



From 125 to 3200 A

➤ Function

The **ATyS** dedicated to applications from 125A, enables the switching On Load three phase sources in remote or automatic mode. This Transfer Switching Equipment (TSE) is designed to be used in low voltage power systems for Open Transition Transfer applications.

This Transfer Switching Equipment (TSE) is composed of two mechanically and electrically interlocked switches.

- The **ATyS 3 (RTSE)** is driven by volt-free dry contacts allowing switching operation between position I, 0, II, from an external control logic or a PLC (control relays type ATyS C30).
- The **ATyS 6 (ATSE)** is dedicated to break before make automatic transfer applications. The ATyS 6 integrates control relays, timers and test functions to manage a Normal/ Backup switching operation between two networks or between a generator set and a network.

➤ General characteristics

- Fully visible breaking.
- On load switching.
- Manual emergency operation.
- 3 stable positions (I, 0, II), overlapping contacts on request (I, I+II, II).
- Padlocking in 0 position (I and II optional).
- AUTO / MANU selector.
- Single phase or three phase control on networks I and II (ATyS 6e and 6m).
- Electrical measurements (ATyS 6e and 6m).
- Measure of I, P, Q, S and PF (ATyS 6m).
- Configurable Control Logic.
- Possibility of inhibition of the electrical control (ATyS 3e).
- Optional communication and inputs/outputs modules (ATyS 3e and ATyS 6).

➤ Conformity to standards

- IEC 60947-3
- IS 14947-3
- 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
- VDE 0660-107



AUT/MAN command



Emergency manual operation



Padlocking facility

What you need to know

On ATyS 3s and 3e models

Operation

ATyS 3s



ATyS 3s is equipped with one 230VAC power input (176-288 VAC), 50/60 Hz (45/65 Hz).

ATyS 3e



ATyS 3e is equipped with 2 power inputs: one for power source 1 & the other one as backup power source 2. It allows the product to be electrically controlled in the 3 positions with only one of the supplies present.

Electrical control

General

- The switching operation can be driven by an external dry contact.
- On ATyS 3e, it is possible to inhibit the electrical control (dry contact closed between terminal n° 313 and 317).

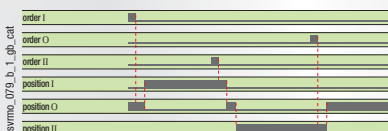
- The first order received has priority as long as it is present. A zero command has always priority, excepted in case of controls inhibition.

Pulse logic

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

Contactor logic

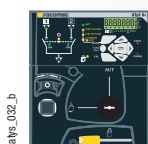
- The transfer command is a maintained dry contact.
- If command I or II disappears, the device returns to zero position, if power supply is available.
- A 0 command drives the device into zero position, irrespective of the status of the I and II commands.



On ATyS 6e and 6m models

Operation

ATyS 6e



ATyS 6m



ATyS 6e and 6m are equipped with 2 power inputs (same as ATyS 3e): one for power source 1 & the other one as backup power source 2. It allows the product to be electrically controlled in the 3 positions with only one of the supplies present.

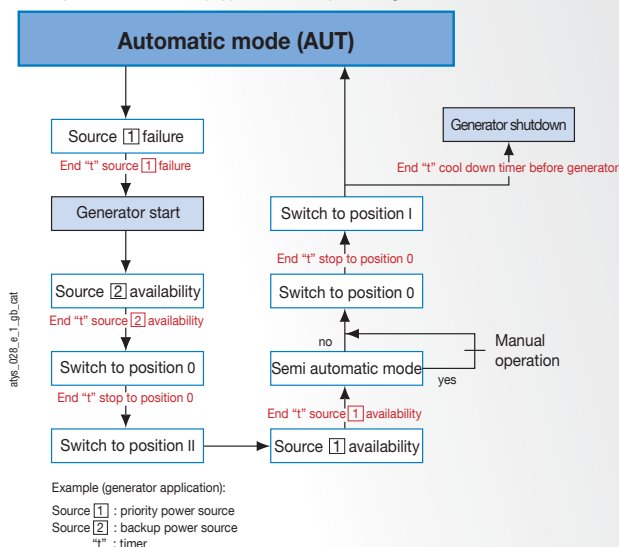
Characteristics

- Single phase or three phase control on networks I and II.
- Independent adjustable over/undervoltage and over/underfrequency thresholds: +/- 20 % of the nominal value.
- Adjustable hysteresis thresholds linked to the threshold values.
- Control of phase rotation
- Measure (3U and frequency on network 1 and 2; ATyS 6e and 6m N/E cycle delay; 3I, In, P, Q, S, PF - 3 phases only on ATyS 6m).

- Display + keyboard (adjustment of all threshold parameters; adjustment of MFT, DTT, OMF, MRT, OMR and CDT Visualization of electrical values; Test functions and position control functions;
- LED's (Product Power On; Status of the electrical sources; Position of the switch status; "AUT" mode; TEST/CONTROL mode and default.
- 1 configurable bistable output relay for generator start/stop command.(30 VDC, 5 A, AC1).
- 1NO fault relay activated in case of changeover position ordered and not reached (30 VDC, 5 A, AC1).

Automatic Control

The ATyS 6e and 6m are equipped with a sequence logic.



Control modes

- Test On Load: This test simulates a loss of priority source. The complete automatic sequence is then followed. Can be activated from the keypad of the product or remotely from an external dry contact.
- Test Off-Load: This test will start and stop the generator without load transfer. Can be activated from the keypad of the product.
- Control of position I, 0, II: Allows the selection of the position of the product; the Automatic mode is inhibited. Can be activated from the keypad of the product or remotely from an external dry contact.
- Manual retransfer (Semi automatic): When this parameter is programmed, the switching back to the main must be acknowledge on the keypad of the product or through the contact of an optional Input/output module.

