

Transfer switches

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Manual transfer switches



COMO CS
25 to 100 A
p. 210



SIRCOVER
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Motorised modular transfer switches

ATyS M range p. 240
40 to 160 A



ATyS d M
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ATyS t M
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ATyS p M
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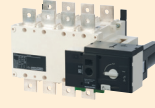
Motorised transfer switches

ATyS S range p. 254
40 to 125 A



ATyS S
ATyS d S
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ATyS range p. 262
125 to 3200 A



ATyS r
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Universal ATS controller

Automatic control of different switching technologies: circuit breakers, contactors, switches.



ATyS C25
p. 290



ATyS C35
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ATyS C55
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ATyS C65
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UL product range

UL range p. 264



SIRCOVER UL1008
100 to 1200 A
Consult us



ATyS UL1008
100 to 400 A
Consult us

Enclosed solutions

SOCOMEc offers a range of pre-equipped enclosures in steel or polyester.



Enclosed **SIRCOVER**
Consult us



Enclosed **ATyS M**
Consult us



Enclosed **ATyS**
Consult us

Any particular requirement?

Thanks to our extensive experience we have developed an impressive portfolio of customised solutions (motorised transfer switches with overlapping contacts and cooled poles, specific software, etc.). Please contact us if you have any specific requests.

For all your applications, even the most critical, trust the experts.

Security and reliability for your transfer applications

An undisputed leader in the field of changeover switching, SOCOMEC is continuously innovating to ensure the continuity of electrical distribution.

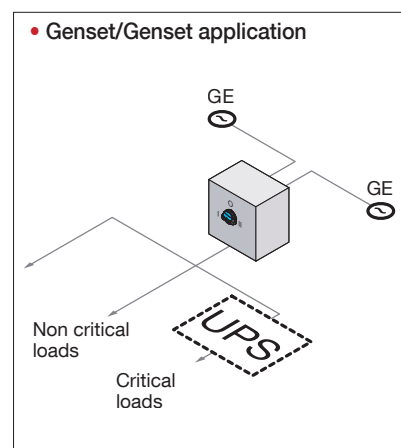
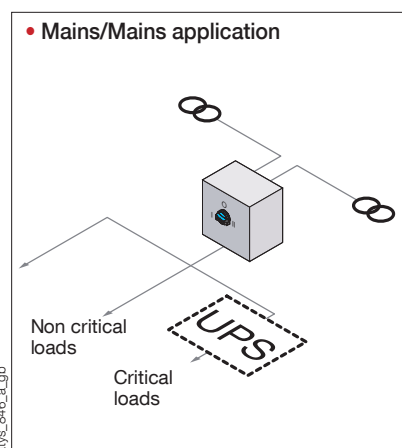
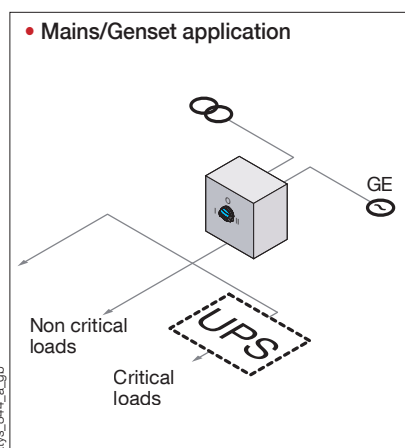
From the COMO CS manual transfer switch (25 - 100 A) to the ATyS p automatic transfer switch (up to 3200 A) and the ATyS d H remotely operated transfer switch (up to 6300 A), our range of changeover switches cover most applications as standard.

Products for all switching applications from 25 to 6300 A

SOCOMECS transfer switches can be used not only for normal/emergency source switching, but also to manage the switching of loads or for earthing/earthing solutions.

Your application	Manual changeover switches	Motorised changeover switches	Automatic changeover switches
Changeover switches (network/network - network/genset - genset/genset)	•	•	•
Bypass application	•	•	•
Other AC applications (load switching - grounding/earthing - phase switching)	•		
Photovoltaic applications	•		

Secure switching for all your transfers



Expert Services

- > Study, definition, advice, implementation, maintenance and training...
- > Our Expert Services extend to a complete offer of customised services to make your project a success.



Secure switching compliant with standard IEC 60947-6-1

The standard IEC 60947-6-1 “Low-voltage switchgear and controlgear – Multiple function equipment – Transfer Switching Equipment” is dedicated to changeover switches.

This standard applies to Transfer Switching Equipment (TSE) with interruption of the supply to the load during transfer, the rated voltage of which does not exceed 1000 VAC or 1500 VDC, be it any of the following:

- **MTSE**
According to the standard IEC 60947-6-1, MTSE (Manually operated Transfer Switching Equipment) is manually operated transfer switching equipment. As such, it requires a person to be present to operate the handle.
- **RTSE**
According to the standard IEC 60947-6-1, RTSE (Remotely operated Transfer Switching Equipment) is transfer switching equipment that is controlled remotely. As such, they require an external controller to provide them with commands.
- **ATSE**
According to the standard IEC 60947-6-1, ATSE (Automatic Transfer Switching Equipment) is transfer switching equipment that is controlled automatically. It differs from RTSE in that it has an integrated controller. As such, these devices are self-monitoring in terms of power source availability, and will start up the genset if required and switch automatically to the power source that is present.

This standard also defines categories of use, depending on the needs of the application, which may apply to the TSE:

Type of current	Utilisation category		Type of load
	Application A ⁽¹⁾	Application B ⁽²⁾	
Alternating current	AC-31A	AC-31B	Non-inductive or low-inductive loads
	AC-32A	AC-32B	Mixed resistive and inductive loads, including moderate overvoltages
	AC-33A	AC-33B	Motors or various loads including motors, resistive loads and loads comprising up to 30% incandescent lamps

(1) Application A: Frequent switching.
(2) Application B: Infrequent switching.

UL applications

SOCOMECL UL 1008 transfer switches are designed for use in “total system optional standby power” applications with a secure transfer of load power between a regular source and a backup source.

“Optional standby systems” are installed to provide a backup power supply for buildings where a power failure could mean disruption, interruptions to operation or damage to products or processes.



Selection guide

Manually operated Transfer Switching Equipment

How many poles?



What type of operations?

			
	COMO CS 25 to 100 A <i>p. 210</i>	SIRCO M 25 to 125 A <i>p. 216</i>	
Number of poles			
3 P	•	•	
4 P	•	•	
Switch operation			
I-0-II	•	•	
I-I+II-II	•	•	
Bypass	•		
Indication of breaking			
Positive break indication	•	•	
Operating handle			
Front direct/external operation	•	•	
Door mountable switch	•		

(1) Depending on the version. From 125 to 3200 A for SIRCOVER I-0-II; from 125 to 1800 A for SIRCOVER I-I+II-II and from 125 to 1600 A for SIRCOVER Bypass.

What type
of breaking
indication?



SIRCOVER
125 à 3200 A ⁽¹⁾
p. 220

•

•

•

•

•

•

•

COMO CS

Manual Cam Transfer Switches
from 25 to 100 A



COMO CS - Door mounting
I-II 3 P 25 A



COMO CS in enclosure
I-0-II 3 P 40 A

The solution for

- > Industry (machine control)



Strong points

- > Simple installation
- > Quick mounting
- > Effective in all circumstances

Compliance with standards

- > IEC 60947-3



- > UL 60947-4-1



* cULus under certification.

Function

COMO CS are manually operated multi-pole transfer switches. They ensure switching, transfer of sources or transfer of two low voltage circuits on load as well as their safe disconnection.

Advantages

Simple installation

The "quick fix" allows significant time saving in fixing the handle to the device. The devices sold in enclosed version are ready for installation.

Quick mounting

The accessories offered are common to all the products in the range. The products are designed for installation:

- on the rear of the cabinet on a backplate,
- on the rear of the cabinet on a DIN rail,
- on the door with a direct handle.

Effective in all circumstances

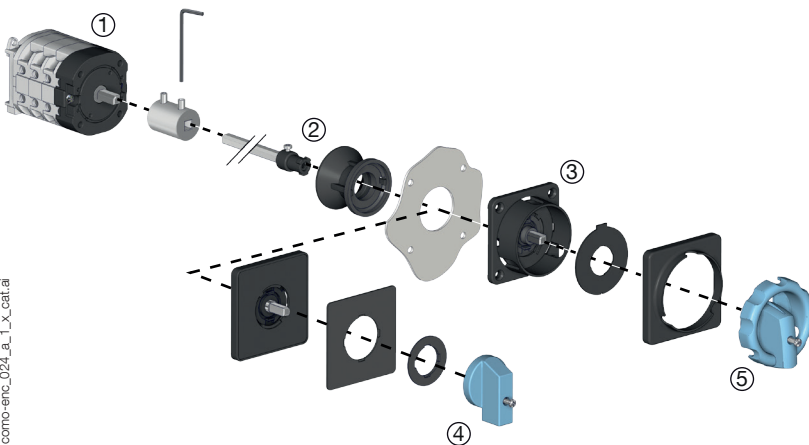
The devices are available with 3 standard switching types that can cover a wide variety of applications:

- I-II
- I-0-II
- I-0-II with bypass

Please consult us for adaptations to specific wiring diagrams.

Configurations

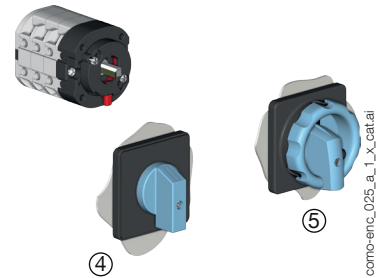
Backplate switch mounted with external handle



Functional diagram (for further details see the installation instructions supplied with the product).
1. Shaft extension

- 2. Shaft guide
- 3. Signalling plate
- 4. Non padlockable handle

Direct quickfixing handle for door or backplate mounted switch



- 5. Padlockable handle

References

COMO CS

Backplate mounting with direct quickfixing handles or external handles

Rating (A)	N° of poles	Switching type	Switch body rear mounting ⁽¹⁾	Padlockable direct quick fixing handle	Non-padlockable direct quick fixing handle	Padlockable external handle ⁽²⁾	Non-padlockable external handle ⁽²⁾
25 A	3 P	I - II	4320 3002	Blue/Black 4359 3042 Red/Yellow 4359 3043	Blue/Black 4359 3022	Blue/Black 4359 1042 Red/Yellow 4359 1043	Blue/Black 4359 2022
	4 P	I - II	4320 4002				
	3 P	I - 0 - II	4330 3002				
	4 P	I - 0 - II	4330 4002				
	3 P	Bypass I - 0 - II	4350 3002				
	4 P	Bypass I - 0 - II	4350 4002				
40 A	3 P	I - II	4320 3004				
	4 P	I - II	4320 4004				
	3 P	I - 0 - II	4330 3004				
	4 P	I - 0 - II	4330 4004				
	3 P	Bypass I - 0 - II	4350 3004				
	4 P	Bypass I - 0 - II	4350 4004				
63 A	3 P	I - II	4320 3006				
	4 P	I - II	4320 4006				
	3 P	I - 0 - II	4330 3006				
	4 P	I - 0 - II	4330 4006				
	3 P	Bypass I - 0 - II	4350 3006				
	4 P	Bypass I - 0 - II	4350 4006				
100 A	3 P	I - II	4320 3010				
	4 P	I - II	4320 4010				
	3 P	I - 0 - II	4330 3010				
	4 P	I - 0 - II	4330 4010				
	3 P	Bypass I - 0 - II	4350 3010				
	4 P	Bypass I - 0 - II	4350 4010				

(1) Mounting on DIN rail and backplate from 25 to 40 A and mounting on backplate for ratings from 63 to 100 A.

(2) Delivered with shaft and plate for front external control.

Door mounting with direct quickfixing handles

Rating (A)	N° of poles	Switching type	Switch body mounting on door	Padlockable direct quick fixing handle	Non-padlockable direct quick fixing handle
25 A	3 P	I - II	4320 3102	Blue/Black 4359 3042 Red/Yellow 4359 3043	Blue/Black 4359 3022
	4 P	I - II	4320 4102		
	3 P	I - 0 - II	4330 3102		
	4 P	I - 0 - II	4330 4102		
	3 P	Bypass I - 0 - II	4350 3102		
	4 P	Bypass I - 0 - II	4350 4102		
40 A	3 P	I - II	4320 3104		
	4 P	I - II	4320 4104		
	3 P	I - 0 - II	4330 3104		
	4 P	I - 0 - II	4330 4104		
	3 P	Bypass I - 0 - II	4350 3104		
	4 P	Bypass I - 0 - II	4350 4104		
63 A	3 P	I - II	4320 3106		
	4 P	I - II	4320 4106		
	3 P	I - 0 - II	4330 3106		
	4 P	I - 0 - II	4330 4106		
	3 P	Bypass I - 0 - II	4350 3106		
	4 P	Bypass I - 0 - II	4350 4106		
100 A	3 P	I - II	4320 3110		
	4 P	I - II	4320 4110		
	3 P	I - 0 - II	4330 3110		
	4 P	I - 0 - II	4330 4110		
	3 P	Bypass I - 0 - II	4350 3110		
	4 P	Bypass I - 0 - II	4350 4110		

Other solutions with enclosures

General characteristics



como-enc_019.eps

- Available for switching types I-II and I-0-II
- Different enclosure sizes adapted to your needs.
 - Maximum safety during maintenance operations due to triple padlocking of the handle in position 0 (position I for switching type I-II).
 - IP 65 / NEMA 4, 4X : When installed in an industrial environment, protection degree IP 65 and NEMA 4, 4X ensures that the products are protected against dust and water jets.
 - Red-yellow operating handle.

