up manual operation function.

### Choice of configuration interface
ATyS M 6 automatic changeover switches are available with a simple or an advanced integrated configuration and control interface:
- ATyS M 6s are configured through the adjustment of dip switches and potentiometers.
- ATyS M 6e are configured through the use of pushbuttons and a display.

### Return to position 0
Depending on its configuration, the ATyS M 6e enables a return to position 0 if the power is cut.

## The solution for
- Healthcare buildings.
- Generator manufacturers.
- Data centres.

## Strong points
- Proven technology.
- Stable positions.
- Secure operation.
- Choice of configuration interface.

## Conformity to standards
- IEC 60947-3
- IEC 60947-6-1
- GB 14048.11

## Approvals and certifications(1)

*(1) Product reference on request.*

## Modes of operation


AUT/MAN control


Back-up manual operation


Padlocking facility



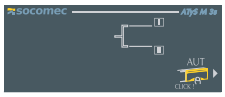
socomec Innovative Power Solutions

# What you need to know

## On *ATyS M 3s* models

### Power supply

*Single-phase interface*




*Three-phase interface*


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

These two power 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.

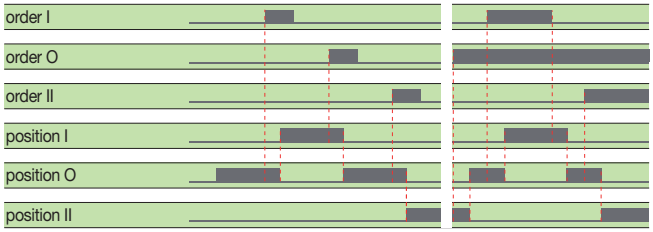
The use of a dual power supply (DPS), or an external supply module, provides full security of the 3 position commands with the availability of either supply.

In this case, both the supply inputs must be connected in parallel in order for them both to be supplied from the output of the DPS.

- Electrical control

The positions are controlled by volt-free contacts which may come from an external automatic controller (e.g. ATyS C30) or, for example, pushbuttons. The positions are stable, even without a supply. Two types of control logic are available:

- Impulse logic
  - A switching command of at least 60 ms is necessary to initiate operation.
  - The first command (order) received (I or II) has priority as long as it remains present.
- Contactor logic
  - Order 0 must be maintained to activate contactor logic (313-317).
  - If command I or II disappears, the device returns to zero position, if power supply is available.



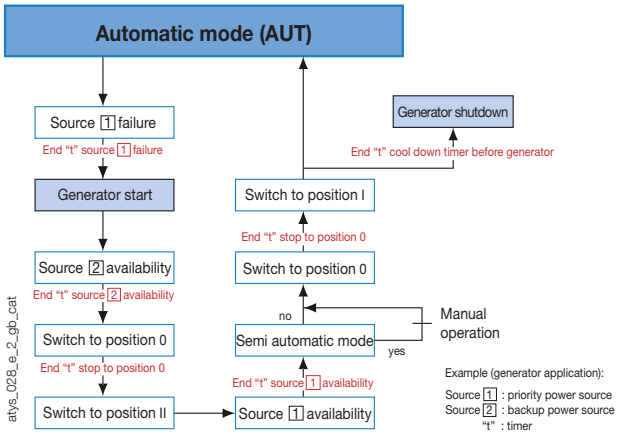

## *ATyS M 6s* and *M 6e* models

### Power supply

- ATyS M 6 products are self powered from incoming supplies: 230 VAC (176-288 VAC for the ATyS M 6s and 160-305 VAC for the ATyS M 6e), 50/60 Hz (45-65 Hz).
- For three-phase, two versions are available:
  - 230 / 400 VAC with distributed neutral conductor: Product is powered between phase and neutral (if there is no neutral, an autotransformer is required)
  - 127 / 230 VAC with or without distributed neutral conductor: product is powered between 2 phases.
- For single-phase, one version is available:
  - 230 VAC networks: Product is powered between phase and neutral.
- The neutral conductor can be connected to the left or right side of each switch.

### Automatic control

- ATyS M 6s and M 6e are equipped with a sequence logic.