➔ ATyS - References



ATyS 3

Rating (A)	No. of poles	ATyS 3s	ATyS 3e	Bridging bars*	Terminal shrouds	Terminal screens	Optional modules	Auxiliary contacts	Voltage transformer 400/230 VAC	
125 A	3 P	1523 3012	1533 3012	4109 0019	3 P 2694 3014 ⁽³⁾⁽⁴⁾ 4 P 2694 4014 ⁽³⁾⁽⁴⁾	3 P 1509 3012 ⁽⁵⁾ 4 P 1509 4012 ⁽⁵⁾	RS485 MODBUS 1599 2000 ⁽⁶⁾ 2 inputs / 2 outputs 1599 2001 ⁽⁶⁾	ATyS 3s 1599 1002 ⁽⁷⁾ ATyS 3e 1599 0002 ⁽⁷⁾	1599 4063	
	4 P	1523 4012 ⁽¹⁾	1533 4012							
160 A	3 P	1523 3016	1533 3016							
	4 P	1523 4016 ⁽¹⁾	1533 4016							
250 A	3 P	1523 3025	1533 3025	4109 0025	3 P 2694 3021 ⁽³⁾⁽⁴⁾	3 P 1509 3025 ⁽⁵⁾				
	4 P	1523 4025 ⁽¹⁾	1533 4025							
400 A	3 P	1523 3040	1533 3040	4109 0039	4 P 2694 4021 ⁽³⁾⁽⁴⁾	4 P 1509 4025 ⁽⁵⁾				
	4 P	1523 4040 ⁽¹⁾	1533 4040							
630 A	3 P	1523 3063	1533 3063	4109 0063	2694 3051 ⁽³⁾⁽⁴⁾ 2694 4051 ⁽³⁾⁽⁴⁾	1509 3063 ⁽⁵⁾ 1509 4063 ⁽⁵⁾				
	4 P	1523 4063 ⁽¹⁾	1533 4063							
800 A	3 P	1523 3080	1533 3080	4109 0080		3 P 1509 3080 ⁽⁵⁾ 4 P 1509 4080 ⁽⁵⁾	ATyS 3s 1599 1032 ⁽⁷⁾ ATyS 3e 1599 0032 ⁽⁷⁾	1599 4120		
	4 P	1523 4080 ⁽¹⁾	1533 4080							
1000 A	3 P	1523 3100	1533 3100							
	4 P	1523 4100 ⁽¹⁾	1533 4100							
1250 A	3 P	1523 3120	1533 3120	4109 0120						
	4 P	1523 4120 ⁽¹⁾	1533 4120							
1600 A	3 P	1523 3160	1533 3160	4109 0160					3 P 1509 3160 ⁽⁵⁾ 4 P 1509 4160 ⁽⁵⁾	
	4 P	1523 4160 ⁽¹⁾	1533 4160							
1800 A	3 P	1523 3180								ATyS 3s 1599 1032 ⁽⁷⁾
	4 P	1523 4180								
2000 A	3 P		1533 3200	(2)		3 P 1509 3200 ⁽⁵⁾ 4 P 1509 4200 ⁽⁵⁾	included	1599 4200		
	4 P		1533 4200							
2500 A	3 P		1533 3250							
	4 P		1533 4250							
3200 A	3 P		1533 3320							
	4 P		1533 4320							

* 1 required per pole.

(1) Available enclosed (see pages 503 "Enclosed changeover switches").

(2) See page 317 "Copper bars connection kits".

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

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

(5) To shroud the front switch top and bottom, 1 reference is required.

(6) On ATyS 3e only.

(7) Factory fitted.

ATyS 3 (continued)

Rating (A)	No. of poles	ATyS 3s	ATyS 3e	DC power supply	Padlockable handle	Key handle interlocking system	Door protective surround	Mounting spacers	DPS - Dual power supply	
125 A	3 P	1523 3012	1533 3012	12VDC/230 VAC 1599 5012	1599 0003 ⁽²⁾	1509 1006 ⁽²⁾	ATyS 3s 1529 0012 ATyS 3e 1539 0012	1509 0001	1599 4001 ⁽³⁾	
	4 P	1523 4012 ⁽¹⁾	1533 4012							
160 A	3 P	1523 3016	1533 3016							
	4 P	1523 4016 ⁽¹⁾	1533 4016							
250 A	3 P	1523 3025	1533 3025							
	4 P	1523 4025 ⁽¹⁾	1533 4025							
400 A	3 P	1523 3040	1533 3040							
	4 P	1523 4040 ⁽¹⁾	1533 4040							
630 A	3 P	1523 3063	1533 3063							
	4 P	1523 4063 ⁽¹⁾	1533 4063							
800 A	3 P	1523 3080	1533 3080	24VDC/230 VAC 1599 5112	1599 0004 ⁽²⁾	1509 1004 ⁽²⁾	ATyS 3s 1529 0080 ATyS 3e 1539 0080			
	4 P	1523 4080 ⁽¹⁾	1533 4080							
1000 A	3 P	1523 3100	1533 3100							
	4 P	1523 4100 ⁽¹⁾	1533 4100							
1250 A	3 P	1523 3120	1533 3120							
	4 P	1523 4120 ⁽¹⁾	1533 4120							
1600 A	3 P	1523 3160	1533 3160							
	4 P	1523 4160 ⁽¹⁾	1533 4160							
1800 A	3 P	1523 3180					ATyS 3s 1529 0080			
	4 P	1523 4180								
2000 A	3 P		1533 3200				ATyS 3e 1539 0080			
	4 P		1533 4200							
2500 A	3 P		1533 3250							
	4 P		1533 4250							
3200 A	3 P		1533 3320							
	4 P		1533 4320							

(1) Available enclosed (see pages 503 "Enclosed changeover switches").

(2) Factory fitted.

(3) On ATyS 3e only.