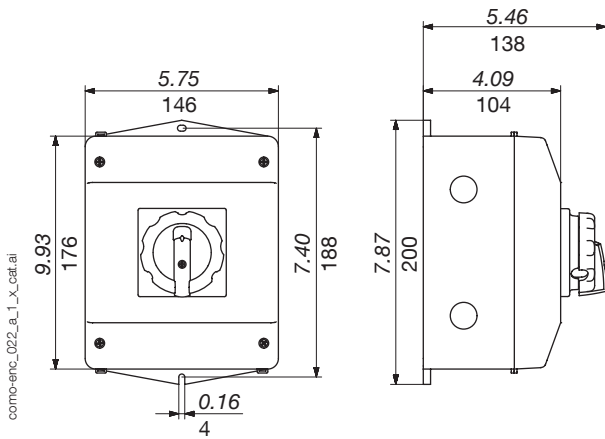
References

Rating (A)	No. of poles	Switching type	Reference
25 A	3 P	I - II	4321 3C02
	4 P	I - II	4321 4C02
	3 P	I - 0 - II	4331 3C02
	4 P	I - 0 - II	4331 4C02
40 A	3 P	I - II	4321 3C04
	4 P	I - II	4321 4C04
	3 P	I - 0 - II	4331 3C04
	4 P	I - 0 - II	4331 4C04
63 A	3 P	I - II	4321 3C06
	4 P	I - II	4321 4C06
	3 P	I - 0 - II	4331 3C06
	4 P	I - 0 - II	4331 4C06
100 A*	3 P	I - II	4321 3C10
	4 P	I - II	4321 4C10
	3 P	I - 0 - II	4331 3C10
	4 P	I - 0 - II	4331 4C10

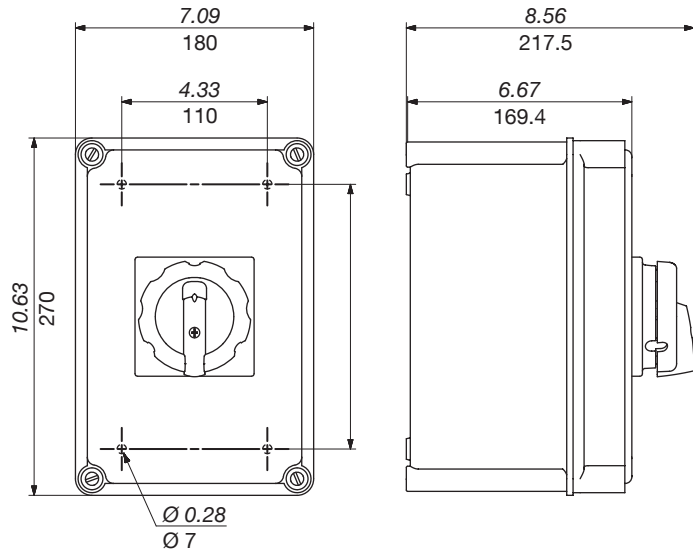
* For an ambient temperature of 35 °C

Dimensions (in/mm)

25 to 40 A



63 to 100 A



Characteristics according to IEC 60947-3

25 to 100 A

Conventional free air thermal current I_{th} at 40 °C (A)	25 A	40 A	63 A	100 A
Conventional free air thermal current I_{th} at 50 °C (A)	25	34	63	100
Conventional free air thermal current I_{th} (60 °C) (A)	19	24	53	90
Rated insulation voltage U_i (V)	690	690	690	690
Rated impulse withstand voltage U_{imp} (kV)	4	6	6	6
Rated operational currents I_e (A)				
Utilisation category at 400 VAC				
AC-21A	25	40	63	100
AC-22A	20.5	40	63	100
AC-23A	15	29	63	63
AC-3	12	22	/	/
Utilisation category at 690 VAC				
AC-21A	25	40	63	100
AC-22A	20.5	40	63	100
AC-23A	8.5	17	63	63
AC-3	7	12.8	/	/
Operational power in AC-23 (kW)⁽¹⁾				
At 400 VAC without pre-break AC	7.5	15	37	37
At 690 VAC without pre-break AC	4.8	15	/	/
Fuse protected short-circuit withstand with gG DIN fuses				
Prospective short-circuit (kA rms)	7	10	5	5
Associated fuse rating (A)	25	40	63	100
Rated operational voltage (Va.c)	690	690	690	690
Connection				
Minimum CU cable cross-section (mm ²)	0.5	1	1.5	4
Maximum CU cable cross-section (mm ²)	4	10	16	35
Tightening torque min - max (Nm)	0.8-1.2	1.2-1.5	2.5	1.5
Mechanical characteristics				
Durability (number of operating cycles)	100 000	100 000	100 000	100 000
Weight of a 3 pole device (g)	109	184	440	440
Weight of a 4 pole device (g)	130	221	535	535

(1) The power is given for information only, the current values vary from one manufacturer to another.

Characteristics according to UL 60947-4-1

25 to 100 A

General use rating (A)	25 A	40 A	63 A	100 A
UL certification file	88EJ		5LM6	
Short circuit rating at 600 VAC (kA)	10	5	/	
Type of fuse	RK5		/	
Max fuse rating (A)	150		/	
Max horsepower rating (HP)				
120 VAC / 1 phase	-	2	/	
120 VAC / 3 phase	-	5	/	
240 VAC / 1 phase	-	3	/	
240 VAC / 3 phase	-	10	/	
480 VAC / 3 phase	-	20	/	
600 VAC / 3 phase	5.2	20	/	
Connection terminals				
Solid wire (AWG)	#14-#12	#14-#8	#14-#4	#10-#2
Wire stripping distance (in/mm)	0.31 / 8	0.39 / 10	0.51 / 13	0.51 / 13
Mechanical characteristics				
Durability (number of operating cycles)	100000	100000	100000	100000
Tightening torque (Lb.in / N.m)	8.8 / 1	13.3 / 1.5	22.1 / 2.5	13.3 / 1.5
Weight of a 3 pole device (lb)	0.24	0.4	1	1
Weight of a 4 pole device (lb)	0.28	0.49	1.18	1.18

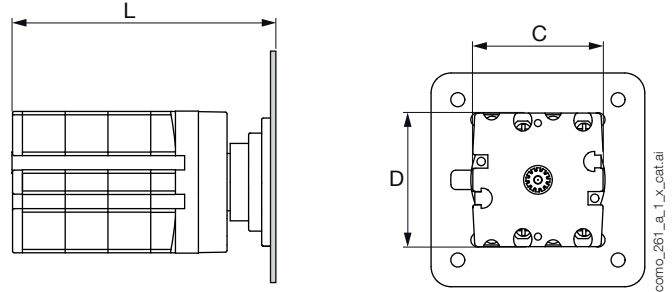
Dimensions (in/mm)

25 to 100A

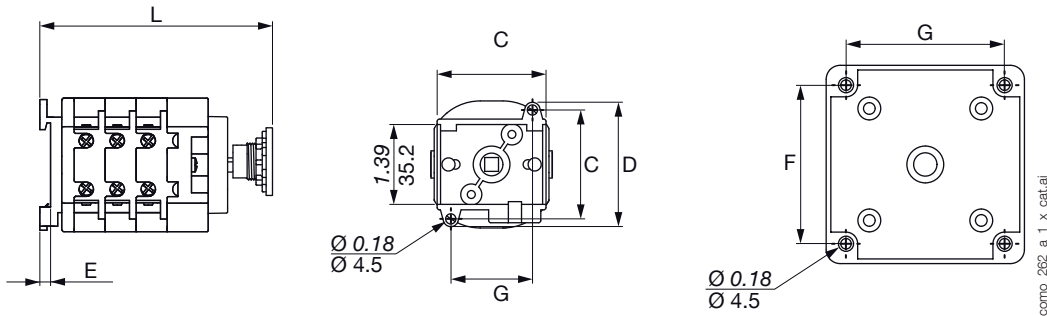
Mounting on door - Fixing with direct handle

Door width		
Unit	Mini	Maxi
in	0.04	0.16
mm	1	4

Rating (A)	Unit	I-II / I-0-II		L		Bypass I-0-II		C	D
		3 P	4 P	3 P	4 P				
25	in	3.19	3.66	4.13	4.61	1.54	1.57	1.54	1.57
	mm	81	93	105	117	39	40		
40	in	3.31	4.82	4.33	4.84	2.11	2.2	2.11	2.2
	mm	84	97	110	123	53.6	56		
63 - 100	in	4.45	5.28	6.1	6.93	2.91	2.8	2.91	2.8
	mm	113	134	155	176	74	71		



Mounting on backplate / DIN rail - Rear fixing of direct handle

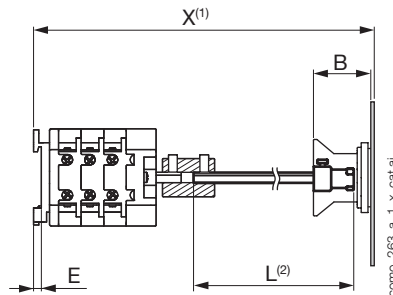


Rating (A)	Unit	I-II / I-0-II		L		E	C	D	F	G
		3 P	4 P	3 P	4 P					
25	in	3.20	3.68	4.15	4.57	0.18	1.89	2.2	1.65	1.42
	mm	81.4	93.4	105.4	116.1	4.5	48	56	47	36
40	in	3.73	4.28	4.28	5.08	0.18	1.89	2.2	1.65	1.42
	mm	94.7	107.7	120.7	129	4.5	48	56	47	36
63 ... 100	in	5.10	5.97	6.83	7.54	-	2.99	2.99	2.68	2.68
	mm	129.5	151.5	173.5	191.5	-	76	76	68	68

Mounting on backplate / DIN rail - Rear fixing of external handle

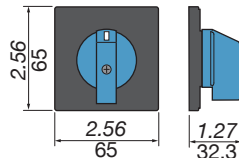
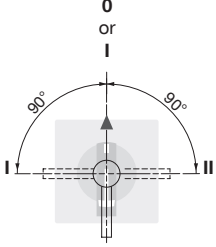
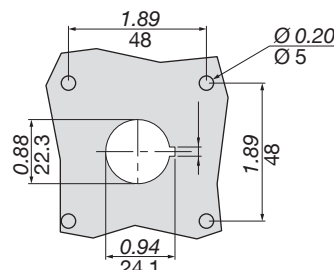
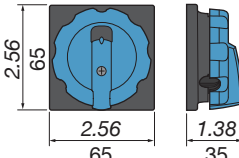
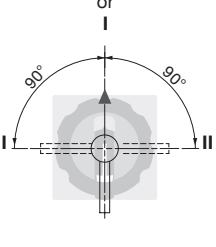
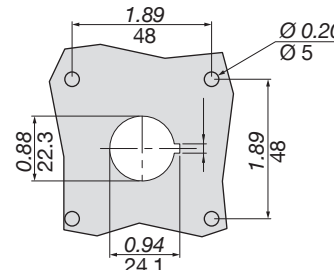
Rating (A)	Unit	X-L ⁽³⁾				E	B
		I-II / I-0-II		Bypass I-0-II			
25	in	3.15	3.63	4.10	4.57	0.18	1.24
	mm	80.1	92.1	104.1	116.1	4.5	31.6
40	in	3.54	4.06	4.57	5.08	0.18	1.24
	mm	90	103	116	129	4.5	31.6
63 ...100	in	5.06	5.89	6.71	7.54	-	1.24
	mm	128.5	149.5	170.5	191.5	-	31.6

(1) X is the distance between the inside of the door and the fixing plate
 (2) L is the total length of the shaft (max 200 mm)
 (3) Minimum distance between the inside of the door and the fixing plate



Dimensions for handles

25 to 100 A

Handle type	Front operation Direction of operation	Door drilling
<p>K1 type non padlockable</p> 	<p>Front operation Direction of operation</p> 	<p>Door drilling</p>  <p style="text-align: right; font-size: small;">poign_075_a_1_gb_cat.ai</p>
<p>K1 type padlockable</p> 	<p>Front operation Direction of operation</p> 	<p>Door drilling</p>  <p style="text-align: right; font-size: small;">poign_076_a_1_gb_cat.ai</p>

SIRCO M

Manually operated Transfer Switching Equipment
from 25 to 125 A



The solution for

- > Healthcare buildings
- > Manufacturing industry



Strong points

- > Secured breaking
- > Modular device
- > Improved on-load switching

Conformity to standards

- > IEC 60947-3



Function

SIRCO M are manually operated 3 or 4 pole modular transfer switches with positive break indication. They provide on-load transfer between two sources for any low voltage power circuit, as well as safety isolation. Other applications include source inversion (e.g. to change the direction of a motor) or grounding/earthing.

Advantages

Secured breaking

SIRCO M transfer switches include contact point technology and double break per pole as standard, enabling safe, optimal operation of LV electrical circuits.