### Configuration

ATyS M 6s

Single-phase interface


Three-phase interface


- Common points between the three-phase and single-phase versions:
  - 2 potentiometers (normal supply loss and return time delays)
  - 2 dip-switches (Pause for 2 seconds in position 0 during switching I<->II ; Transformer/Transformer or Transformer/Genset application).
- 4 LEDs (Source availability indicators; "AUT" Automatic mode; Fault).
- 3 inputs for external control (Inhibition of the automatic mode; Remote test on load (Priority selection for Transformer/Transformer); Manual retransfer from the alternate supply to the normal supply).
- 1 NO bi-stable output relay for generator starting/stopping.
- 1 NC relay for product availability.
- Specific to three-phase ATyS M:
  - 2 additional potentiometers (Nominal voltage; Voltage/frequency thresholds)
  - 2 additional dip switches (50 or 60 Hz; network selection)
- Specific to the single-phase ATyS M:
  - PRG button: voltage and nominal frequency auto configuration.

ATyS M 6e

Three-phase interface


- Applications: Transformer/Genset, Transformer/Transformer, with or without priority.
- Display + keyboard (Device configuration; Displays supply measurements; Test and control mode access).
- LEDs (Product Power On ; Source availability indicators; Position indication; "AUT" Automatic mode; TEST/CONTROL Mode ; Fault).
- 3 configurable inputs.
- 3 configurable output relays.
- 1 configurable output relay for generator starting/stopping.
- Connection of a remote interface ATyS D10 or D20.
- RS485 MODBUS communication (COM version).

# References

## ATyS M 3s

| Rating (A) | No. of poles | Power supply voltage | ATyS M 3s | Bridging bars | Voltage sensing and power supply tap | Terminal shrouds | Auxiliary contact block |
|---|---|---|---|---|---|---|---|
| 40 A | 2 P | 230 VAC | 1323 **2004** | 2 P 1309 **2006** 4 P 1309 **4006** | 2 pieces 1399 **4006** | 2 pieces 2294 **4016**(1) | 1st A/C block included<br>2nd A/C block Separate common points 1309 **0001**(2)<br>Linked common points 1309 **0011**(2) |
| | 4 P | 230 VAC | 1323 **4004** | | | | |
| 63 A | 2 P | 230 VAC | 1323 **2006** | | | | |
| | 4 P | 230 VAC | 1323 **4006** | | | | |
| 80 A | 2 P | 230 VAC | 1323 **2008** | | | | |
| | 4 P | 230 VAC | 1323 **4008** | | | | |
| 100 A | 2 P | 230 VAC | 1323 **2010** | | | | |
| | 4 P | 230 VAC | 1323 **4010** | | | | |
| 125 A | 2 P | 230 VAC | 1323 **2012** | | | | |
| | 4 P | 230 VAC | 1323 **4012** | | | | |
| 160 A | 2 P | 230 VAC | 1323 **2016** | 1309 **2016** | | | |
| | 4 P | 230 VAC | 1323 **4016** | 1309 **4016** | | | |

*(1) For the three-phase version (4 P), for upstream and downstream protection, please order the reference twice. For the single-phase version (2 P) please order the reference once.*
*(2) 1 NO/NC contact block for positions I, 0 and II.*