ATyS 6*

Rating (A)	No. of poles	ATyS 6e	ATyS 6m	Bridging bars**	Voltage sensing kit	Terminal shrouds	Terminal screens	Optional modules	Human interface / Offset Machine	RJ45 connecting cable
125 A	3 P	1563 3012	1573 3012	4109 0019	3 P 1559 3012 4 P 1559 4013 ⁽³⁾	3 P 2694 3014 ⁽⁴⁾⁽⁵⁾ 4 P 2694 4014 ⁽⁴⁾⁽⁵⁾	3 P 1509 3012 ⁽⁶⁾ 4 P 1509 4012 ⁽⁶⁾	RS485 MODBUS 1599 2000 2 inputs/ 2 outputs 1599 2001	ATyS D10 1599 2010 ATyS D20 1599 2020	1599 2009
	4 P	1563 4012 ⁽¹⁾	1573 4012							
160 A	3 P	1563 3016	1573 3016							
	4 P	1563 4016 ⁽¹⁾	1573 4016							
250 A	3 P	1563 3025	1573 3025	4109 0025	3 P 1559 3025 4 P 1559 4026 ⁽³⁾	3 P 2694 3021 ⁽⁴⁾⁽⁵⁾ 4 P 2694 4021 ⁽⁴⁾⁽⁵⁾	3 P 1509 3025 ⁽⁶⁾ 4 P 1509 4025 ⁽⁶⁾			
	4 P	1563 4025 ⁽¹⁾	1573 4025							
400 A	3 P	1563 3040	1573 3040	4109 0039	3 P 1559 3040 4 P 1559 4041 ⁽³⁾	3 P 2694 4021 ⁽⁴⁾⁽⁵⁾	3 P 1509 4025 ⁽⁶⁾ 4 P 1509 4025 ⁽⁶⁾			
	4 P	1563 4040 ⁽¹⁾	1573 4040							
630 A	3 P	1563 3063	1573 3063	4109 0063	3 P 1559 3063 4 P 1559 4064 ⁽³⁾	2694 3051 ⁽⁴⁾⁽⁵⁾	1509 3063 ⁽⁶⁾			
	4 P	1563 4063 ⁽¹⁾	1573 4063			2694 4051 ⁽⁴⁾⁽⁵⁾	1509 4063 ⁽⁶⁾			
800 A	3 P	1563 3080	1573 3080	4109 0080	3 P 1559 3080 4 P 1559 4081 ⁽³⁾		3 P 1509 3080 ⁽⁶⁾ 4 P 1509 4080 ⁽⁶⁾ 1509 3160 ⁽⁶⁾ 1509 4160 ⁽⁶⁾			
	4 P	1563 4080 ⁽¹⁾	1573 4080							
1000 A	3 P	1563 3100	1573 3100							
	4 P	1563 4100 ⁽¹⁾	1573 4100							
1250 A	3 P	1563 3120	1573 3120	4109 0120	3 P 1559 3120 4 P 1559 4121 ⁽³⁾					
	4 P	1563 4120 ⁽¹⁾	1573 4120							
1600 A	3 P	1563 3160	1573 3160	4109 0160	3 P 1559 3160 4 P 1559 4161 ⁽³⁾					
	4 P	1563 4160 ⁽¹⁾	1573 4160							
2000 A	3 P	1563 3200	1573 3200	(2)	3 P 1559 3200 4 P 1559 4201 ⁽³⁾		3 P 1509 3200 ⁽⁶⁾ 4 P 1509 4200 ⁽⁶⁾ 3 P 1509 3200 ⁽⁶⁾ 4 P 1509 4200 ⁽⁶⁾			
	4 P	1563 4200	1573 4200							
2500 A	3 P	1563 3250	1573 3250							
	4 P	1563 4250	1573 4250							
3200 A	3 P	1563 3320	1573 3320							
	4 P	1563 4320	1573 4320							

* (ATS) Enclosed Automatic Transfer Switch.

** 1 required per pole.

(1) Available enclosed (see pages 504 "Enclosed changeover switches").

(2) See page 317 "Copper bars connection kits".

(3) Neutral on the left (on the right, see page 318).

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

(5) To fully shroud front, rear, top and bottom 4 references required.

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

ATyS 6* (continued)

Rating (A)	No. of poles	ATyS 6e	ATyS 6m	Auxiliary contacts	Voltage transformer 400/230 VAC	DC power supply	Padlockable handle	Key handle interlocking system	Door protective surround	Mounting spacers
125 A	3 P	1563 3012	1573 3012	1599 0002 ⁽²⁾	1599 4063	12 VDC / 230 VAC 1599 5012 24 VDC / 230 VAC 1599 5112	1599 0003 ⁽²⁾	1509 1006 ⁽²⁾	1539 0012	1509 0001
	4 P	1563 4012 ⁽¹⁾	1573 4012							
160 A	3 P	1563 3016	1573 3016							
	4 P	1563 4016 ⁽¹⁾	1573 4016							
250 A	3 P	1563 3025	1573 3025							
	4 P	1563 4025 ⁽¹⁾	1573 4025							
400 A	3 P	1563 3040	1573 3040							
	4 P	1563 4040 ⁽¹⁾	1573 4040							
630 A	3 P	1563 3063	1573 3063							
	4 P	1563 4063 ⁽¹⁾	1573 4063							
800 A	3 P	1563 3080	1573 3080	1599 0032 ⁽²⁾	1599 4120		1599 0004 ⁽²⁾	1509 1004 ⁽²⁾	1539 0080	
	4 P	1563 4080 ⁽¹⁾	1573 4080							
1000 A	3 P	1563 3100	1573 3100							
	4 P	1563 4100 ⁽¹⁾	1573 4100							
1250 A	3 P	1563 3120	1573 3120							
	4 P	1563 4120 ⁽¹⁾	1573 4120							
1600 A	3 P	1563 3160	1573 3160							
	4 P	1563 4160 ⁽¹⁾	1573 4160							
2000 A	3 P	1563 3200	1573 3200	included	1599 4200					
	4 P	1563 4200	1573 4200							
2500 A	3 P	1563 3250	1573 3250							
	4 P	1563 4250	1573 4250							
3200 A	3 P	1563 3320	1573 3320							
	4 P	1563 4320	1573 4320							

* (ATS) Enclosed Automatic Transfer Switch.