Modular device

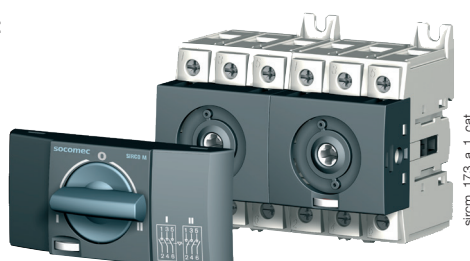
Thanks to their modular format, SIRCO M transfer switches can be fixed to a DIN rail, a backplate or a modular panel.

Improved on-load switching

The SIRCO M switch comprises two mechanically interlocked load break switches which are tested in accordance to standard IEC 60947-3. Its AC23 characteristics enable it to perform on-load changeover switching.

What you need to know

- There are two types of operating handles available for the SIRCO M transfer switches:
 - direct front handle
 - external front handle
- The SIRCO M changeover switch is available in 3 and 4 pole, from 25 to 125 A, with pre-break or signalisation auxiliary contacts (accessories).



References

Rating (A) / Frame size	No. of poles	Switch body	Direct handle	External handle with 1 position padlocking	External handle with 3 position padlocking	Shaft extension for external front handle	Auxiliary contact	Terminal shrouds	Bridging kit									
25 A/M1	3 P	2230 3002	Blue 2239 5012 Red 2239 5013	S000 type I - 0 - II Black IP65 1463 5113 ⁽¹⁾	S01 type I - 0 - II Black IP65 1403 2813	S00, S000 type 150 mm 1407 0515	M type 1 contact NO + NC 2299 0001	1 P 2294 1005 ⁽²⁾ 3 P 2294 3005 ⁽²⁾	3 P 2299 3005 4 P 2299 4005									
	4 P	2230 4002								200 mm 1407 0520								
40 A/M1	3 P	2230 3004				S00 type I - 0 - II Black IP65 1473 1113 ⁽¹⁾		S01 type I - 0 - II Black IP65 1403 2113 ⁽¹⁾	320 mm 1407 0532	S01 type 200 mm 1404 0520	1 P 2294 1009 ⁽²⁾ 3 P 2294 3009 ⁽²⁾	3 P 2299 3009 4 P 2299 4009						
	4 P	2230 4004											320 mm 1407 0532					
63 A/M2	3 P	2230 3006							S00 type I - 0 - II Black IP65 1403 2113 ⁽¹⁾	S01 type I - 0 - II Black IP65 1403 2113 ⁽¹⁾	320 mm 1404 0532	1 contact 2 NC 2299 0011	1 P 2294 1011 ⁽²⁾ 3 P 2294 3016 ⁽²⁾	3 P 2299 3009 4 P 2299 4009				
	4 P	2230 4006													320 mm 1404 0532			
80 A/M2	3 P	2230 3008									S00 type I - 0 - II Black IP65 1473 1113 ⁽¹⁾	S01 type I - 0 - II Black IP65 1403 2113 ⁽¹⁾	320 mm 1404 0532	1 contact 2 NC 2299 0011	1 P 2294 1011 ⁽²⁾ 3 P 2294 3016 ⁽²⁾	3 P 2299 3009 4 P 2299 4009		
	4 P	2230 4008															320 mm 1404 0532	
100 A/M3	3 P	2230 3010											S00 type I - 0 - II Black IP65 1473 1113 ⁽¹⁾	S01 type I - 0 - II Black IP65 1403 2113 ⁽¹⁾	S00 type 150 mm 1409 0615	1 contact 2 NC 2299 0011	1 P 2294 1011 ⁽²⁾ 3 P 2294 3016 ⁽²⁾	3 P 2299 3009 4 P 2299 4009
	4 P	2230 4010																
125 A/M3	3 P	2230 3011	S00 type I - 0 - II Black IP65 1473 1113 ⁽¹⁾	S01 type I - 0 - II Black IP65 1403 2113 ⁽¹⁾	320 mm 1409 0632		1 contact 2 NC 2299 0011								1 P 2294 1011 ⁽²⁾ 3 P 2294 3016 ⁽²⁾		3 P 2299 3009 4 P 2299 4009	
	4 P	2230 4011																320 mm 1409 0632

(1) Defeatable handle.

(2) 3 pole: for upstream and downstream protection, order quantity 2 x 3 pole shrouds. For a 4 pole device, order quantity 2 x 3 pole + 2 x 1 pole shrouds.

Accessories

See "SIRCO M switches".

Characteristics according to IEC 60947-3

Thermal current I_{th} (40 °C)	25 A	40 A	63 A	80 A	100 A	125 A
Frame size	M1	M1	M2	M2	M3	M3
Rated insulation voltage U_i (V)	800	800	800	800	800	800
Rated impulse withstand voltage U_{imp} (kV)	8	8	8	8	8	8
Rated operational currents I_e (A)						
Rated voltage	Utilisation category	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾	A/B ⁽¹⁾
415 VAC	AC-20 A / AC-20 B	25/25	40/40	63/63	80/80	100/100
415 VAC	AC-21 A / AC-21 B	25/25	40/40	63/63	80/80	100/100
415 VAC	AC-22 A / AC-22 B	25/25	40/40	63/63	80/80	100/100
415 VAC	AC-23 A / AC-23 B	25/25	40/40	63/63	80/80	100/100
Operational power in AC-23 (kW)						
At 400 VAC without pre-break in AC-23 (kW) ⁽²⁾	11.3	18	28.4	35.5	45	56.3
Fuse protected short-circuit withstand (kA rms prospective)						
Prospective short-circuit (kA rms) ⁽³⁾	50	50	50	50	50	25
Associated fuse rating (A) ⁽³⁾	25	40	63	80	100	125
Circuit breaker protected short-circuit withstand with any circuit breaker that ensures tripping in less than 0.3s⁽⁴⁾						
Rated short-time withstand current 0.3s I_{sc} (kA rms)	2.3	2.3	2.74	2.74	5	5
Short-circuit capacity (without protection)						
Rated short-time withstand current 1s. I_{sc} (kA rms)	1.26	1.26	1.5	1.5	2.75	2.75
Rated short-circuit making capacity I_{cm} (kA peak)	1.8	1.8	2.1	2.1	3.9	3.9
Connection						
Minimum Cu cable cross-section (mm ²)	1.5	1.5	2.5	2.5	10	10
Maximum Cu cable cross-section (mm ²)	16	16	35	35	70	70
Tightening torque min / max (Nm)	2 / 2.2	2 / 2.2	3.5 / 3.85	3.5 / 3.85	4 / 4.4	4 / 4.4
Mechanical characteristics						
Durability (number of operating cycles)	10000	10000	10000	10000	10000	8000
Weight of a 3 pole device (kg)	0.41	0.41	0.58	0.58	1.1	1.1
Weight of a 4 pole device (kg)	0.51	0.51	0.75	0.75	1.46	1.46

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

(2) The power value is given for information only, the current values vary from one manufacturer to another.

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

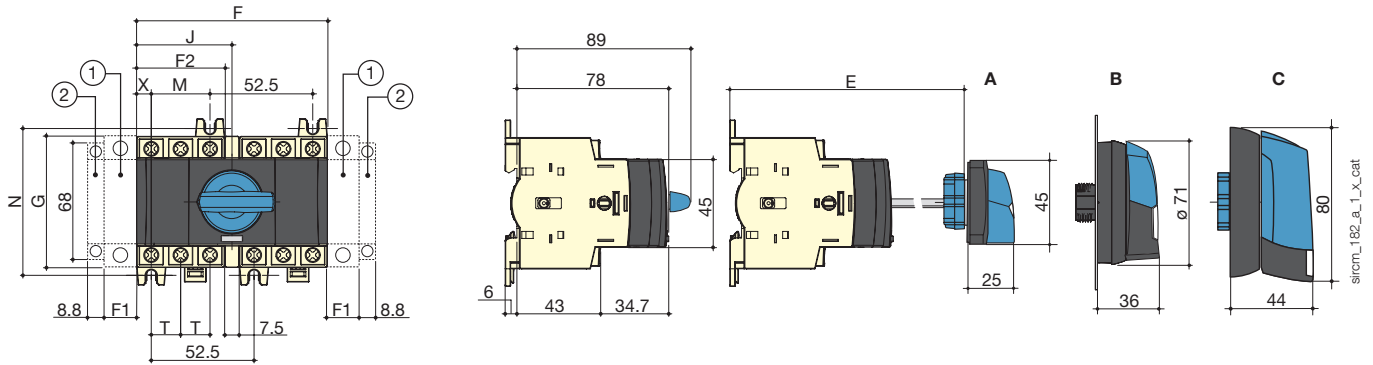
(4) Value for coordination with any circuit breaker that ensures tripping in less than 0.3s. For coordination with specific circuit-breaker references, higher short-circuit current values are available. Please consult us.

Dimensions

25 to 80 A / M1 to M2

Direct front operation for 3/4 pole changeover switches

External front operation for 3/4 pole changeover switches



1. Location for: 1 main pole or 1 auxiliary contact (See accessory pages).
2. Position for 1 auxiliary contact module only.

A. S000 handle
B. S00 handle
C. S01 handle

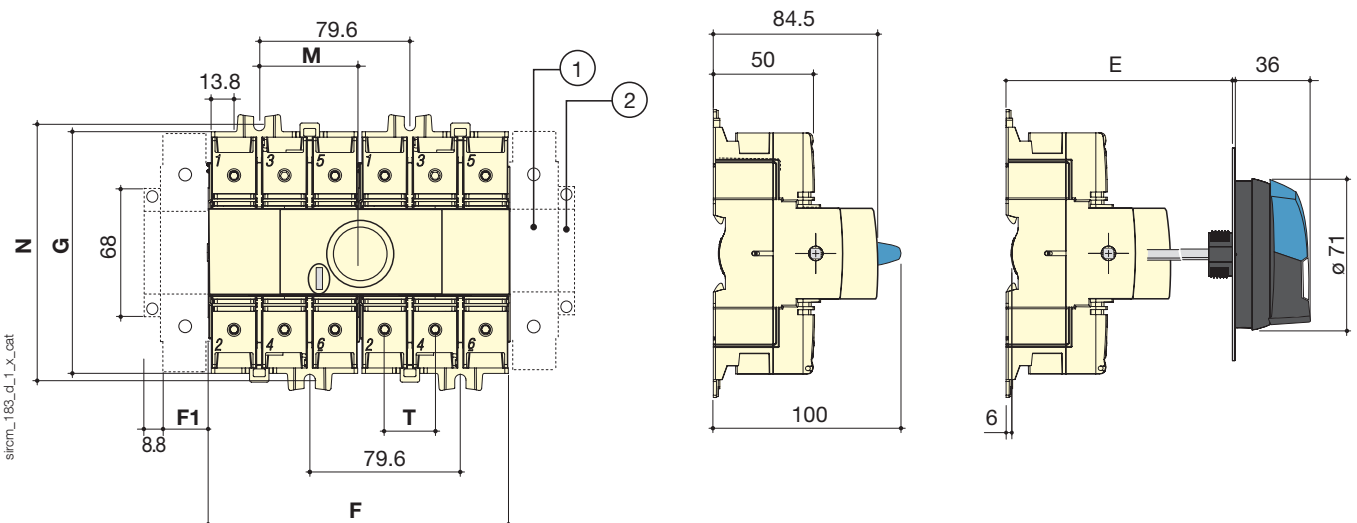
Note: Maximum of 4 additional blocks (3 pole changeover can be fitted with either one main pole and one A/C block, or two A/C blocks per side; 4 pole changeover can be fitted with only one A/C block per side).

Rating (A)	Frame size	Overall dimensions		Switch body					Switch mounting		Connection	
		E min	E max	F	F1	F2	G	J	M	N	T	X
25 ... 40	M1	105	372	97.5	15	45	68	48.75	30	75	15	7.5
63 ... 80	M2	105	372	105	17.5	52.5	76	52.5	35	85	17.5	8.75

100 to 125 A / M3

Direct front operation for 3/4 pole changeover switches

External front operation for 3/4 pole changeover switches



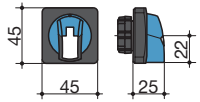
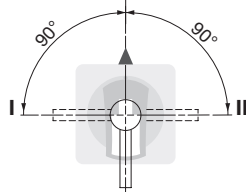
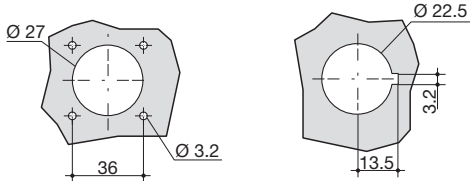
1. Location for: 1 main pole or 1 auxiliary contact (See accessory pages).
2. Position for 1 auxiliary contact module only.

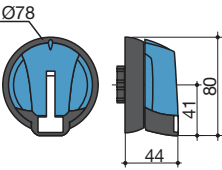
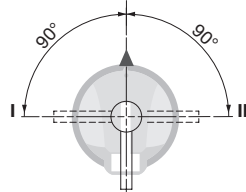
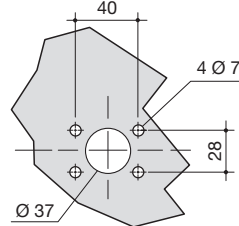
Note: Maximum of 4 additional blocks (3 pole changeover can be fitted with either one main pole and one A/C block, or two A/C blocks per side; 4 pole changeover can be fitted with only one A/C block per side).