## ATyS M 6s

| Rating (A) | No. of poles | Network (VAC) | ATyS M 6s | Bridging bars | Voltage sensing and power supply tap | Terminal shrouds | Auxiliary contact block | Sealable cover |
|---|---|---|---|---|---|---|---|---|
| 40 A | 2 P | 230 | 1353 **2004** | 2 P 1309 **2006** 4 P 1309 **4006** | 2 pieces 1399 **4006** | 2 pieces 2294 **4016**(1) | 1 piece<br>Separate common points 1309 **0001**(2)<br>Linked common points 1309 **0011**(2) | 2 P 1359 **2000** 4 P 1359 **0000** |
| | 4 P | 127/230 | 1353 **4004** | | | | | |
| | 4 P | 230/400 | 1354 **4004** | | | | | |
| 63 A | 2 P | 230 | 1353 **2006** | | | | | |
| | 4 P | 127 / 230 | 1353 **4006** | | | | | |
| | 4 P | 230 / 400 | 1354 **4006** | | | | | |
| 80 A | 2 P | 230 | 1353 **2008** | | | | | |
| | 4 P | 127 / 230 | 1353 **4008** | | | | | |
| | 4 P | 230 / 400 | 1354 **4008** | | | | | |
| 100 A | 2 P | 230 | 1353 **2010** | | | | | |
| | 4 P | 127 / 230 | 1353 **4010** | | | | | |
| | 4 P | 230 / 400 | 1354 **4010** | | | | | |
| 125 A | 2 P | 230 | 1353 **2012** | | | | | |
| | 4 P | 127 / 230 | 1353 **4012** | | | | | |
| | 4 P | 230 / 400 | 1354 **4012** | | | | | |
| 160 A | 2 P | 230 | 1353 **2016** | 2 P 1309 **2016** | | | | |
| | 4 P | 127 / 230 | 1353 **4016** | 4 P 1309 **4016** | | | | |
| | 4 P | 230 / 400 | 1354 **4016** | | | | | |

*(1) For the three-phase version (4 P), for upstream and downstream protection, please order the reference twice. For the single-phase version (2 P) please order the reference once.*
*(2) 1 NO/NC contact block for positions I, 0 and II.*

## ATyS M 6e

| Rating (A) | No. of poles | Network (VAC) | ATyS M 6e | ATyS M 6e + COM | Bridging bars | Voltage sensing and power supply tap | Terminal shrouds | Auxiliary contact block | Remote control interface |
|---|---|---|---|---|---|---|---|---|---|
| 40 A | 4 P | 127 / 230 | 1363 **4004** | 1383 **4004** | 4 P 1309 **4006** | 2 pieces 1399 **4006** | 2 pieces 2294 **4016**(1) | 1 piece<br>Separate common points 1309 **0001**(2)<br>Linked common points 1309 **0011**(2) | ATyS D10 1599 **2010** ATyS D20 1599 **2020** |
| | 4 P | 230 / 400 | 1364 **4004** | 1384 **4004** | | | | | |
| 63 A | 4 P | 127 / 230 | 1363 **4006** | 1383 **4006** | | | | | |
| | 4 P | 230 / 400 | 1364 **4006** | 1384 **4006** | | | | | |
| 80 A | 4 P | 127 / 230 | 1363 **4008** | 1383 **4008** | | | | | |
| | 4 P | 230 / 400 | 1364 **4008** | 1384 **4008** | | | | | |
| 100 A | 4 P | 127 / 230 | 1363 **4010** | 1383 **4010** | | | | | |
| | 4 P | 230 / 400 | 1364 **4010** | 1384 **4010** | | | | | |
| 125 A | 4 P | 127 / 230 | 1363 **4012** | 1383 **4012** | | | | | |
| | 4 P | 230 / 400 | 1364 **4012** | 1384 **4012** | | | | | |
| 160 A | 4 P | 127 / 230 | 1363 **4016** | 1383 **4016** | 4 P 1309 **4016** | | | | |
| | 4 P | 230 / 400 | 1364 **4016** | 1384 **4016** | | | | | |

*(1) For upstream and downstream protection please order the reference twice.*
*(2) 1 NO/NC contact block for positions I, 0 and II.*

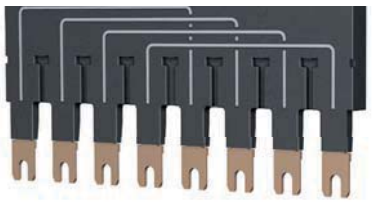
# Accessories

## Bridging bars

### Use

For providing a common connection between switches I & II on the incoming or outgoing side of the ATyS M (outgoing side only for ATyS M 6), to enable, for example, the load to be supplied from either incoming source (I or II).

The bridging bar set does not reduce the connection capacity of the ATyS M's cage terminals.


atysm_025_a

| 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** |

## Voltage sensing and power supply tap

### Use

This single-pole voltage sensing tap allows the connection of 2 x ≤1.5 mm² voltage sensing or power cables to any ATyS M power terminal without reducing its connection 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. Tamper seals can be fitted for increased security.