(1) Available enclosed (see pages 504 "Enclosed changeover switches").

(2) Factory fitted.

Other products

Make before break motorised changeover switch (overlapping contact).



Function

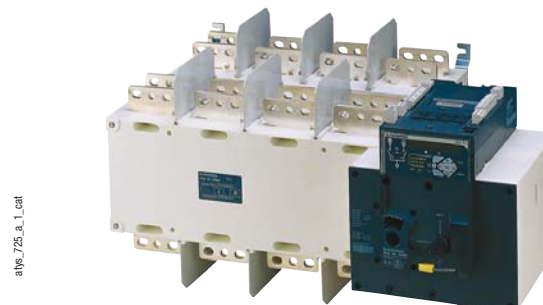
They provide switching, uninterrupted low voltage source inversion and safety isolation. They are intended to be coupled with a UPS (I, I+II, II).

General characteristics

- For ratings from 125 to 1800 A, 3 and 4 pole.
- 3 stable positions (I - I+II - II).
- Automatic on-load switching and source changeover without interruption with a UPS.
- Manual emergency operation.
- Padlocking in 3 positions.

Consult us

Motorised mixed pole changeover switches



Function

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

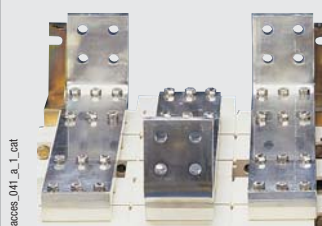
General characteristics

1250 to 3200 A ratings, 3 and 4 pole.

Consult us

⇒ Accessories

Bridging bars



Use

To provide common point on either incoming or outgoing terminals.

Rating (A)	Section (mm)	Reference
125 ... 160	20 x 2.5	4109 0019
250	25 x 2.5	4109 0025
400	32 x 5	4109 0039
630	50 x 5	4109 0063
800 ... 1000	50 x 6	4109 0080
1250	60 x 8	4109 0120
1600 ... 1800	90 x 10	4109 0160

Copper bars connection kits

Fig. 1

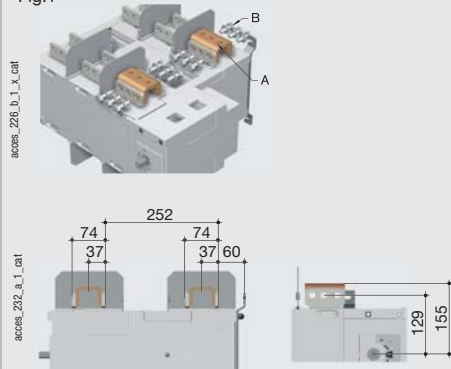


Fig. 2

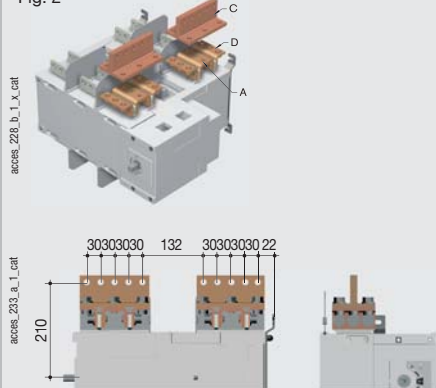
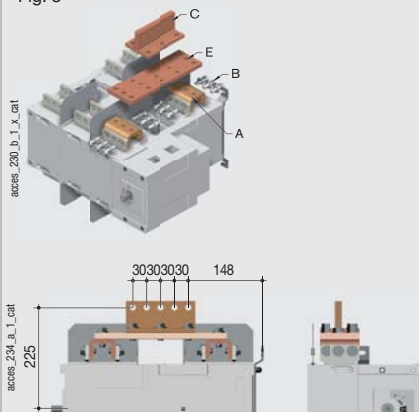


Fig. 3



Use

Enables:

- Connection between the two power terminals from the 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 connection piece (part A) are delivered bridged from factory. Bolt sets must be ordered separately. Technical notice for these specific accessories can be download from www.socomec.com

Top or bottom **flat** connection - Fig. 1

Rating (A)	Piece	Quantity to order per pole ⁽¹⁾	Reference
2 000 ... 2 500	Connection - part A	2	2619 1200
2 000 ... 2 500	Bolt set - part B	2	2699 1200
3 200	Connection - part A		included
3 200	Bolt set - part B	2	2699 1200

Top or bottom **edgewise** connection - Fig. 2

Rating (A)	Piece	Quantity to order per pole ⁽¹⁾	Reference
2 000 ... 2 500	Connection - part A	2	2619 1200
2 000 ... 2 500	T piece - part C	2	2629 1200 ⁽²⁾
2 000 ... 2 500	Right angle - part D	2	2639 1200 ⁽²⁾
3 200	Connection - part A		included
3 200	T piece - part C	2	2629 1200 ⁽²⁾
3 200	Right angle - part D	2	2639 1200 ⁽²⁾

Top or bottom **bridging** connection - Fig. 3

Rating (A)	Piece	Quantity to order per pole ⁽¹⁾	Reference
2 000 ... 2 500	Connection - part A	2	2619 1200
2 000 ... 2 500	Bolt set - part B	2	2699 1200
2 000 ... 2 500	Bar - piece E	1	4109 0250 ⁽²⁾
2 000 ... 2 500	T piece - part C	1	2629 1200 ⁽²⁾
3 200	Connection - part A		included
3 200	Bolt set - part B	2	2699 1200
3 200	Bar - piece E	1	4109 0320 ⁽²⁾
3 200	T piece - part C	1	2629 1200 ⁽²⁾

(1) Example for 3 pole device equipped upstream only: order 3 times the indicated quantities.

(2) Bolt set is provided with the accessories.

Control voltage transformer

Use

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

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

DC power supply

Use

Allows standard ATyS 3 or ATyS 6 to be DC power supplied. To be positioned as close as possible to DC power supply source.