Rating (A)	Frame size	Overall dimensions		Switch body			Switch mounting		Connection
		E min	E max	F	F1	G	M	N	T
100 ... 125	M3	105	372	159	26	124.5	52.8	131.5	26

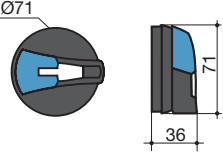
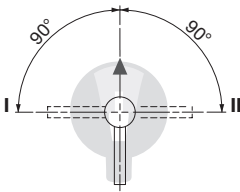
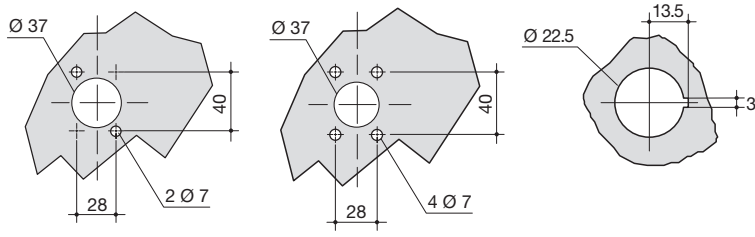
Dimensions for external handles

25 to 80 A / M1 to M2

Handle type	Front operation Direction of operation	Door drilling
<p>S000 type Transfer switches I-0-II and I - I+II - II</p> 	<p>0 or I+II</p> 	<p>With 4 fixing screws With fixing nut</p> 

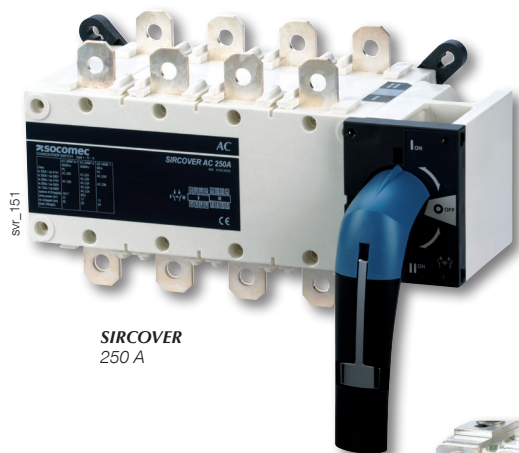
Handle type	Front operation Direction of operation	Door drilling
<p>S01 type Transfer switches I-0-II and I - I+II - II</p> 	<p>0 or I+II</p> 	<p>IP65 with 4 fixing screws</p> 

25 to 125 A / M1 to M3

Handle type	Front operation Direction of operation	Door drilling
<p>S00 type Transfer switches I-0-II and I - I+II - II</p> 	<p>0 or I+II</p> 	<p>IP55 with 2 fixing clips IP65 with 4 fixing screws With fixing nut</p> 

SIRCOVER

Manual Transfer Switching Equipment
from 125 to 3200 A



SIRCOVER
250 A



SIRCOVER Bypass
500 A

The solution for

- > Manufacturing
- > Power distribution



Strong points

- > Complete range
- > Easy to connect
- > Stable positions
- > On-load switching

Conformity to standards

- > IEC 60947-6,-1
- > IEC 60947-3
- > GB/T 14048-11



Function

SIRCOVER products are manually operated transfer switches with positive break indication. There are 4 ranges in the series:

- **SIRCOVER** for open transition switching (I-0-II) available in 3 or 4 pole.
- **SIRCOVER** for overlapping contact switching (I-I+II-II). For applications where both sources are synchronised and there is to be no interruption to the load supply during transfer - available in 3 or 4 pole.
- **SIRCOVER Bypass**. This combination of three interlocked load break switches provides 3+6 or 4+8 poles for bypass applications.
- **SIRCOVER Bypass** for overlapping contact switching (I-I+II-II). This combination of three interlocked load break switches provides bypass to an UPS or other devices when sources are synchronised and the UPS is in static bypass mode.

They provide on-load transfer between two sources for any low voltage power circuit, as well as safety isolation by double breaking per pole. Other applications include source inversion (e.g. to change the direction of a motor) or grounding/earthing.

Advantages

A complete range

There are 4 SIRCOVER models to meet every need: The standard model I-0-II, the overlapping contact model I-I+II-II, the bypass model and the bypass with overlapping contact model I-I+II-II.

Easy to connect

For ratings of 2000 to 3200 A, we offer copper bar connection pieces. This gives you the option of different connection methods - flat, edgewise with top or bottom bridging.

Stable positions

SIRCOVER devices have three stable positions, unaffected by voltage fluctuations and vibrations, protecting your loads from network disturbances.

On-load switching

With its AC-23 and AC-33 characteristics, tested according to standards IEC 60947-3 and IEC 60947-6-1, the SIRCOVER enables safe on-load switching for any type of load. With its on-load transfer capabilities, it is not necessary to isolate loads prior to transfer therefore the SIRCOVER offers an economical solution.

Approvals and certifications⁽¹⁾



BUREAU
VERITAS

⁽¹⁾ Product references on request.

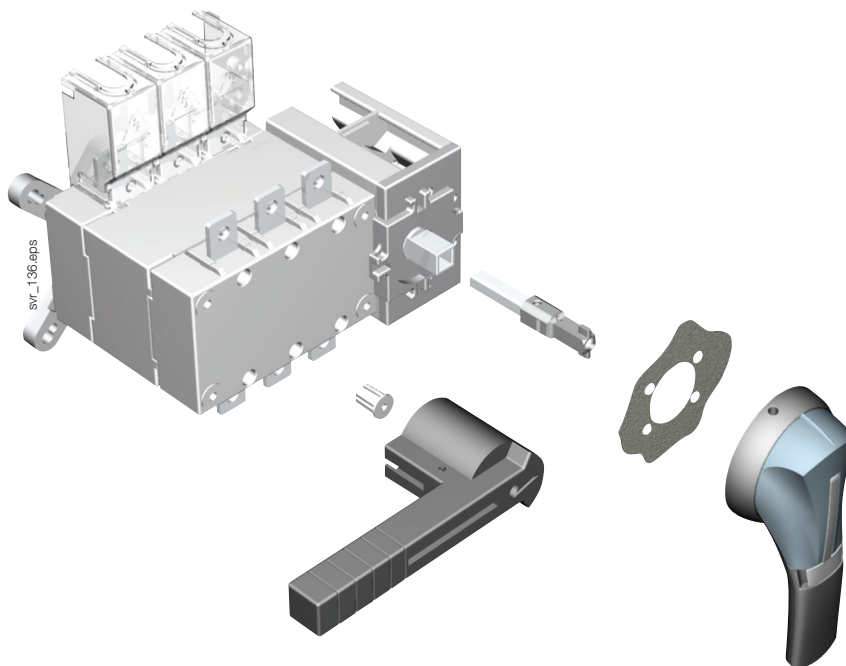
SIRCOVER in enclosure



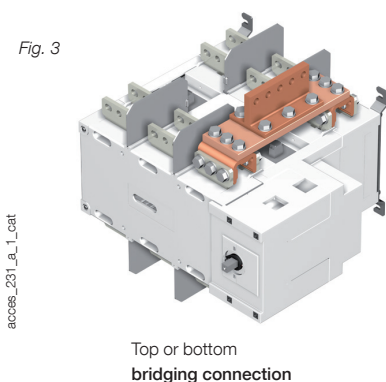
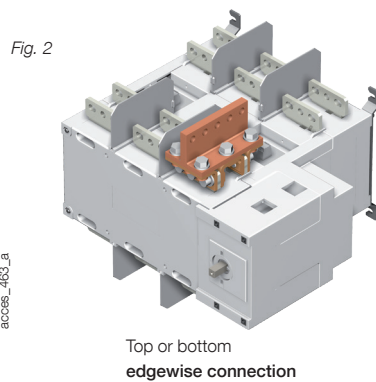
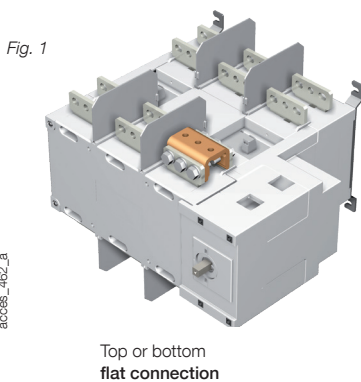
See "Enclosed transfer switches".

What you need to know

- SIRCOVER with **break-before-make contacts (I-0-II)** are available as 3 or 4 pole models with ratings of 125 to 3200 A. They are available in steel or polyester enclosures (125 to 1600 A).
- SIRCOVER switches with **3 overlapping contact positions (I-I+II-II)** are available as 3 or 4 pole models from 125 to 1600 A. They are available in steel enclosures.
- With **break-before-make (I-0-II)** or overlapping contact positions (I-I+II-II), SIRCOVER Bypass devices are a combination of three interlocked switches enabling the use with 3+6 or 4+8 poles from 125 to 1600 A. They are available in steel enclosures.
- All SIRCOVER can be operated with **direct front operation** or **external handles**.



- **Connection pieces for copper bars** allows the connection between the 2 power terminals of the same pole (Fig. 1 and 2) and the bridging of switch I and switch II on the top or the bottom for ratings 2000, 2500 and 3200 A (Fig. 3).



SIRCOVER

Manual Transfer Switching Equipment
from 125 to 3200 A

References

SIRCOVER I-0-II

Rating(A) / Frame size	No. of poles	Switch body	Direct handle	External handle	Shaft for external handle	Bridging bars ⁽⁶⁾	Auxiliary contact	Terminal shrouds	Terminal screens				
125 A / B3	3 P	41AC 3013	J2 type Blue 1122 1111 Red 1123 1111	S2 type Black IP55 1421 2113 IP65 1423 2113 ⁽¹⁾	200 mm 1400 1020 320 mm 1400 1032 ⁽¹⁾	4109 0019	1 st /2 nd NO/NC contact 4109 0021 ⁽²⁾	3 P 2694 3014 ⁽³⁾⁽⁴⁾ 4 P 2694 4014 ⁽³⁾⁽⁴⁾	3 P 1509 3012 4 P 1509 4012				
	160 A / B3	3 P								41AC 3016			
4 P		41AC 4016											
200 A / B3	3 P	41AC 3020											
	4 P	41AC 4020											
250 A / B4	3 P	41AC 3025											
	4 P	41AC 4025											
315 A / B4	3 P	41AC 3031											
	4 P	41AC 4031											
400 A / B4	3 P	41AC 3040											
	4 P	41AC 4040											
500 A / B5	3 P	41AC 3050											
	4 P	41AC 4050											
630 A / B5	3 P	41AC 3063											
	4 P	41AC 4063											
800 A / B6	3 P	41AC 3080	J3 type Black 1132 1111	S4 type Black IP65 1443 3113	200 mm 1401 1520 320 mm 1401 1532 ⁽¹⁾	4109 0080	1 st and 2 nd NO/NC contact included	3 P 2694 3051 ⁽³⁾⁽⁴⁾ 4 P 2694 4051 ⁽³⁾⁽⁴⁾	3 P 1509 3080 4 P 1509 4080				
	1000 A / B6	3 P								41AC 3100			
4 P		41AC 4100											
1250 A / B6	3 P	41AC 3120											
	4 P	41AC 4120											
1600 A / B7	3 P	41AC 3160											
	4 P	41AC 4160											
2000 A / B8	3 P	41AC 3200				S5 type Black 2799 7042		S5 type Black IP65 1453 8113	200 mm 2799 3015 320 mm 2799 3018 ⁽¹⁾ 450 mm 2799 3019	4109 0120	(5)	3 P 2799 3015	included
	2500 A / B8	3 P											
4 P		41AC 4250											
3200 A / B8	3 P	41AC 3320											
	4 P	41AC 4320											

(1) Standard.

(2) 2 contacts supplied: one for position I and one for position II.

(3) For complete shrouding at front, rear, top and bottom, order quantity 4; if equipped with bridging bars order quantity 3.

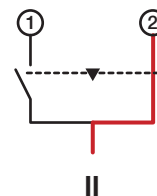
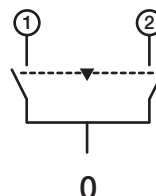
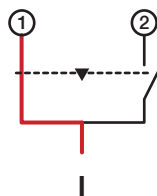
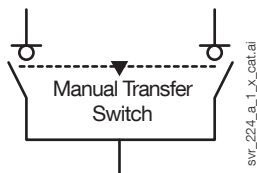
(4) For top and bottom shrouding for the front only, order quantity 2.

(5) See "Copper bar connection pieces".

(6) For a 3 pole device order quantity 3 bridging bars, for a 4 pole device order quantity 4.