### Required quantity

For upstream and downstream protection with a three-phase ATyS M two sets are required. For the single-phase version only one set is required.


atysm_027_a

| Rating (A) | Position | Reference |
|---|---|---|
| 40 … 160 | top and bottom | 2294 **4016**(1) |

*(1) Reference composed of 2 pieces.*

## Auxiliary contact

### Use

Auxiliary contacts for position indication. A maximum of two auxiliary contact blocks can be fitted to each product. Each auxiliary contact block integrates 3 NO/NC auxiliary contacts, one per position (I, 0, II). There are two versions of contact block, one with three separate sets of connections and one that has its three common terminals linked internally. With the common points linked the number of signal cables required is reduced (4 cables instead of 6). The ATyS M 3s is supplied as standard with one auxiliary contact block fitted; this A/C block has separate common points.

### Characteristics:

250 VAC / 5 A maximum.
24 VDC / 2 A maximum.


access_353_a

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

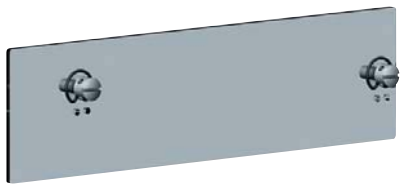
# Accessories (continued)

## Sealable cover

**Use**

It prevents access to the configuration panel of the ATyS M 6s.

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




## Polycarbonate enclosure

**Use**

Dedicated to the implementation of a three-phase ATyS M, it enables easy access to a compact changeover solution.

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


## Extension switch body

**Use**

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

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


## Residential enclosure

**Use**

Dedicated to the implementation of a single-phase ATyS M, it provides a compact IP41 changeover solution with easy access.

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


## Auto-transformer

**Use**

For use with ATyS M 6 in 400 VAC three-phase applications without a distributed neutral. As the ATyS M 6 has integrated measurement and power supply circuits, 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 M 6 to function.

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


## Double power supply - DPS

**Use**

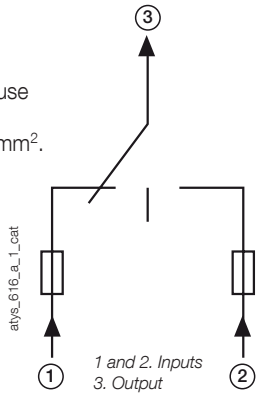
Provides 230 VAC to both ATyS M 3s power supply inputs, enabling remote transfer to any position with either incoming source available.

**Input**

- The input is considered “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 device: 4 module width.

| 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 |

| Description of accessories | Reference |
|---|---|
| DPS: Double power supply for ATyS M 3s | 1599 **4001** |




## Remote interfaces for ATyS M 6e

### Use

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

Interfaces are powered from the ATyS M 6e, via the RJ45 connection cable.

Maximum connection distance: 3 m.

### ATyS D10

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

Protection degree: IP21

### ATyS D20

In addition to the functions of the ATyS D10, the D20 displays measurements and enables ATyS M 6e mode control and configuration from the front of a panel.

Protection degree: IP21

### Door mounting

2 holes Ø 22.5.

ATyS M connection via RJ45 cable, not isolated.

Cable available as an accessory.

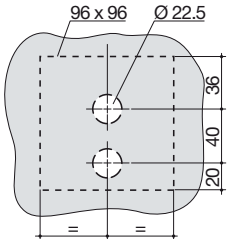
| Description of accessories | Reference |
|---|---|
| ATyS D10 | 1599 **2010** |
| ATyS D20 | 1599 **2020** |


ats_564_c_1_cat


ats_565_c_1_cat

ats_597_a_1_cat

*Interfaces are powered from the ATyS M*




ats_161_a_1_x_cat

*Drillings*

## Connecting cable for remote interfaces

### Use

To connect between a remote interface (type D10 or D20) and an ATyS M 6e.