Rating (A)	Operating voltage	Reference
125 ... 1800	12 VDC / 230 VAC	1599 5012
125 ... 1800	24 VDC / 230 VAC	1599 5112

Mounting spacers



atys_009_a_2_cat

Use

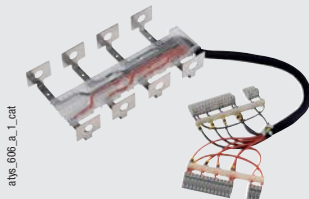
Raises the device's terminals 10mm away from the bottom of the enclosure or frame on which the device is mounted.

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

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

Voltage sensing and power supply kit

From 125 to 630 A.



atys_008_a_1_cat

From 800 to 3200 A.



atys_003_a_2_cat

Use

For ATyS 6 power supply and voltage measurement (4 wires, three phase). 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 bottom of the switch.

Note: the 3-pole version does not integrate the power supply.

From 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

From 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

N°1 - communication 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

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

Description of accessories	Reference
RS485 MODBUS (N°1)	1599 2000
2 inputs/2 outputs (N°2)	1599 2001

Terminal shrouds



aces_208_a_2_cat

Use

Protection IP2X against direct contact with terminals or connecting parts.

Advantages

Perforations allowing remote thermographic inspection without removal.

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

Terminal screens

aces_207_a_2_cat



Use

Top or bottom protection against direct contact with terminals or connection parts.

Rating (A)	No. of poles	Position	Reference
125 ... 160	3 P	top / bottom	1509 3012
125 ... 160	4 P	top / bottom	1509 4012
250 ... 400	3 P	top / bottom	1509 3025
250 ... 400	4 P	top / bottom	1509 4025
630	3 P	top / bottom	1509 3063
630	4 P	top / bottom	1509 4063
800 ... 1 250	3 P	top / bottom	1509 3080
800 ... 1 250	4 P	top / bottom	1509 4080
1600 ... 1800	3 P	top / bottom	1509 3160
1600 ... 1800	4 P	top / bottom	1509 4160
2000 ... 3200	3 P	top / bottom	1509 3200
2000 ... 3200	4 P	top / bottom	1509 4200

Auxiliary contacts

aces_005_a_1_cat



Use

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

Low level auxiliary contacts : Consult us.

For ATyS 3s

Rating (A)	Reference
125 ... 630	1599 1002
800 ... 1800	1599 1032

For ATyS 3e, 6e and 6m

Rating (A)	Reference
125 ... 630	1599 0002
800 ... 1600	1599 0032
2000 ... 3200	included

Padlocking in the 3 positions I-0-II

atys_125_a_1_cat



Use

Allows padlocking of the operation in the 3 positions I, 0 and II (factory fitted).

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

Key handle interlocking accessories

atys_101_a_1_cat



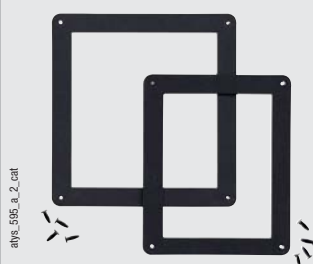
Use

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:
Locking in position I, 0 or II

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

Door protective surround



Use

Door finishing surround for protecting ATyS application.

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

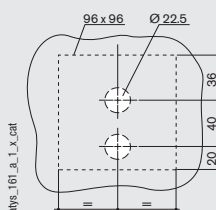
Remote control interfaces for ATyS 6e, 6m and C30



Interfaces are self powered from the ATyS.



Drillings



Use

To display source availability and changeover state on the front of a panel. 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. Protection degree: IP21.

ATyS D20

In addition to the ATyS D10 allows displays, operation and configuration on the cabinet front panel. Protection degree: IP21.

Door mounting

2 holes Ø 22.5. ATyS connection via RJ45 cable, not isolated.

Cable not provided.

Description of accessories

Description of accessories	Reference
ATyS D10	1599 2010
ATyS D20	1599 2020

Connecting cable for remote interfaces



Use

To connect between a remote interface (D10 or D20) and a control product (C30 or ATyS 6e or 6m).

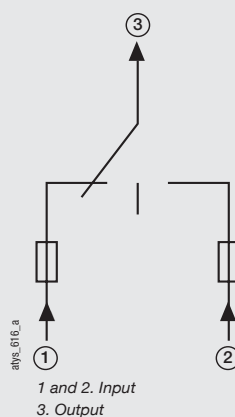
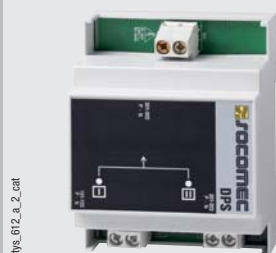
Characteristics

RJ45 8 straight non insulated wires, length 3m.

For ATyS 6e, 6m and C30

Type	Length	Reference
RJ45 cable	3 m	1599 2009

Double power supply - DPS



Use

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

Input

- The input is considered as "active" from 200 VAC.
- Maximum voltage: 288 VAC.
- Internal protection: fuse protected 3.15 A
- Terminal connections: max. 6 mm².
- Modular device: 4 modules 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

Description of accessories	Reference
	1599 4001

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

125 to 1000 A

Thermal current I_{th} (40°C)	125 A	160 A	250 A	400 A	630 A	800 A	1 000 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⁾	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	125/125	160/160	250/250	400/400	630/630	800/800	1000/1000
415 VAC	AC-22 A / AC-22 B	125/125	160/160	250/250	400/400	630/630	800/800	1000/1000
415 VAC	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
690 VAC ⁽²⁾	AC-21 A / AC-21 B	125/125	160/160	200/250	200/250	500/500	800/800	800/800
690 VAC ⁽²⁾	AC-22 A / AC-22 B	125/125	125/125	125/160	125/160	315/315	800/800	800/800
690 VAC ⁽²⁾	AC-23 A / AC-23 B	63/80	63/80	100/125	100/125	160/200	200/250	200/250
220 VDC	DC-20 A / DC-20 B	125/125	160/160	250/250	400/400	630/630	800/800	1000/1000
220 VDC	DC-21 A / DC-21 B	125/125	160/160	250/250	250/250	630/630	800/800	1000/1000
220 VDC	DC-22 A / DC-22 B	125/125	160/160	250/250	250/250	500/500	800/800	1000/1000
220 VDC	DC-23 A / DC-23 B	125/125	125/125	200/200	200/200	500/500	800/800	1000/1000
440 VDC	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⁾
440 VDC	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⁾
440 VDC	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⁾

