

ATyS S - ATyS d S

Remotely operated transfer switching equipment from 40 to 125 A



Function

ATyS S products are 4 pole remotely operated transfer switches with positive break indication. They enable the on-load transfer of two three-phase supplies via remote volt-free contacts, from either an external automatic controller, using pulse logic, or a switch.

They are intended for use in low voltage power supply systems where a brief interruption of the load supply is acceptable during transfer.

Advantages

Extensive power supply range

The ATyS S is available in four supply versions, each with a broad range (+/-30%).

The four versions are:

- 12 VDC power supply.
- 24/48 VDC power supply.
- 230 VAC single power supply.
- 2 x 230 VAC dual power supply.

Safety and reliability

ATyS S products use stable position technology, ensuring constant pressure on the contacts and preventing premature aging. In addition, they do not require a power supply to maintain position, thus protecting their loads from voltage fluctuations.

Easy integration

ATyS S products can be easily installed inside enclosures. Their design, and in particular their compact size, enables integration within most 200 mm deep enclosures.

Simplified maintenance

Maintenance can be carried out easily under load, with manual operation still available. The control and motorisation section can be replaced simply by removing 4 screws, with no work required on the installation cabling.

ATyS d S: Dual power supply

In addition to the functions offered by the ATyS S, the ATyS d S incorporates supply redundancy without the need for additional wiring. This is obtained by integrating a double supply (2 independent supplies) directly within the product.

The solution for

- > Genset < 90 kVA
- > Heating systems
- > Climate control
- > Ventilation systems
- > Telecommunications



Strong points

- > Extensive power supply range
- > Safety and reliability
- > Easy integration
- > Simplified maintenance
- > ATyS d S: Dual power supply

Conformity to standards

- > IEC 60947-6-1
- > IS/IEC 60947-3
- > GB 14048-11



Approvals and certifications



References

ATySS - ATySdS

Rating (A)	No. of poles	Power supply	ATyS S - ATyS d S + bridging bars	Terminal shrouds	Voltage tap	Terminal retainer	DIN rail		
	4 P	12 VDC	9505 4004SL				4 modules 9599 4002G		
40 A	4 P	230 VAC	9503 4004SL		9599 4001G				
	4 P	2 x 230 VAC	9513 4004SL						
	4 P	12 VDC	9505 4006SL			2 pieces			
63 A	4 P	230 VAC	9503 4006SL		0500 4004 6				
	4 P	2 x 230 VAC	9513 4006SL	Source side	9599 4001G				
	4 P	12 VDC	9505 4008SL	2 pieces 9594 4012A					
80 A	4 P	230 VAC	9503 4006SL	Load side 2 pieces 9594 9012A	9599 4001G				
	4 P	2 x 230 VAC	9513 4006SL						
	4 P	12 VDC	9505 4010SL						
100 A	4 P	230 VAC	9503 4006SL		050040046				
	4 P	2 x 230 VAC	9513 4006SL		9599 4001G	959940016			
125 A	4 P	12 VDC	9505 4012SL						
	4 P	230 VAC	9503 4012SL						
	4 P	2 x 230 VAC	9513 4012SL		9599 4001G				

Accessories

Voltage tap

Use

Enables the required power supply for ATyS S 230 VAC and ATyS d S products to be tapped directly from the product's incoming power terminals. Can also be utilised in applications without neutral, to provide 400 VAC to the autotransformer.

Rating (A)	Reference
40 125	9599 4001G



Terminal retainer

Use

These clips have a dual function: - to prevent direct access to the power supply and control terminals and

- to secure these connector terminals.

Rating (A)	Pack	Reference
40 125	2 pieces	9599 4003G



Terminal shrouds

IP2X protection against direct contact with terminals or connecting parts.

Terminal shrouds for the source side					
Rating (A) Pack Reference					
40 125	2 pieces	9594 4012A			
Terminal shrouds for the load side					
Rating (A)	Pack	Reference			
40 125	2 pieces	9594 9012A			





Autotransformer 400/230 VAC

Use	Dimensions
For applications without neutral, this	75 x 80 x 72 mm
autotransformer provides the 230 VAC	
required to power these ATyS products.	