### Characteristics:

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

acces_209_a_2_cat

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

## Power connection terminals

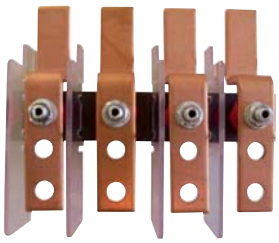
### Use

The power connection terminals allow conversion of the cage terminals into bolt-on type connection terminals, enabling connection of up to two 35mm² cables or one 70mm² cable.

Each power connection terminal is provided with separation screens.

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

*For complete conversion, order 3 times the reference.*

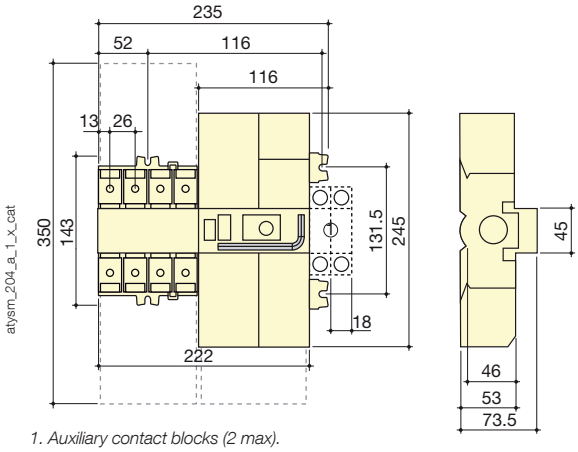


acces_319_a_1_cat

# Dimensions

## ATyS M 40 to 160 A

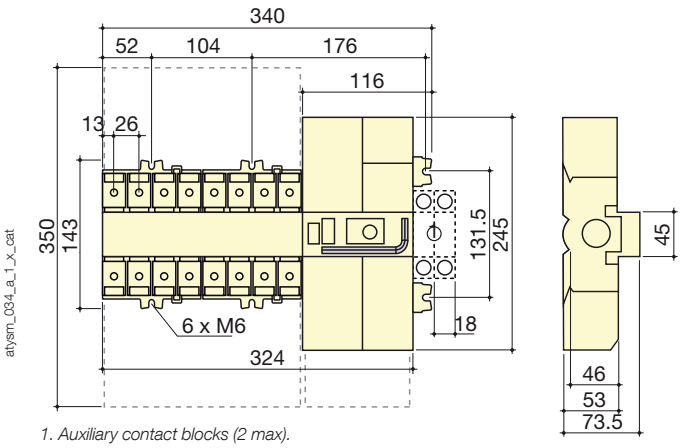
### Single-phase ATyS M




atysm_204_a_1_x_cat

*1. Auxiliary contact blocks (2 max).*

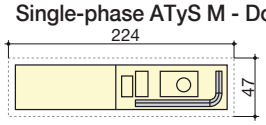
### Three-phase ATyS M




atysm_034_a_1_x_cat

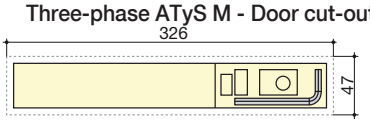
*1. Auxiliary contact blocks (2 max).*

### Single-phase ATyS M - Door cut-out




atysm_207_a_1_x_cat

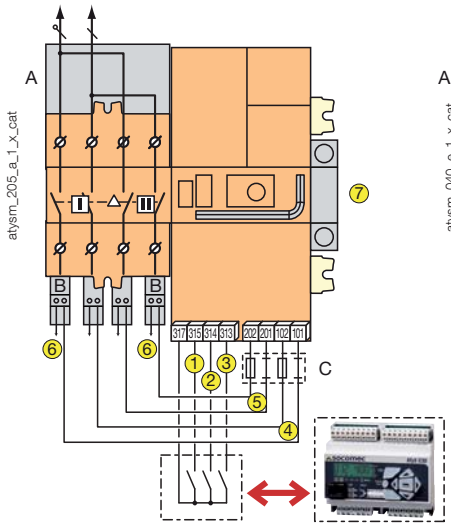