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

415 VAC	AC - 31 B	125	160	250	400	630	800	1 000
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Overload capacity

Rated short-time withstand current 1 s. I_{cw} (kA eff.)	7	7	9	9	13	26	35
Short-circuit making capacity (kA peak) ⁽⁵⁾	20	20	30	30	45	55	80
Prospective short-circuit (kA rms) ⁽⁵⁾	100	100	50	18	70	50	100
Associated fuse rating (A) ⁽⁵⁾	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 (Standard setting)

I - II or II - I (s) ⁽⁶⁾	0.75	0.75	1.3	1.3	1.3	2.6	2.6
I - O or II - O (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

Power 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

Durability (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) 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 poles in series for the "+" and 1 pole for the "-".

(4) 4-pole device with 2 poles in series by polarity.

(5) For a rated operational voltage $U_n = 400$ VAC.(6) Between the command given and arrival in position at U_n (under nominal conditions).

1 250 to 3 200 A

Thermal current I_{th} (40°C)	1 250 A	1 600 A	1 800 A	2 000 A	2 500 A	3 200 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
415 VAC	AC-22 A / AC-22 B	1250/1250	1600/1600	1800/1800	-/2000	-/2500	-/3200
415 VAC	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			
690 VAC ⁽²⁾	AC-21 A / AC-21 B	800/800	1000/1000	1000/1000			
690 VAC ⁽²⁾	AC-22 A / AC-22 B	800/800	1000/1000	1000/1000			
690 VAC ⁽²⁾	AC-23 A / AC-23 B	200/250	500/500	500/500			
220 VDC	DC-20 A / DC-20 B	1250/1250	1600/1600	1800/1800			
220 VDC	DC-21 A / DC-21 B	1250/1250	1250/1250	1250/1250			
220 VDC	DC-22 A / DC-22 B	1250/1250	1250/1250	1250/1250			
220 VDC	DC-23 A / DC-23 B	1250/1250	1250/1250	1250/1250			
440 VDC	DC-20 A / DC-20 B	1250/1250	1600/1600	1800/1800			
440 VDC	DC-21 A / DC-21 B	1250 ⁽³⁾ /1250 ⁽³⁾	1250 ⁽³⁾ /1250 ⁽³⁾	1250 ⁽³⁾ /1250 ⁽³⁾			
440 VDC	DC-22 A / DC-22 B	1250 ⁽³⁾ /1250 ⁽³⁾	1250 ⁽³⁾ /1250 ⁽³⁾	1250 ⁽³⁾ /1250 ⁽³⁾			
440 VDC	DC-23 A / DC-23 B	1250 ⁽³⁾ /1250 ⁽³⁾	1250 ⁽³⁾ /1250 ⁽³⁾	1250 ⁽³⁾ /1250 ⁽³⁾			

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

415 VAC	AC - 31 B	1 250	1 600	1800	2 000	2 500	3 200
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Overload capacity

Rated short-time withstand current 1 s. I_{cw} (kA eff.)	35	50	50	55	55	55
Rated peak withstand current (kA peak) ⁽⁴⁾	80	110	110	120	120	120
Prospective short-circuit (kA rms) ⁽⁴⁾	100	100	100			
Associated fuse rating (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 (Standard setting)

I - II or II - I (s) ⁽⁵⁾	2.6	2.6	2.6	2	2	2
I - O or II - O (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

Power supply 230 VAC min / max (VAC)	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)	450/120	450/120	450/120	550/390	550/390	550/390
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Mechanical characteristics

Durability (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	51	59
Weight of 4 P switch (ATyS 3) (kg)	29.6	42.1	42.1	57	61	69
Weight of 3 P switch (ATyS 6) (kg)	25.4	36.9		47	51	59
Weight of 4 P switch (ATyS 6) (kg)	30.4	42.9		57	61	69

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

(2) With terminal shrouds or phase barrier.

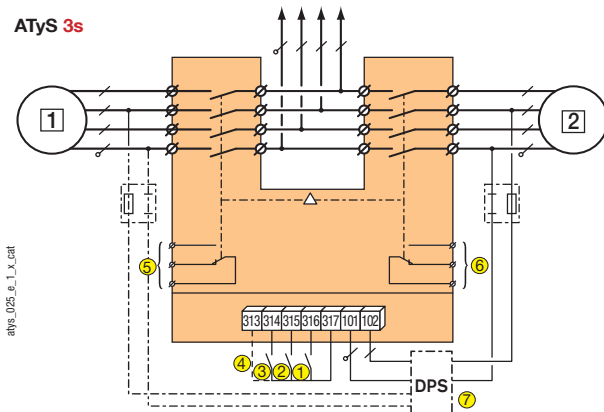
(3) 4-pole device with 2 poles in series by polarity.

(4) For a rated operational voltage $U_s = 400$ VAC.

(5) Between the command given and arrival in position at U_s (under nominal conditions).