Operating principle

SIRCOVER I-0-II



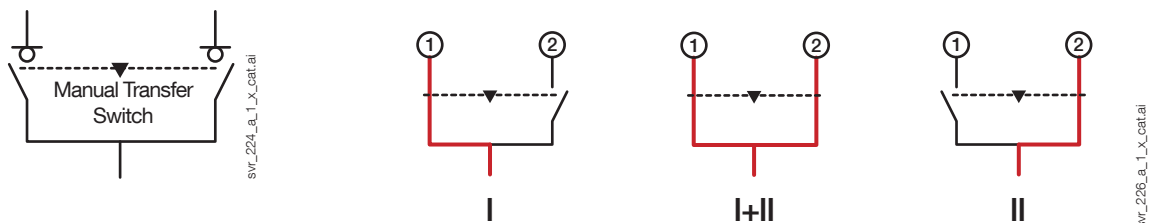
SIRCOVER I-I+II-II

Rating (A) / Frame size	No. of poles	Switch body	Direct handle	External handle	Shaft for external handle	Bridging bars ⁽⁶⁾	Auxiliary contact	Terminal shrouds	Terminal screens
125 A / B3	3 P	4190 3013	J2 type Blue 1122 1111 Red 1123 1111	S2 type Blue IP65 1423 2114	200 mm 1400 1020	3 P 4109 3019 4 P 4109 4019	1 st /2 nd NO/NC contact 4109 0021 ⁽²⁾	3 P 2694 3014 ⁽³⁾⁽⁴⁾ 4 P 2694 4014 ⁽³⁾⁽⁴⁾	3 P 1509 3012 4 P 1509 4012
	160 A / B3	4 P							
3 P		4190 3016							
200 A / B3	4 P	4190 4016							
	3 P	4190 3019							
250 A / B4	4 P	4190 4019							
	3 P	4190 3025							
400 A / B4	4 P	4190 4025							
	3 P	4190 3039							
630 A / B5	4 P	4190 4039							
	3 P	4190 3063							
800 A / B6	4 P	4190 4063							
	3 P	4190 3080							
1250 A / B6	4 P	4190 4080							
	3 P	4190 3120							
1600 A / B7	4 P	4190 4120							
	3 P	4190 3160							
	4 P	4190 4160							
	3 P	4190 3160							

(1) Standard.
 (2) 2 contacts supplied: one for position I and one for position II.
 (3) For complete shrouding at front, rear, top and bottom, order quantity 4; if equipped with bridging bars order quantity 3.
 (4) For top and bottom shrouding for the front only, order quantity 2.
 (5) See "Copper bar connection pieces".
 (6) For a 3 pole device order quantity 3 bridging bars, for a 4 pole device order quantity 4.

Operating principle

SIRCOVER I-I+II-II



Warning: Please note that in position I+II contacts overlap.
 In case of UPS, make sure it is working in static bypass mode before operating.

SIRCOVER

Manual Transfer Switching Equipment
from 125 to 3200 A

References (continued)

SIRCOVER Bypass I-0-II

Rating (A) / Frame size	No. of poles	Switch body	Direct handle	External handle	Shaft for external handle	Bridging bars ⁽⁶⁾	Auxiliary contact	Terminal shrouds	Terminal screens
125 A / B3	3 P	41AC 7013	J2 type Blue 1122 1111	S2 type Blue IP55 1421 2113	200 mm 1400 1020	3 P 2x 4109 3019	1 st /2 nd NO/NC contact 4109 0021 ⁽²⁾	3 P 2694 3014 ⁽³⁾⁽⁴⁾	3 P 1509 3012
	4 P	41AC 9013							
160 A / B3	3 P	41AC 7016	Red 1123 1111	Blue IP65 1423 2113 ⁽¹⁾	320 mm 1400 1032 ⁽¹⁾	4 P 2x 4109 4019		3 P 2694 3014 ⁽³⁾⁽⁴⁾	4 P 1509 4012
	4 P	41AC 9016							
200 A / B3	3 P	41AC 7020	J3 type Black 1132 1111	S3 type Blue IP65 1433 3113	200 mm 1401 1520	2x 4109 3025		3 P 2694 3021 ⁽³⁾⁽⁴⁾	3 P 1509 3025
	4 P	41AC 9020							
250 A / B4	3 P	41AC 7025	J3 type Black 1132 1111	S3 type Blue IP65 1433 3113	320 mm 1401 1532 ⁽¹⁾	2x 4109 3039		3 P 2694 3021 ⁽³⁾⁽⁴⁾	3 P 1509 3025
	4 P	41AC 9025							
400 A / B4	3 P	41AC 7040	J3 type Black 1132 1111	S3 type Blue IP65 1433 3113	320 mm 1401 1532 ⁽¹⁾	2x 4109 4039		3 P 2694 3021 ⁽³⁾⁽⁴⁾	3 P 1509 3025
	4 P	41AC 9040							
630 A / B5	3 P	41AC 7063	J4 type Black 1142 1111 ⁽⁵⁾	V2 type Black IP65 4199 7146	200 mm 2799 3015	2x 4109 3063	3 P 2694 3051 ⁽³⁾⁽⁴⁾	3 P 1509 3063	
	4 P	41AC 9063							4 P 2694 4051 ⁽³⁾⁽⁴⁾
800 A / B6	3 P	41AC 7080	J4 type Black 1142 1111 ⁽⁵⁾	V2 type Black IP65 4199 7146	200 mm 2799 3015	2x 4109 3080	3 P 2694 3051 ⁽³⁾⁽⁴⁾	3 P 1509 3080	
	4 P	41AC 9080							4 P 2694 4051 ⁽³⁾⁽⁴⁾
1250 A / B6	3 P	41AC 7120	J4 type Black 1142 1111 ⁽⁵⁾	V2 type Black IP65 4199 7146	320 mm 2799 3018 ⁽¹⁾	2x 4109 3120	3 P 2694 3051 ⁽³⁾⁽⁴⁾	3 P 1509 3080	
	4 P	41AC 9120							4 P 2694 4051 ⁽³⁾⁽⁴⁾
1600 A / B7	3 P	41AC 7160	J4 type Black 1142 1111 ⁽⁵⁾	V2 type Black IP65 4199 7146	450 mm 2799 3019	2x 4109 3160	3 P 2694 3051 ⁽³⁾⁽⁴⁾	3 P 1509 3160	
	4 P	41AC 9160							4 P 2694 4051 ⁽³⁾⁽⁴⁾

(1) Standard.

(2) 2 contacts supplied: one for position I and one for position II.

(3) For complete shrouding at front, rear, top and bottom, order quantity 6; if equipped with bridging bars order quantity 4.

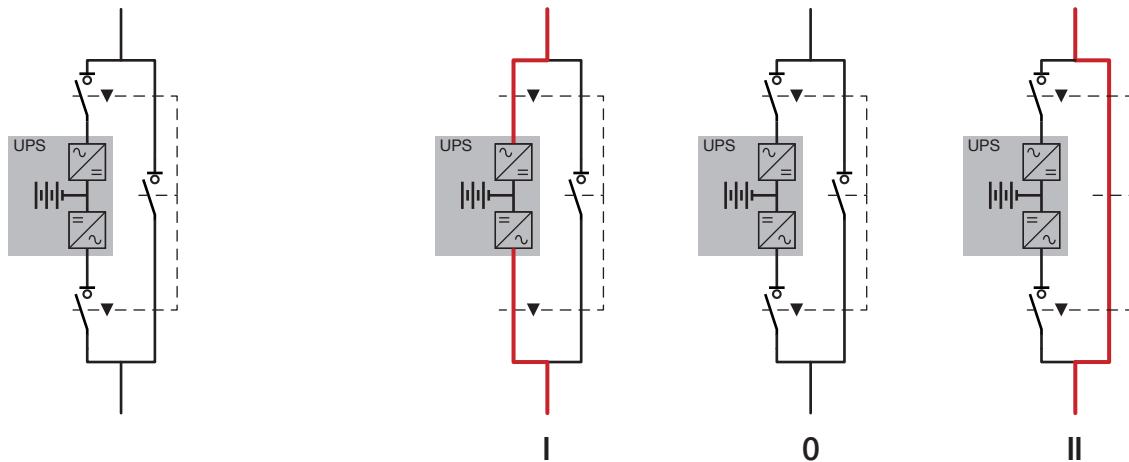
(4) For top and bottom shrouding for the front only, order quantity 2.

(5) Double lever handle.

(6) For a 3 pole device order quantity 6 bridging bars, for a 4 pole device order quantity 8.

Operating principle

SIRCOVER Bypass I-0-II



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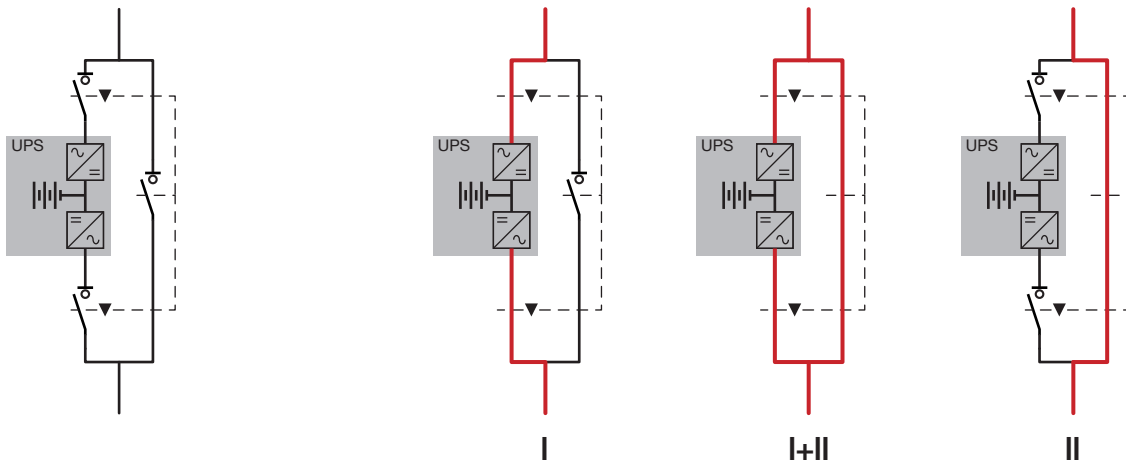
SIRCOVER Bypass I-I+II-II

Rating (A) / Frame size	No. of poles	Switch body	Direct handle	External handle	Shaft for external handle	Bridging bars ⁽⁶⁾	Auxiliary contact	Terminal shrouds	Terminal screens
125 A / B3	3 P	46AC 7013	J2 type Blue 1122 1111	S2 type Blue IP 65 1423 2114 ⁽¹⁾	200 mm 1400 1020	3 P 2x 4109 3019		3 P 2694 3014 ⁽³⁾⁽⁴⁾	3 P 1509 3012
	4 P	46AC 9013							
160 A / B3	3 P	46AC 7016	Red 1123 1111		320 mm 1400 1032 ⁽¹⁾	4 P 2x 4109 4019			
	4 P	46AC 9016							
200 A / B3	3 P	46AC 7020							
	4 P	46AC 9020							
250 A / B4	3 P	46AC 7025	J3 type Black 1132 1111	S3 type Blue IP65 1433 3114	200 mm 1401 1520	2x 4109 3025		3 P 2694 3021 ⁽³⁾⁽⁴⁾	3 P 1509 3025
	4 P	46AC 9025							
400 A / B4	3 P	46AC 7040			320 mm 1401 1532 ⁽¹⁾	2x 4109 3039	1 st /2 nd NO/NC contact 4109 0021 ⁽²⁾	2x 4109 4039	
	4 P	46AC 9040							
630 A / B5	3 P	46AC 7063						2694 3051 ⁽³⁾⁽⁴⁾	1509 3063
	4 P	46AC 9063							
800 A / B6	3 P	46AC 7080	J4 type Black 1142 1111 ⁽⁵⁾	V2 type Black IP65 4199 7146	200 mm 2799 3015	2x 4109 3080			
	4 P	46AC 9080							
1250 A / B6	3 P	46AC 7120			320 mm 2799 3018 ⁽¹⁾	2x 4109 3120			
	4 P	46AC 9120							
1600 A / B7	3 P	46AC 7160			450 mm 2799 3019	2x 4109 3160			1509 3160
	4 P	46AC 9160							

(1) Standard.
 (2) 2 contacts supplied: one for position I and one for position II.
 (3) For complete shrouding at front, rear, top and bottom, order quantity 6; if equipped with bridging bars order quantity 4.
 (4) For top and bottom shrouding for the front only, order quantity 2.
 (5) Double lever handle.
 (6) For a 3 pole device order quantity 6 bridging bars, for a 4 pole device order quantity 8.

Operating principle

SIRCOVER Bypass I-I+II-II



Warning: Please note that in position I+II contacts overlap.
 In case of UPS, make sure it is working in static bypass mode before operating.