### Three-phase ATyS M - Door cut-out



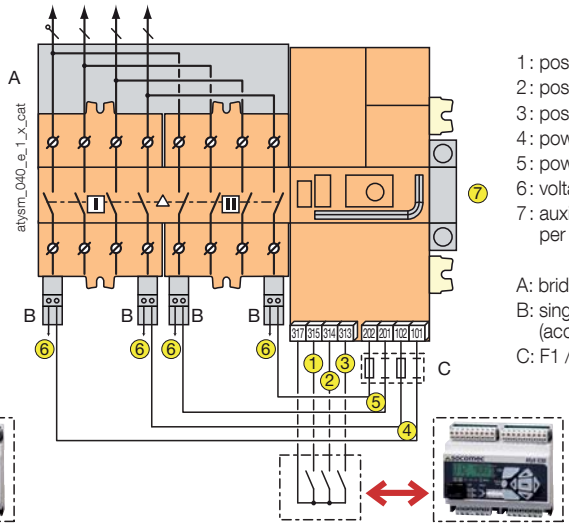

atysm_008_b_1_x_cat

# Terminals and connections

## Single-phase ATyS M 3s



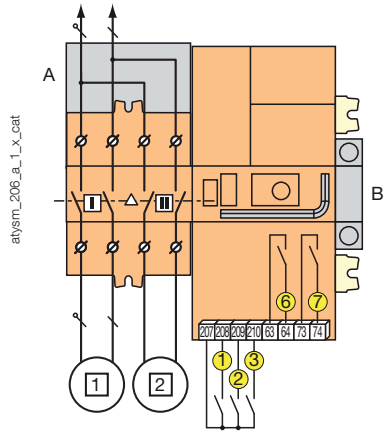

## Three-phase ATyS M 3s



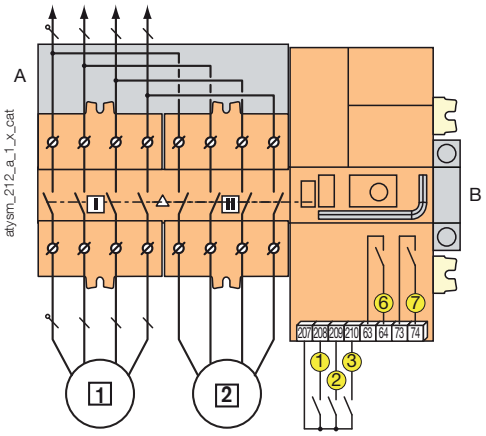

1 : position I control
2 : position II control
3 : position 0 control
4 : power supply I (230 VAC)
5 : power supply II (230 VAC)
6 : voltage tap
7 : auxiliary contact block - 1 NO/NC contact per position I , 0, II (factory fitted)

A: bridging bar (accessories)
B: single-phase voltage sensing tap (accessories)
C: F1 / F2 = fuse 10 A gG

## Single-phase ATyS M 6s




## Three-phase ATyS M 6s

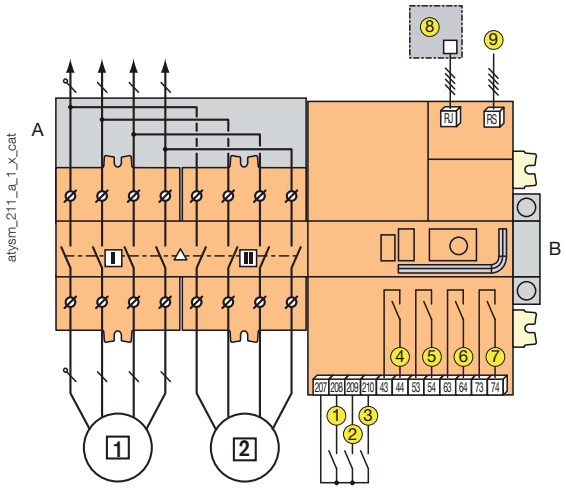



1 preferred source
2 alternate source

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 (accessories)
B: auxiliary contact block - 1 NO/NC contact per position I , 0, II (accessories)

## Three-phase ATyS M 6e




1 preferred source
2 alternate source

1 - 2 - 3 : programmable inputs
4 - 5 - 6 : programmable outputs
7 : genset start / stop control
8 : RJ 45 for connecting a ATyS D10/D20 remote interface
9 : RS485 for communication on versions with COM.