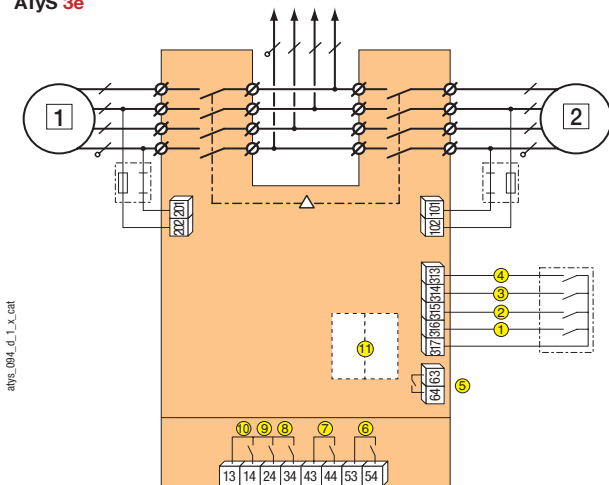
Terminals and connections

ATyS 3s



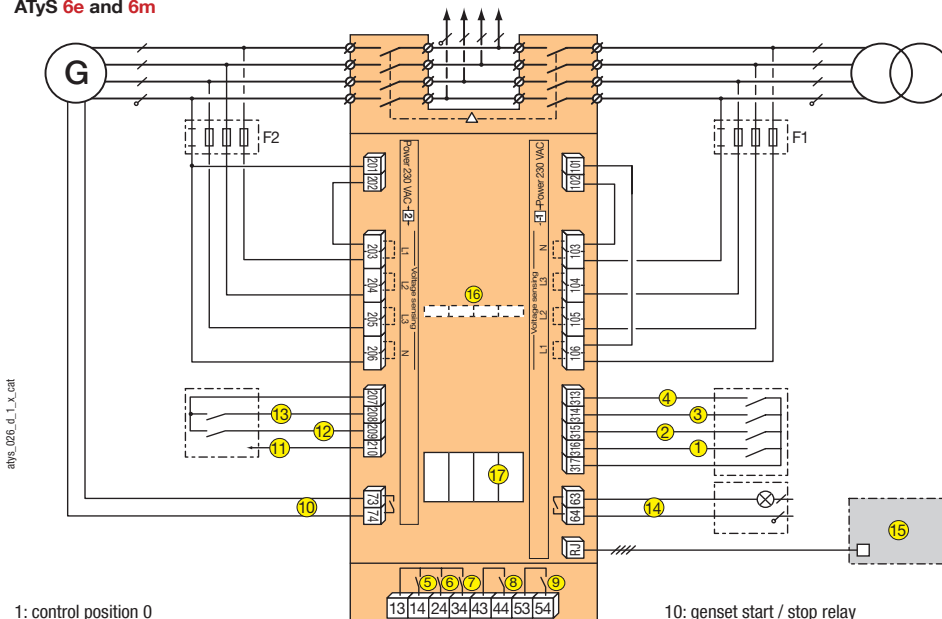
- 1 preferred source
- 2 alternate source
- 1: control position 0
- 2: control position I
- 3: control position II
- 4: configuration of the control logic
- 5: NO/NC position and prebreaking contact for position I
- 6: NO/NC position and prebreaking contact for position II
- 7: Double Power Supply (accessory)

ATyS 3e



- 1 preferred source
- 2 alternate source
- 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

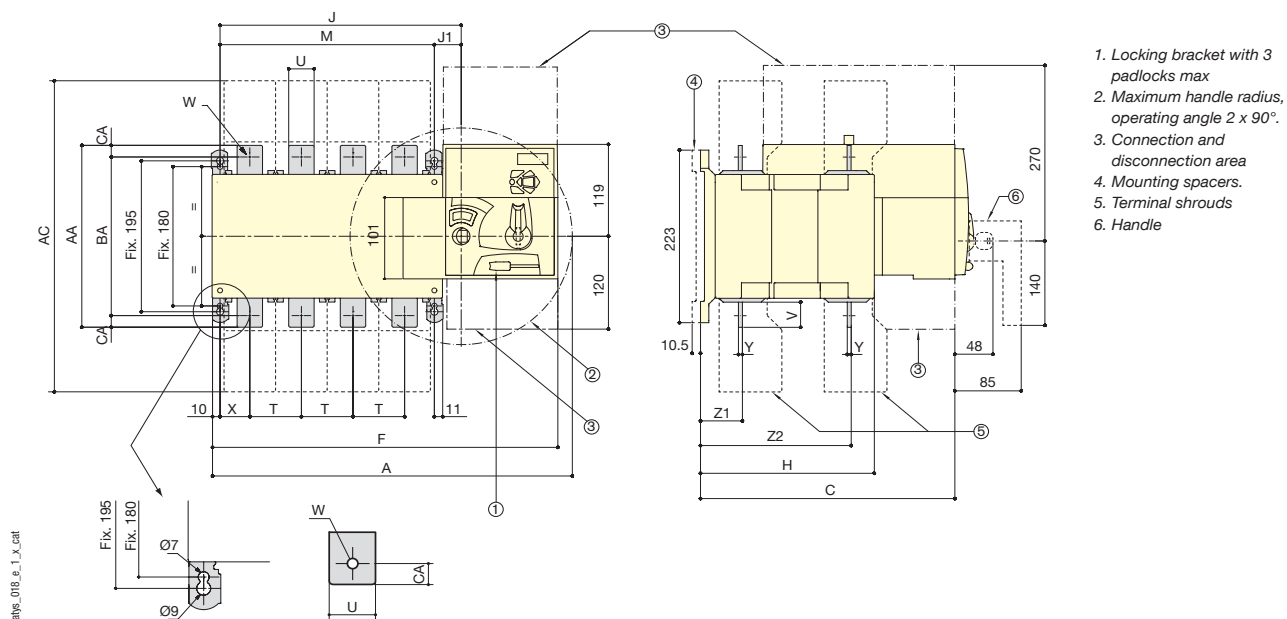
ATyS 6e and 6m



- 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: genset start / stop relay
- 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 relay
- 15: remote control interface
- 16: current transformers (ATyS 6m only)
- 17: slots for optional modules