SIRCOVER

Manual Transfer Switching Equipment
from 125 to 3200 A

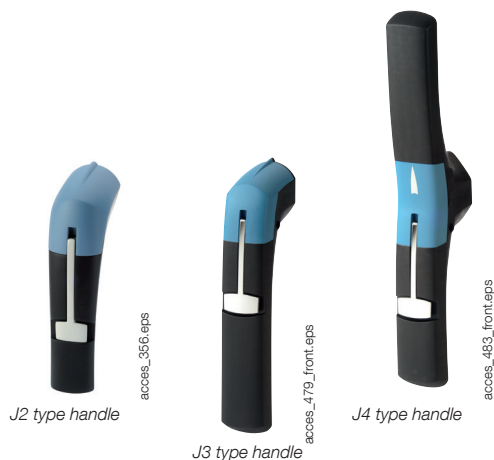
Accessories

Direct operation handle

SIRCOVER I-0-II and I-I+II-II				
Rating (A)	Frame size	Handle colour	Handle type	Reference
125 ... 630	B3 ... B5	Blue	J2	1122 1111
125 ... 630	B3 ... B5	Red	J2	1123 1111
800 ... 1600	B6 ... B7	Blue	J3	1132 1111
2000 ... 3200	B8	Black	S5	2799 7042 ⁽¹⁾

SIRCOVER Bypass				
Rating (A)	Frame size	Handle colour	Handle type	Reference
125 ... 200	B3	Blue	J2	1122 1111
250 ... 630	B4 ... B5	Blue	J3	1132 1111
800 ... 1600	B6 ... B7	Blue	J4	1142 1111 ⁽¹⁾

(1) Double lever handle.



External operation handle

Use

Door interlocked external front operation handles include an escutcheon, are padlockable and must be utilised with an extension shaft.

SIRCOVER I-0-II and I-I+II-II					
Rating (A)	Frame size	Switching type	External IP ⁽¹⁾	Handle type	Reference
125 ... 630	B3 ... B5	I - 0 - II	IP55	S2	1421 2113
125 ... 630	B3 ... B5	I - 0 - II	IP65	S2	1423 2113
125 ... 630	B3 ... B5	I - I+II - II	IP65	S2	1423 2114
800 ... 1600	B6 ... B7	I - 0 - II	IP65	S4	1443 3113 ⁽²⁾
800 ... 1600	B6 ... B7	I - I+II - II	IP65	S4	1443 3114 ⁽²⁾
2000 ... 3200	B8	I - 0 - II	IP65	S5	1453 8113 ⁽²⁾

(1) IP: protection index according to IEC 60529.

(2) Double lever handle.

SIRCOVER Bypass					
Rating (A)	Frame size	Switching type	External IP ⁽¹⁾	Handle type	Reference
125 ... 200	B3	I - 0 - II	IP55	S2	1421 2113
125 ... 200	B3	I - 0 - II	IP65	S2	1423 2113
250 ... 630	B4 ... B5	I - 0 - II	IP65	S3	1433 3113
800 ... 1600	B6 ... B7	I - 0 - II	IP65	V2	4199 7146

(1) IP: protection index according to IEC 60529.



Alternative S type handle cover colours

Use

For single lever handles S2, S3 and for double lever handle S4.
Other colours available: consult us.

Colour	To be ordered in multiples of	Handle type	Reference
Light grey	50	S2, S3	1401 0001
Dark grey	50	S2, S3	1401 0011
Light grey	50	S4	1401 0031
Dark grey	50	S4	1401 0041



access_188.eps

S type handle adapter

Use

Enables S type handles to be fitted in place of existing older style SOCOMEC handles. Adapter can also be utilised as a spacer to increase the distance between the panel door and the handle lever.

Dimensions

Add 12 mm to the handle depth.

Colour	To be ordered in multiples of	External IP ⁽¹⁾	Reference
Black	1	IP65	1493 0000

(1) IP: protection index according to IEC 60529.



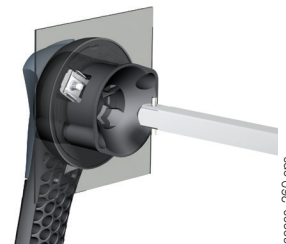
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Shaft guide for external operation

Use

For use with S type handles, to guide the shaft extension into the external handle. This accessory enables the handle to engage the extension shaft with a misalignment of up to 15 mm. Recommended for a shaft length over 320 mm.

Designation	Reference
Shaft guide	1429 0000



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SIRCOVER

Manual Transfer Switching Equipment
from 125 to 3200 A

Accessories (continued)

Shaft for external operation

Use

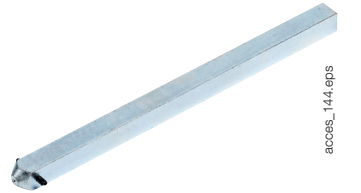
Standard lengths:

- 200 mm,
- 320 mm,
- 450 mm.

Other lengths available: consult us.



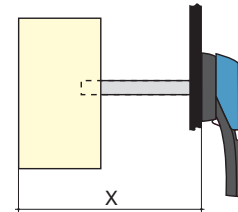
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SIRCOVER I-0-II and I-I+II-II				
Rating (A)	Frame size	Length (mm)	Side X (mm)	Reference
125 ... 400	B3 ... B4	200	210 ... 310	1400 1020
125 ... 400	B3 ... B4	320	210 ... 430	1400 1032
500 ... 630	B5	200	280 ... 390	1400 1020
500 ... 630	B5	320	280 ... 510	1400 1032
800 ... 1600	B6 ... B7	200	425 ... 577	1401 1520
800 ... 1600	B6 ... B7	320	425 ... 697	1401 1532
2000 ... 3200	B8	200	653 ... 803	2799 3015
2000 ... 3200	B8	320	653 ... 923	2799 3018
2000 ... 3200	B8	450	653 ... 1053	2799 3019

SIRCOVER Bypass				
Rating (A)	Frame size	Length (mm)	Side X (mm)	Reference
125 ... 200	B3	200	320 ... 450	1400 1020
125 ... 200	B3	320	320 ... 570	1400 1032
250 ... 400	B4	200	298 ... 420	1401 1520
250 ... 400	B4	320	298 ... 540	1401 1532
630	B5	200	417 ... 539	1401 1520
630	B5	320	417 ... 659	1401 1532
800 ... 1600	B6 ... B7	200	550 ... 680	2799 3015
800 ... 1600	B6 ... B7	320	550 ... 800	2799 3018
800 ... 1600	B6 ... B7	450	550 ... 930	2799 3019



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Bridging bars

Use

For creating a common connection between switches I & II, on the top or bottom side of the SIRCOVER, to enable, for example, the load to be fed from either incoming source (I or II).

For SIRCOVER Bypass, twice the quantity of bridging bars are required (6 for 3 pole device and 8 for 4 pole).

Rating (A)	Frame size	Diameter (mm)	Reference ⁽¹⁾
125 ... 200	B3	20 x 2.5	4109 0019
250	B4	25 x 2.5	4109 0025
315 ... 400	B4	32 x 5	4109 0039
500	B5	32 x 5	4109 0050
630	B5	50 x 5	4109 0063
800 ... 1000	B6	50 x 6	4109 0080
1250	B6	60 x 8	4109 0120
1600	B7	90 x 10	4109 0160

(1) SIRCOVER: For a 3 pole device order quantity 3 bridging bars, and for a 4 pole device order quantity 4.
SIRCOVER Bypass: For a 3 pole device order quantity 6 bridging bars, and for a 4 pole device order quantity 8.

SIRCOVER I-0-II and SIRCOVER I-I+II-II

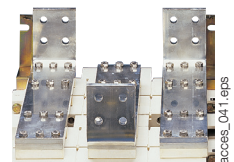


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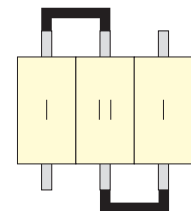
SIRCOVER Bypass



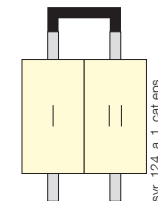
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Copper bar connection pieces

Use

For ratings 2000 to 3200 A.

Enables:

- Flat connection: the connection pieces provide a link between the two power terminals of the same pole (Fig. 1).
- Edgewise connection: the connection pieces provide a link between the two power terminals of the same pole and an edgewise bar connection terminal.
- Top or bottom bridging between two poles (Fig. 3).

Once installed, the power terminal is connection ready.

For 3200 A rating, connection pieces (part A) are supplied as standard. Bolt sets must be ordered separately.

Connection: the quantities given in the below table refer to the number of pieces required per pole, top or bottom.

Bridging connection: the quantities given refer to the number of pieces required to complete a single bridging connection between two poles.

	Reference	2000 – 2500 A			3200 A		
		Fig. 1	Fig. 2	Fig. 3	Fig. 1	Fig. 2	Fig. 3
		Connection		Bridging connection I - II	Connection		Bridging connection I - II
Connection - part A	2619 1200	1	1		2 ⁽²⁾	included	
Bolt kit 35 mm - part B	2699 1201	1 ⁽¹⁾		2 ⁽²⁾	1 ⁽¹⁾		2 ⁽²⁾
Bolt kit 45 mm - part B	2699 1200	1 ⁽¹⁾			1 ⁽¹⁾		
T + Bolt kit - part C	2629 1200		1	1		1	1
Bracket + Bolt kit - part D	2639 1200		1			1	
Bar + Bolt kit - part E	4109 0320			1			1

(1) Choose the bolt length according to the thickness of the bars being connected; if bar thickness is greater than 20 mm, 45 mm bolts are required.

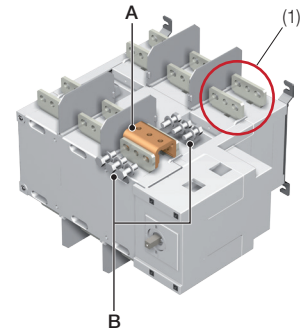
(2) For bridging connections, quantity 2 pieces are required for creating the link between the two power terminals of the same pole for switch bodies I and II.

The quantities of the applicable pieces then need to be multiplied by the number of connection points (power terminals) in order to determine the total quantity required of each part.

Example: for a 4 pole 2500 A SIRCOVER with upstream edgewise connection (Fig. 2) and downstream bridging (Fig. 3), the following quantities will be required:

Part	Upstream edgewise quantity	Downstream bridging quantity	Total quantity
A	8	8	16
B	0	8	8
C	8	4	12
D	8	0	8
E	0	4	4

Fig. 1



(1) Single pole connection: 1 pole (top or bottom) comprises two power terminals which are to be linked with the copper connection kit.

Fig. 2

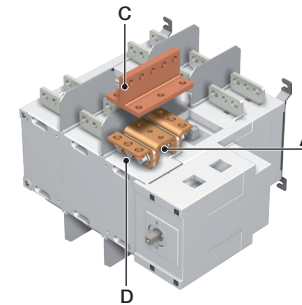
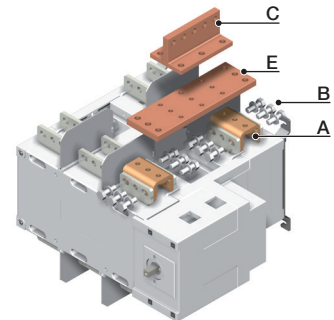


Fig. 3



Auxiliary contact

Use

Pre-breaking and signalling of positions I and II: 1 to 2 NO/NC auxiliary contacts in each position.

Low level AC: consult us.

Connection to the control circuit

By 6.35 mm fast-on terminal.

Electrical characteristics

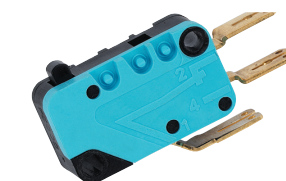
30,000 operations.

Characteristics

Rating (A)	Frame size	Nominal current (A)	Operating current I _o (A)			
			250 VAC AC-13	400 VAC AC-13	24 VDC DC-13	48 VDC DC-13
125 ... 3200	B3... B8	16	12	8	14	6

NO/NC changeover contact

Rating (A)	Frame size	Contact(s)	Reference
125 ... 1600	B3 ... B7	1 st / 2 nd	4109 0021
2000 ... 3200	B8	1 st / 2 nd	included



SIRCOVER

Manual Transfer Switching Equipment
from 125 to 3200 A

Accessories (continued)

Terminal shrouds

Use

Protection against direct contact with terminals or connecting parts.

Advantage

Perforations allow remote thermographic inspection without the need to remove the shrouds.

Rating (A)	Frame size	No. of poles	Position	Reference
125 ... 200	B3	3 P	top / bottom / front (I) / rear (II)	2694 3014 ⁽¹⁾⁽²⁾
125 ... 200	B3	4 P	top / bottom / front (I) / rear (II)	2694 4014 ⁽¹⁾⁽²⁾
250 ... 400	B4	3 P	top / bottom / front (I) / rear (II)	2694 3021 ⁽¹⁾⁽²⁾
250 ... 400	B4	4 P	top / bottom / front (I) / rear (II)	2694 4021 ⁽¹⁾⁽²⁾
500 ... 630	B5	3 P	top / bottom / front (I) / rear (II)	2694 3051 ⁽¹⁾⁽²⁾
500 ... 630	B5	4 P	top / bottom / front (I) / rear (II)	2694 4051 ⁽¹⁾⁽²⁾



(1) For complete shrouding at front, rear, top and bottom, order 4 x for a SIRCOVER and 6 x for a SIRCOVER Bypass; if equipped with bridging bars order 3 x for a SIRCOVER and 4 x for a SIRCOVER Bypass.

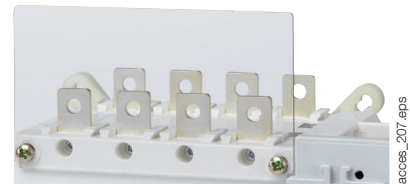
(2) For top and bottom shrouding for the front only, order 2 x for a SIRCOVER and a SIRCOVER Bypass.