Rating (A)	Reference
40 125	9599 4004G



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Accessories (continued)

DIN rail

Use

This 4-module DIN rail can be installed directly on the front of the ATyS S and can be utilised, for example, for the installation of a surge protection device.

Rating (A)	Reference
40 125	9599 4002G



Spares

Motorisation unit

Use

The motorisation module of the ATyS S can be easily replaced in case of problems, even when the load is supplied.

Rating (A)	ATyS S 12 VDC	ATyS S 24/48 VDC	ATyS S 230 VAC	ATyS d S 2 x 230 VAC
40	9505 5004G	9506 5004G	9503 5004G	9513 5004G
63	9505 5006G	9506 5006G	9503 5006G	9513 5006G
80	9505 5008G	9506 5008G	9503 5008G	9513 5008G
100	9505 5010G	9506 5010G	9503 5010G	9513 5010G
125	9505 5012G	9506 5012G	9503 5012G	9513 5012G



Switching unit

Use

References to be used for replacing the switching module of ATyS S products.

Rating (A)	Reference
40	9509 1004G
63	9509 1006G
80	9509 1008G
100	9509 1010G
125	9509 1012G



Manual emergency operation handle

Use

This handle can be used on the product whether the motor unit is mounted or not.

Ratir	g (A)	Reference
40	125	9599 5012G



Connector kit

This kit, which includes all of the ATyS S connectors, can be ordered to replace any lost or broken terminal connectors.

Rating (A)	Reference
40 125	9509 0002G





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

40 to 125 A

Thermal current I _{th} at 40°C		40 A	63 A	80 A	100 A	125 A
Rated insulation voltage U _i (V) (power circuit)		800	800	800	800	800
Rated impulse withstand voltage Uimp	(kV) (power circuit)	6	6	6	6	6
Rated insulation voltage U _i (V) (operation circuit)		300	300	300	300	300
Rated impulse withstand voltage Uimp	(kV) (operation circuit)	4	4	4	4	4
Rated operational currents I _e (A	A) according to IEC 60947-6-1					
Rated voltage	Utilisation category	A/B	A/B	A/B	A/B	A/B
415 VAC	AC-31 B	40	63	80	100	125
415 VAC	AC-32 B	40	63	80	80	80
Rated operational currents I _e (A	A) according to IEC 60947-3					
Rated voltage	Utilisation category	A/B	A/B	A/B	A/B	A/B
415 VAC	AC-20 A / AC-20 B	40/40	63/63	80/80	100/100	125/125
415 VAC	AC-21 A / AC-21 B	40/40	63/63	80/80	100/100	100/125
415 VAC	AC-22 A / AC-22 B	40/40	63/63	80/80	100/100	100/100
415 VAC	AC-23 A / AC-23 B	-/40	-/63	-/63	-/63	-/63
Fuse protected short-circuit wi	thstand (kA rms prospective)					
Prospective short-circuit current (kA	rms)	50	50	50	25	15
Associated fuse rating (A)		40	63	80	100	125
Short-circuit capacity as per IE	C 60947-6-1					
Rated short-time withstand current 0	.03 s. (kA)	5	5	5	5	-
Rated short-circuit making capacity I _{cm} (kA peak)		7.65	7.65	7.65	7.65	-
Short-circuit capacity as per IE)					
Rated short-time withstand current 1 s. I _{cw} (kA rms)		2.5	2.5	2.5	2.5	2.5
Rated short-time withstand current 0.3s I _{cw} (kA rms) (1)		3.5	3.5	3.5	3.5	3.5
Rated peak withstand current (kA pe	ak)	12	12	12	12	12
Connection						
Maximum Cu cable cross-section (m	m²)	50	50	50	50	50
Tightening torque mini / maxi (Nm)		1.2/3	1.2/3	1.2/3	1.2/3	1.2/3
Switching time (Standard setting	ng)					
I - 0 or II - 0 (ms)		500	500	500	500	500
I - II or II - I (ms)		1000	1000	1000	1000	1000
Duration of "electrical blackout" I - II (ms) minimum		500	500	500	500	500
Power supply						
Power supply 12 VDC min / max (VDC)		9/15	9/15	9/15	9/15	9/15
Power supply 230 VAC min / max (VAC)		160/310	160/310	160/310	160/310	160/310
Control supply power demand						
Power supply 12 VDC inrush / nominal (VA)		200/40	200/40	200/40	200/40	200/40
Power supply 230 VAC inrush / nominal (VA)		200/40	200/40	200/40	200/40	200/40
Mechanical characteristics						
Durability (number of operating cycles	s)	25 000	25 000	25 000	25 000	25 000
Weight ATyS S and ATyS d S 4 P (kg	Weight ATyS S and ATyS d S 4 P (kg)		3	3	3	3