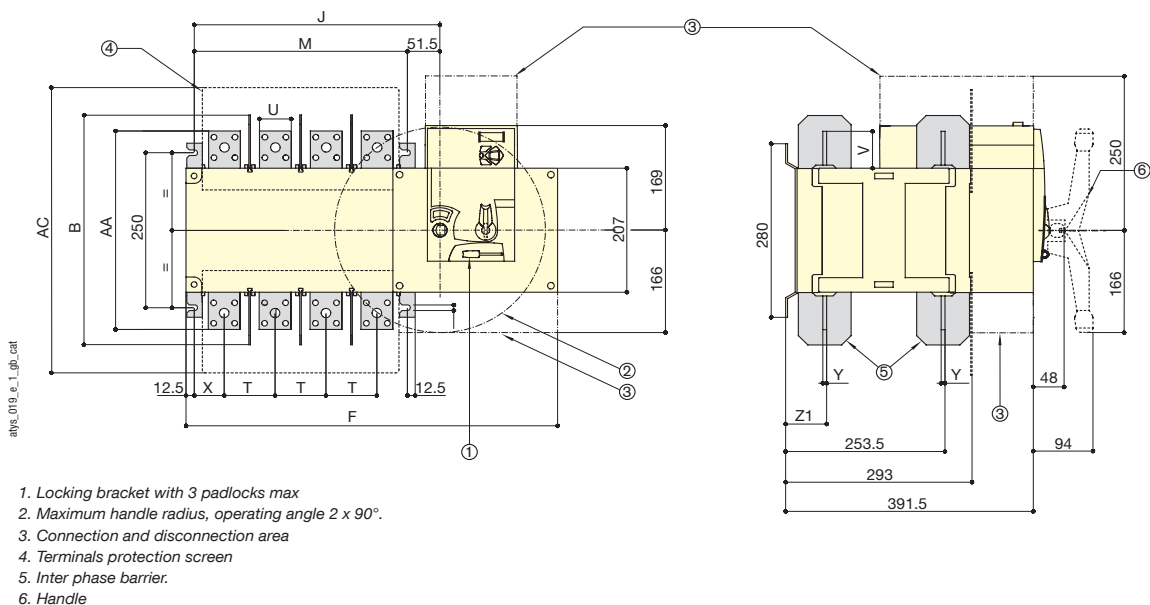
➤ ATyS - Dimensions

ATyS 125 to 630 A



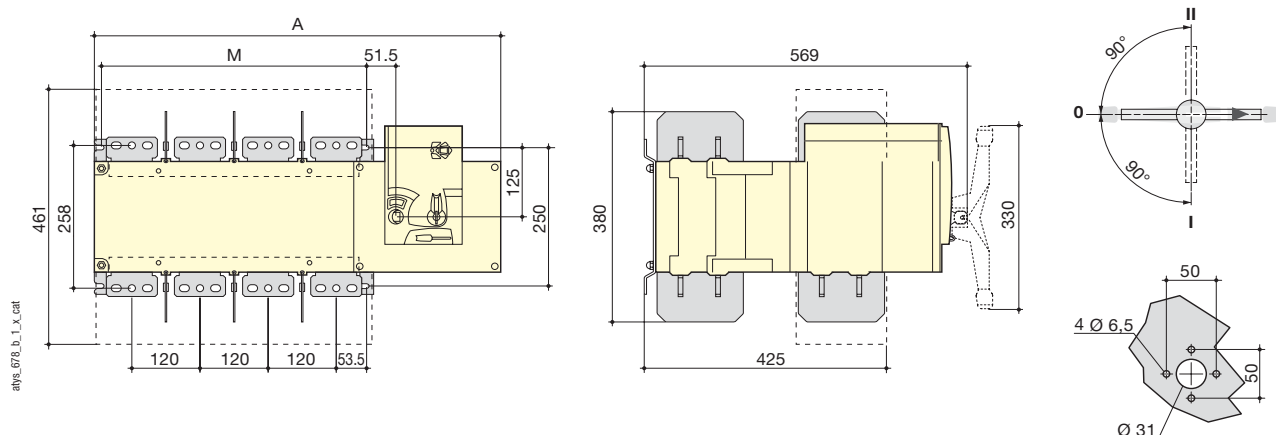
Rating (A)	Overall dimensions			Terminal shrouds	Switch body						Switch mounting		Connection											
	A 3p.	A 4p.	C	AC	F 3p.	F 4p.	H	J 3p.	J 4p.	J1	M 3p.	M 4p.	T	U	V	W	X 3p.	X 4p.	Y	Z1	Z2	AA	BA	AC
125	304	340	244	235	286.5	322.5	151	154	184	34	120	150	36	20	25	9	28	22	3.5	38	134	135	115	10
160	304	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 800 to 1800 A



Rating (A)	Overall dimensions	Terminal shrouds	Switch body				Switch mounting		Connection						
	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



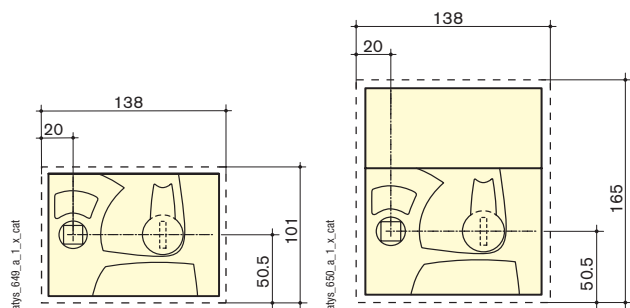
Rating (A)	Overall dimensions A 3p.	A 4p.	Switch mounting M 3p.	M 4p.
2 000 ... 3 200	596	716	347	467

➡ Cut of dimensions

ATyS 125 to 630 A

ATyS 3s

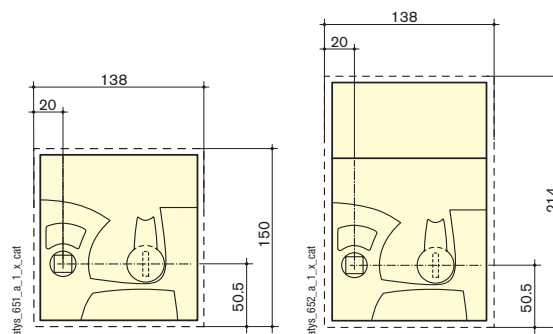
ATyS 3e, 6e, 6m



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