Terminal screens

Use

Upstream and downstream protection against direct contact with terminals or connection parts. For upstream and downstream protection, order quantity 1.

Rating (A)	Frame size	No. of poles	Position	Reference
125 ... 200	B3	3 P	top / bottom	1509 3012
125 ... 200	B3	4 P	top / bottom	1509 4012
250 ... 400	B4	3 P	top / bottom	1509 3025
250 ... 400	B4	4 P	top / bottom	1509 4025
500 ... 630	B5	3 P	top / bottom	1509 3063
500 ... 630	B5	4 P	top / bottom	1509 4063
800 ... 1250	B6	3 P	top / bottom	1509 3080
800 ... 1250	B6	4 P	top / bottom	1509 4080
1600	B7	3 P	top / bottom	1509 3160
1600	B7	4 P	top / bottom	1509 4160
2000 ... 3200	B8	3 / 4 P	top / bottom	included



Inter-phase barrier

Use

Safe isolation between the terminals, essential for use at 690 VAC or in a polluted or dusty atmosphere.

Rating (A)	Frame size	No. of poles	Reference
125 ... 200	B3	3 P	2998 0033
125 ... 200	B3	4 P	2998 0034
250 ... 400	B4	3 P	2998 0023
250 ... 400	B4	4 P	2998 0024
500 ... 630	B5	3 P	2998 0013
500 ... 630	B5	4 P	2998 0014
800 ... 3200	B6 ... B8	3/4 P	included

Key handle interlocking system

Padlocking in position I, 0 or II				
SIRCOVER Rating (A) / Frame size	SIRCOVER Bypass Rating (A) / Frame size	Operation	Figure	Reference
125 ... 630 / B3 ... B5	125 ... 200 / B3	external	1	1423 2813

Locking using RONIS EL11AP lock in position 0 (not included)				
SIRCOVER Rating (A) / Frame size	SIRCOVER Bypass Rating (A) / Frame size	Operation	Figure	Reference
125 ... 630 / B3 ... B5	125 ... 200 / B3	direct	2	4109 1006 ⁽¹⁾
	250 ... 630 / B4 ... B5	direct	3	consult us
800 ... 1600 / B6 ... B7	800 ... 1600 / B6 ... B7	direct	3	4109 1004 ⁽²⁾
2000 ... 3200 / B8		direct	3	4109 2007 ⁽²⁾
125 ... 630 / B3 ... B5	125 ... 630 / B3 ... B5	external	4	1499 7701 ⁽²⁾
2000 ... 3200 / B8	800 ... 1600 / B6 ... B7	external	4	2799 7002 ⁽²⁾

(1) Specific handle included.

(2) This locking facility can be configured by the user in the 3 positions.

Locking using RONIS EL11AP lock in position I, 0, II (not included)				
SIRCOVER Rating (A) / Frame size	SIRCOVER Bypass Rating (A) / Frame size	Operation	Figure	Reference
125 ... 630 / B3 ... B5	125 ... 200 / B3	direct	2	4109 1002 ⁽¹⁾
	250 ... 630 / B4 ... B5	direct	3	consult us
800 ... 1600 / B6 ... B7	800 ... 1600 / B6 ... B7	direct	3	4109 1004 ⁽²⁾
2000 ... 3200 / B8		direct	3	4109 2007 ⁽²⁾
125 ... 630 / B3 ... B5	125 ... 630 / B3 ... B5	external	4	1499 7701 ⁽²⁾
2000 ... 3200	800 ... 1600 / B6 ... B7	external	4	2799 7002 ⁽²⁾

(1) Specific handle included.

(2) This locking facility can be configured by the user in the 3 positions.

Locking using 230 VAC undervoltage coil in position 0 (factory fitted)				
SIRCOVER Rating (A) / Frame size	SIRCOVER Bypass Rating (A) / Frame size	Operation	Figure	Reference
800 ... 3200 / B6 ... B8	800 ... 1600 / B6 ... B7	direct	3	consult us

Locking using Type K CASTELL lock (not supplied)				
SIRCOVER Rating (A) / Frame size	SIRCOVER Bypass Rating (A) / Frame size	Operation	Figure	Reference
125 ... 1600 / B3 ... B7	125 ... 630 / B3 ... B5	external	4	1499 7702
2000 ... 3200 / B8	800 ... 1600 / B6 ... B7	external	4	2799 7003

Use

- Padlocked (padlock not included). This device is factory mounted in the direct or external operation handle and allows the use of up to 3 padlocks.
- Locking:
 - using lock (not supplied),
 - using undervoltage coil.
- The interlocking positions are either determined as standard or configured by the user by removing the pre-form tabs.
- Padlocking and locking can be combined.

Fig. 1

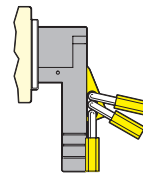
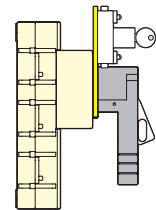


Fig. 2



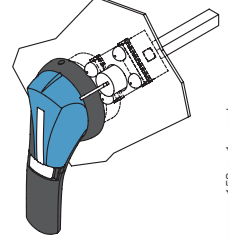
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Fig. 3



Fig. 4



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Other specific accessories



bc_03_04_01

- Customised protection screens (for specific dimensions or high ambient temperatures).
- Connection accessories.
- Low level auxiliary contacts.

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

125 to 630 A

Thermal current I th at 40°C	125 A	160 A	200 A	250 A	315 A	400 A	500 A	630 A
Frame size	B3	B3	B3	B4	B4	B4	B5	B5
Rated insulation voltage U _i (V)	800	800	800	1000	1000	1000	1000	1000
Rated impulse withstand voltage U _{imp} (kV)	8	8	8	12	12	12	12	12
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⁾	A/B ⁽¹⁾
415 VAC	AC-31 B	125	160	200	250	315	400	500
415 VAC	AC-32 B				200	315	400	500
415 VAC	AC-33 B				200	200	200	400
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⁾	A/B ⁽¹⁾
415 VAC	AC-21 A / AC-21 B	125/125	160/160	200/200	250/250	315/315	400/400	500/500
415 VAC	AC-22 A / AC-22 B	125/125	160/160	200/200	250/250	315/315	400/400	500/500
415 VAC	AC-23 A / AC-23 B	125/125	160/160	200/200	200/200	315/315	400/400	500/500
500 VAC	AC-21 A / AC-21 B	125/125	160/160	200/200	250/250	315/315	400/400	500/500
500 VAC	AC-22 A / AC-22 B	125/125	160/160	200/200	200/250	200/315	200/400	500/500
500 VAC	AC-23 A / AC-23 B	80/80	80/80	80/80	200/200	200/200	200/200	400/400
690 VAC ⁽³⁾	AC-21 A / AC-21 B	125/125	160/160	200/200	200/200	200/200	200/200	500/500
690 VAC ⁽³⁾	AC-22 A / AC-22 B	125/125	125/125	125/125	160/160	160/160	160/160	400/400
690 VAC ⁽³⁾	AC-23 A / AC-23 B	63/80	63/80	63/80	125/125	125/125	125/125	400/400
220 VDC	DC-21 A / DC-21 B	125/125	160/160	200/200	250/250	250/250	250/250	500/500
220 VDC	DC-22 A / DC-22 B	125/125	160/160	200/200	250/250	250/250	250/250	500/500
220 VDC	DC-23 A / DC-23 B	125/125	125/125	125/125	200/200	200/200	200/200	500/500
440 VDC ⁽²⁾	DC-21 A / DC-21 B	125/125	125/125	125/125	200/200	200/200	200/200	500/500
440 VDC ⁽²⁾	DC-22 A / DC-22 B	125/125	125/125	125/125	200/200	200/200	200/200	500/500
440 VDC ⁽²⁾	DC-23 A / DC-23 B	125/125	125/125	125/125	200/200	200/200	200/200	500/500
Operation power in AC-23 (kW) ⁽⁴⁾								
At 415 VAC without AC pre-break		58/58	75/75	100/100	100/100	145/145	190/190	235/235
At 690 VAC without AC pre-break		50/62	50/62	50/62	90/90	90/90	90/90	310/310
Reactive power (kvar) ⁽⁴⁾								
At 415 VAC (kvar)		60/60	75/75	100/100	125/125	150/150	200/200	250/300
Fuse protected short-circuit withstand as per IEC 60947-3 (kA rms prospective)								
Prospective short-circuit current with gG DIN fuses at 415 VAC (kA rms)		100	100	50	50	50	50	50
Prospective short-circuit current with gG DIN fuses at 690 VAC (kA rms)					50	50	50	50
Associated fuse rating (A)		125	160	200	250	315	400	500
Short-circuit withstand without protection as per IEC 60947-3								
Rated short-time withstand current 0.3s I _{cw} at 415 VAC (kA rms)		12	12	12	15 ⁽⁵⁾	15 ⁽⁵⁾	15 ⁽⁵⁾	17 ⁽⁵⁾
Rated short-time withstand current 1s I _{cw} at 415 VAC (kA rms)		7	7	7	8 ⁽⁵⁾	8 ⁽⁵⁾	8 ⁽⁵⁾	11 ⁽⁵⁾
Rated peak withstand current at 415 VAC (kA peak)		20	20	20	30	30	30	45
Short-circuit withstand without protection as per IEC 60947-6-1								
Rated short-time withstand current 30 ms I _{cw} at 415 VAC (kA rms)		10	10	10	10	10	10	
Rated short-time withstand current 60 ms I _{cw} at 415 VAC (kA rms)								10
Connection								
Minimum Cu cable cross-section as per IEC 60947-1 (mm ²)		35	35	50	95	120	185	2 x 95
Recommended Cu busbar cross-section (mm ²)								2 x 32 x 5
Maximum Cu cable cross-section (mm ²)		50	95	120	150	240	240	2 x 185
Maximum Cu busbar width (mm)		25	25	25	32	32	32	50
Min./max. tightening torque (Nm)		9/13	9/13	9/13	20/26	20/26	20/26	20/26
Mechanical specifications								
Durability (number of operating cycles)		10,000	10,000	10,000	8,000	8,000	8,000	5,000
Weight 3 P (kg)		2.9	2.9	2.9	3.8	3.9	3.9	8.6
Weight 4 P (kg)		4.1	4.1	4.1	4.6	4.9	4.9	11.1

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

(2) 3-pole device with 2 pole in series for the "+" an 1 pole for the "-".

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

(3) Interphase barriers must be installed on the products.

(4) The power value is given for information only, the current values vary from one manufacturer to another.

(5) Values given at 690 VAC.

800 to 3200 A

Thermal current I th at 40°C	800 A	1000 A	1250 A	1600 A	2000 A	2500 A	3200 A
Frame size	B6	B6	B6	B7	B8	B8	B8
Rated insulation voltage U _i (V)	1000	1000	1000	1000	1000	1000	1000
Rated impulse withstand voltage U _{imp} (kV)	12	12	12	12	12	12	12
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 B	800	1000	1250	1600	2000	3200
415 VAC	AC-32 B	800	1000	1250	1250	2000	2000
415 VAC	AC-33 B	800	1000	1000	1000	1250	1250
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-21 A / AC-21 B	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/3200
415 VAC	AC-22 A / AC-22 B	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/3200
415 VAC	AC-23 A / AC-23 B	800/800	1000/1000	1250/1250	1250/1250	-/1600	-/1600
500 VAC	AC-21 A / AC-21 B	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/2000
500 VAC	AC-22 A / AC-22 B	630/630	800/800	1000/1000	1600/1600		
500 VAC	AC-23 A / AC-23 B	630/630	630/630	800/800	1000/1000		
690 VAC ⁽³⁾	AC-21 A / AC-21 B	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/2000
690 VAC ⁽³⁾	AC-22 A / AC-22 B	630/630	800/800	1000/1000	1000/1000		
690 VAC ⁽³⁾	AC-23 A / AC-23 B	630/630	630/630	800/800	800/800		
220 VDC	DC-21 A / DC-21 B	800/800	1000/1000	1250/1250	1250/1250		
220 VDC	DC-22 A / DC-22 B	800/800	1000/1000	1250/1250	1250/1250		
220 VDC	DC-23 A / DC-23 B	800/800	1000/1000	1250/1250	1250/1250		
440 VDC ⁽²⁾	DC-21 A / DC-21 B	800/800	1000/1000	1250/1250	1250/1250		
440 VDC ⁽²⁾	DC-22 A / DC-22 B	800/800	1000/1000	1250/1250	1250/1250		
440 VDC ⁽²⁾	DC-23 A / DC-23 B	800/800	1000/1000	1250/1250	1250/1250		
Operation power in AC-23 (kW)⁽⁴⁾							
At 415 VAC without AC pre-break		375/375	450/450	560/560	560/560	-/710	-/710
At 690 VAC without AC pre-break		475/475	475/475	620/620	620/620		
Reactive power (kvar)⁽⁴⁾							
At 415 VAC (kvar)		400/400	500/500	650/650	650/650	-/850	-/850
Fuse protected short-circuit withstand as per IEC 60947-3 (kA rms prospective)							
Prospective short-circuit current with gG DIN fuses at 415 VAC (kA rms)		50	50	100	100		
Prospective short-circuit current with gG DIN fuses at 690 VAC (kA rms)		50	50	50			
Associated fuse rating (A)		800	1000	1250	2x800		
Short-circuit withstand without protection as per IEC 60947-3							
Rated short-time withstand current 0.3s I _{cw} at 415 VAC (kA rms)		64	64	64	78	78	78
Rated short-time withstand current 1s I _{cw} at 415 VAC (kA rms)		35	35	35	50	50	50
Rated peak withstand current at 415 VAC (kA peak)		55	55	80	110	120	120
Short-circuit withstand without protection as per IEC 60947-6-1							
Rated short-time withstand current 30 ms I _{cw} at 415 VAC (kA rms)							
Rated short-time withstand current 60 ms I _{cw} at 415 VAC (kA rms)		20	20	25	32	50	50
Connection							
Minimum Cu cable cross-section as per IEC 60947-1 (mm ²)		2 x 185					
Recommended Cu busbar cross-section (mm ²)		2 x 50 x 5	2 x 63 x 5	2 x 60 x 7	2 x 100 x 5	3 x 100 x 5	2 x 100 x 10
Maximum Cu cable cross-section (mm ²)		4 x 185	4 x 185	4 x 185	6 x 185		
Maximum Cu busbar width (mm)		63	63	63	100	100	100
Min./max. tightening torque (Nm)		20/26	20/26	20/26	40/45	40/45	40/45
Mechanical specifications							
Durability (number of operating cycles)		4,000	4,000	4,000	3,000	3,000	3,000
Weight 3 P (kg)		20.5	21.0	21.6	25.7	42.0	52.3
Weight 4 P (kg)		24.8	25.6	26.2	32.0	52.9	66.6

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

(2) 3-pole device with 2 pole in series for the "+" an 1 pole for the "-".