⁽¹⁾ 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.



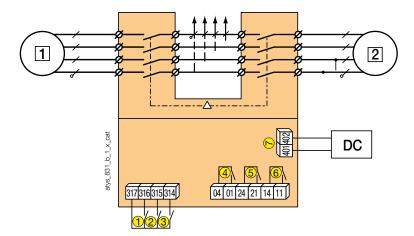
ATyS S - ATyS d S

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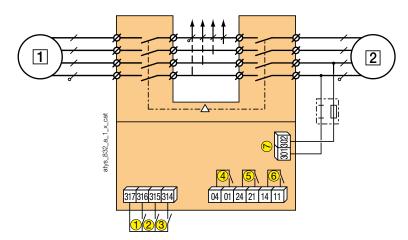
Terminals and connections

ATyS S DC version



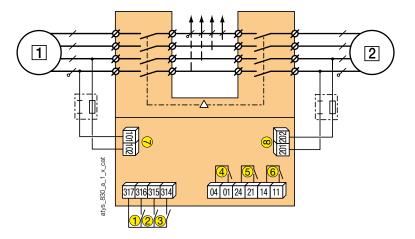
- 1 preferred source
- 2 alternate source
- 1: position 0 control
- 2: position I control
- 3: position II control
- 4: auxiliary contact, closed when the switch is in position 0
- 5: auxiliary contact, closed when the switch is in position II
- 6: auxiliary contact, closed when the switch is in position I
- 7: power supply :12 VDC (9-15 VDC).

ATyS S: 230 VAC



- 1 preferred source
- 2 alternate source
- 1: position 0 control
- 2: position I control
- 3: position II control
- 4: auxiliary contact, closed when the switch is in position 0
- 5: auxiliary contact, closed when the switch is in position II
- 6: auxiliary contact, closed when the switch is in position I
- 7: power supply: 230 VAC (160-310 VAC)

ATyS d S: 2 x 230 VAC

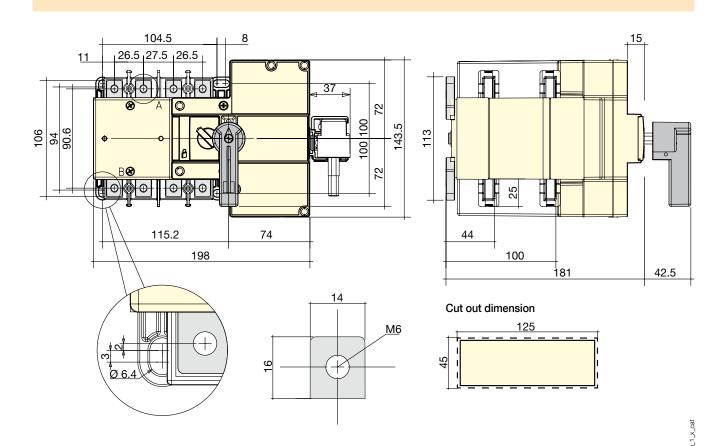


- 1 preferred source
- 2 alternate source
- 1: position 0 control
- 2: position I control
- 3: position II control
- 4: auxiliary contact, closed when the switch is in position 0
- 5: auxiliary contact, closed when the switch is in position II
- 6: auxiliary contact, closed when the switch is in position I
- 7: power supply I: 230 VAC (160-310 VAC)
- 8 : power supply II: 230 VAC (160-310 VAC)

Includes a built-in dual power supply.



Dimensions



Connection terminal