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

# 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) (operation circuit) | | 300 | 300 | 300 | 300 | 300 | 300 |
| Rated impulse withstand voltage $U_{imp}$ (kV) (operation circuit) - ATyS M 3s | | 4 | 4 | 4 | 4 | 4 | 4 |
| Rated impulse withstand voltage $U_{imp}$ (kV) (operation circuit) - ATyS M 6 | | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| 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(5) | AC-21 A / AC-21 B | 40/40 | 63/63 | 80/80 | 100/100 | 125/125 | 160/160 |
| 690 VAC(5) | AC-22 A / AC-22 B | 40/40 | 63/63 | 80/80 | 80/80 | 100/125 | 100/125 |
| 690 VAC(5) | AC-23 A / AC-23 B | 40/40 | 63/63 | 63/63 | 80/80 | 80/80 | 80/80 |
| 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 |
| Fuse protected short-circuit withstand as per IEC 60947-3 at 415 VAC | | | | | | | |
| Prospective short-circuit current (kA rms) | | 50 | 50 | 50 | 50 | 50 | 40 |
| Associated fuse rating (A) | | 40 | 63 | 80 | 100 | 125 | 160 |
| Circuit breaker protected short-circuit withstand with any circuit breaker that ensures tripping in less than 0.3s | | | | | | | |
| Rated short-time withstand current 0.3s Icw (kA rms) | | 7 | 7 | 7 | 7 | 7 | 7 |
| Short-circuit capacity (without protection) | | | | | | | |
| Rated short-time withstand current 1 s. $I_{CW}$ (kA rms) | | 4 | 4 | 4 | 4 | 4 | 4 |
| Rated short-circuit making capacity $I_{cm}$ (kA peak) | | 5.88 | 5.88 | 5.88 | 5.88 | 5.88 | 5.88 |
| Connection | | | | | | | |
| Minimum connection cross-section | | 10 | 10 | 10 | 10 | 10 | 10 |
| Maximum Cu cable cross-section ($mm^2$) | | 70 | 70 | 70 | 70 | 70 | 70 |
| Tightening torque (Nm) | | 5 | 5 | 5 | 5 | 5 | 5 |
| Switching time (Standard setting) | | | | | | | |
| I - 0 or II - 0 (ms)(3) | | 45 | 45 | 45 | 45 | 45 | 45 |
| I - II or II - I (ms) (3) | | 180 | 180 | 180 | 180 | 180 | 180 |
| Duration of "electrical blackout" I - II (ms) minimum | | 90 | 90 | 90 | 90 | 90 | 90 |
| Power supply | | | | | | | |
| Power supply voltage 230 VAC min / max (VAC) (ATyS M 3s and ATyS M 6s) | | 176/288 | 176/288 | 176/288 | 176/288 | 176/288 | 176/288 |
| Power supply voltage 230 VAC min / max (VAC) (ATyS M 6e) | | 160/305 | 160/305 | 160/305 | 160/305 | 160/305 | 160/305 |
| Control supply power demand | | | | | | | |
| Nominal power (VA) | | 6 | 6 | 6 | 6 | 6 | 6 |
| Max current under 230 VAC (A) - ATyS M 3s and M 6s | | 30 | 30 | 30 | 30 | 30 | 30 |
| Max current under 230 VAC (A) - ATyS M 6e | | 20 | 20 | 20 | 20 | 20 | 20 |
| Mechanical characteristics | | | | | | | |
| Durability (number of operating cycles) | | 10 000 | 10 000 | 10 000 | 10 000 | 10 000 | 10 000 |
| Weight of single-phase versions - without packaging (kg) | | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |
| Weight of single-phase versions - with packaging (kg) | | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| Weight of three-phase versions - without packaging (kg) | | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| Weight of three-phase versions - with 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) Between the command given and reaching of position at $U_n$ (under nominal conditions).*
*(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 consult us.*
*(5) Only on ATyS M 3s.*

## Services and technical assistance

> Our expertise extends to a complete offer of customised services such as technical site audit and solution specification, commissioning, training, maintenance, and project engineering.