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

(3) Interphase barriers must be installed on the products.

(4) The power value is given for information only, the current values vary from one manufacturer to another.

(5) Values given at 690 VAC.

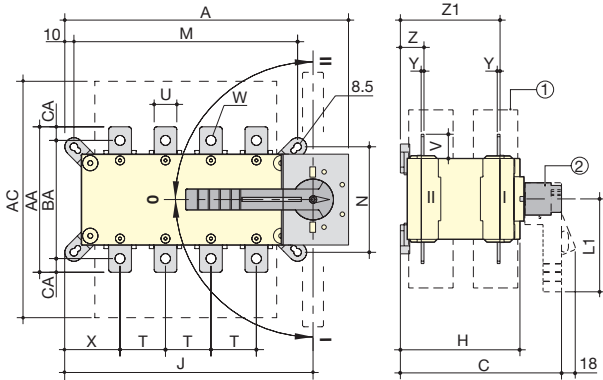
SIRCOVER

Manual Transfer Switching Equipment
from 125 to 3200 A

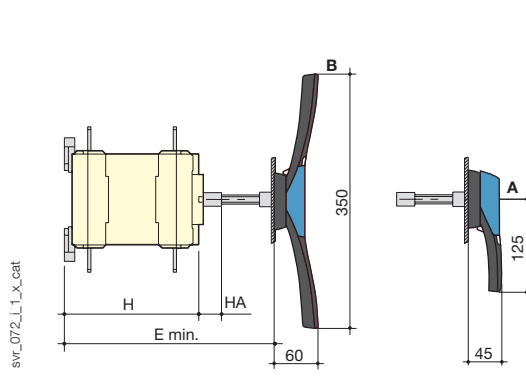
Dimensions

SIRCOVER 125 to 1600 A / B3 to B7

Direct front operation



External front operation



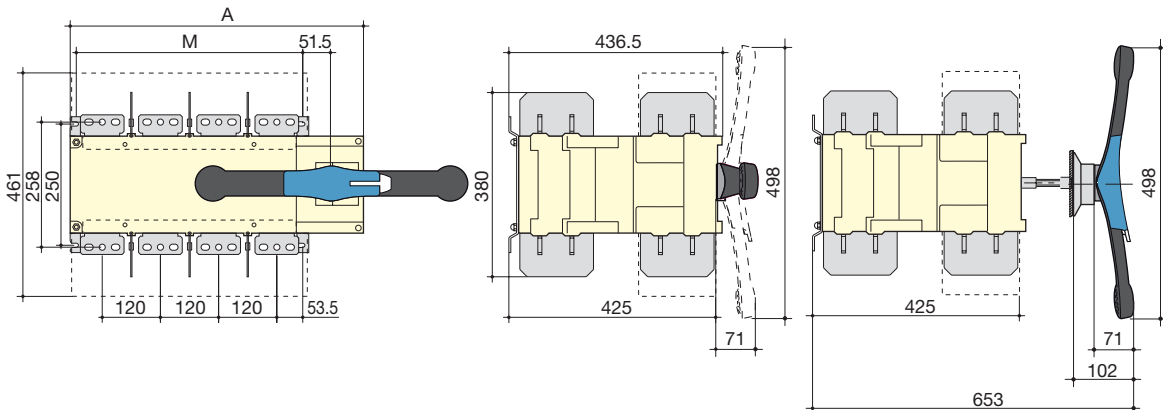
A. S2 type handle for external operation: 125 to 630 A
B. S4 type handle for external operation: 800 to 1600 A

1. Terminal shrouds
2. Direct operation handle:
- 125 to 630 A: L1 = 140 mm,
- 800 to 1600 A: L1 = 210 mm.

Rating (A)/ Frame size	Overall dimensions				Terminal shrouds	Switch body				Switch mounting				Connection										
	A 3p.	A 4p.	C	E min		AC	H	HA	J 3p.	J 4p.	M 3p.	M 4p.	N	T	U	V	W	X 3p.	X 4p.	Y	Z	Z1	AA	BA
125 / B3	221	251	218	208 ... 436	235	148	25	182	212	156	186	101	36	20	25	8.5	56	50	3.5	28	124	135	115	10
160 / B3	221	251	218	208 ... 436	235	148	25	182	212	156	186	101	36	20	25	8.5	56	50	3.5	28	124	135	115	10
200 / B3	221	251	218	208 ... 436	235	148	25	182	212	156	186	101	36	20	25	8.5	56	50	3.5	28	124	135	115	10
250 / B4	262	312	218	208 ... 436	280	148	25	223	273	196	246	116	50	25	30	11	61	61	3.5	30	124	160	130	15
315 / B4	262	312	218	208 ... 436	280	148	25	223	273	196	246	116	50	35	35	11	61	61	3.5	30	124	170	140	15
400 / B4	262	312	218	208 ... 436	280	148	25	223	273	196	246	116	50	35	35	11	61	61	3.5	30	124	170	140	15
500 / B5	319	379	295	285 ... 513	401	225	25	272	332	246	306	176	65	32	37	13	70.5	65.5	5	43	180	235	205	15
630 / B5	319	379	295	285 ... 513	400	225	25	272	332	246	306	176	65	45	50	13	70.5	65.5	5	43	180	260	220	20
800 / B6	386	466	375	425 ... 577	459	298	29	306.5	386.5	255	336	250	80	50	60.5	15	48	48	7	66.5	253.5	321		26.5
1000 / B6	386	466	375	425 ... 577	459	298	29	306.5	386.5	255	336	250	80	50	60.5	15	48	48	7	66.5	253.5	321		26.5
1250 / B6	386	466	375	425 ... 577	459	298	29	306.5	386.5	255	336	250	80	60	65	16x11	48	48	7	66.5	255.5	330		29.5
1600 / B7	478	598	375	425 ... 577	461	298	29	388.5	518.5	347	467	250	120	90	43.5	12.5x5	54	54	8	66.5	255.5	288		15

SIRCOVER 2000 to 3200 A / B8

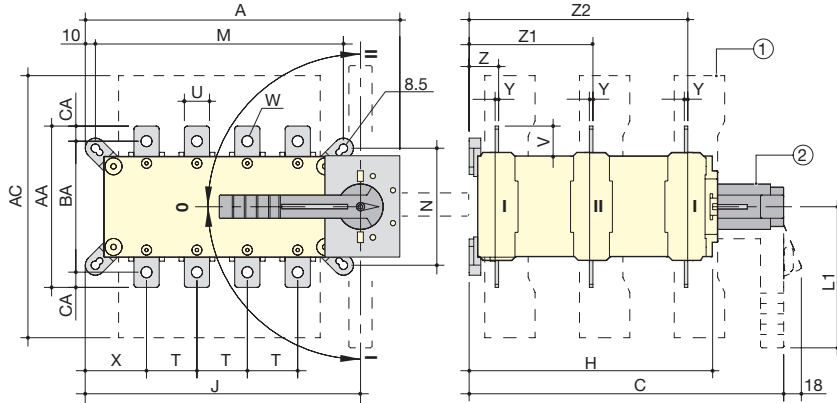
Direct front operation



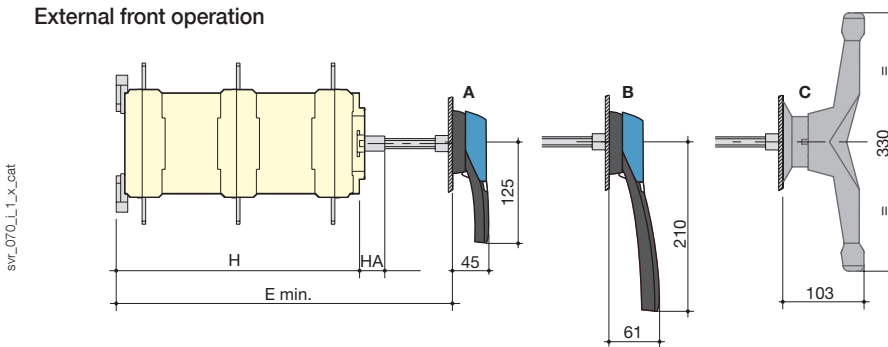
Rating (A) / Frame size	Overall dimensions		Switch mounting	
	A 3p.	A 4p.	M 3p.	M 4p.
2000 ... 3200 / B8	478	598	347	467

SIRCOVER Bypass 125 to 1600 A / B3 to B7

Direct front operation



External front operation



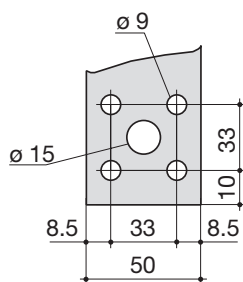
A. S2 type handle for external operation: 125 to 200 A
B. S3 type handle for external operation: 250 to 630 A
C. External double lever handle: 800 to 1600 A

1. Terminal shrouds
2. Direct operation handle:
 - 125 to 200 A: L1 = 140 mm,
 - 250 to 630 A: L1 = 210 mm,
 - 800 to 1600 A: L1 = diameter 330 mm.

Rating (A) / Frame size	Overall dimensions				Terminal shrouds	Switch body				Switch mounting				Connection											
	A 3+6p.	A 4+8p.	C	E min		AC	H	HA	J 3+6p.	J 4+8p.	M 3+6p.	M 4+8p.	N	T	U	V	W	X 3+6p.	X 4+8p.	Y	Z	Z1	Z2	AA	BA
125 / B3	221	251	313	320	235	243	25	182	212	156	186	101	36	20	25	8.5	56	50	3.5	28	124	219	135	115	10
160 / B3	221	251	313	320	235	243	25	182	212	156	186	101	36	20	25	8.5	56	50	3.5	28	124	219	135	115	10
200 / B3	221	251	313	320	235	243	25	182	212	156	186	101	36	20	25	8.5	56	50	3.5	28	124	219	135	115	10
250 / B4	262	312	313	298	280	243	25	223	273	196	246	116	50	25	30	11	61	61	3.5	30	124	219	160	130	10
400 / B4	262	312	313	298	280	243	25	223	273	196	246	116	50	35	35	11	61	61	3.5	30	124	219	170	140	15
630 / B5	319	379	432	417	400	362	25	272	332	246	306	176	65	45	50	13	70.5	65.5	5	43	180	317	260	220	20
800 / B6	386	466	560	550	459	479	29	306.5	386.5	255	335	250	80	50	60.5	15	48	48	7	66.5	253.5	439.5	321		26.5
1250 / B6	386	466	560	550	459	479	29	306.5	386.5	255	335	250	80	60	65	16x11	48	48	7	66.5	253.5	439.5	320		29.25
1600/B7	478	598	560	550	461	479	29	388.5	518.5	347	467	250	120	90	43.5	12.5x5	54	54	8	66.5	253.5	439.5	288		15

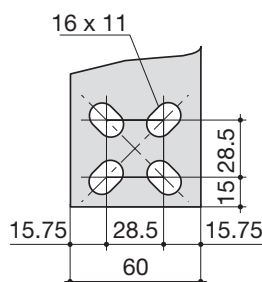
Connection terminals

SIRCOVER and SIRCOVER Bypass 800 A / B6



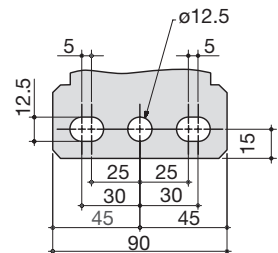
svr_077_a_1_x_cat

SIRCOVER and SIRCOVER Bypass 1250 A / B6



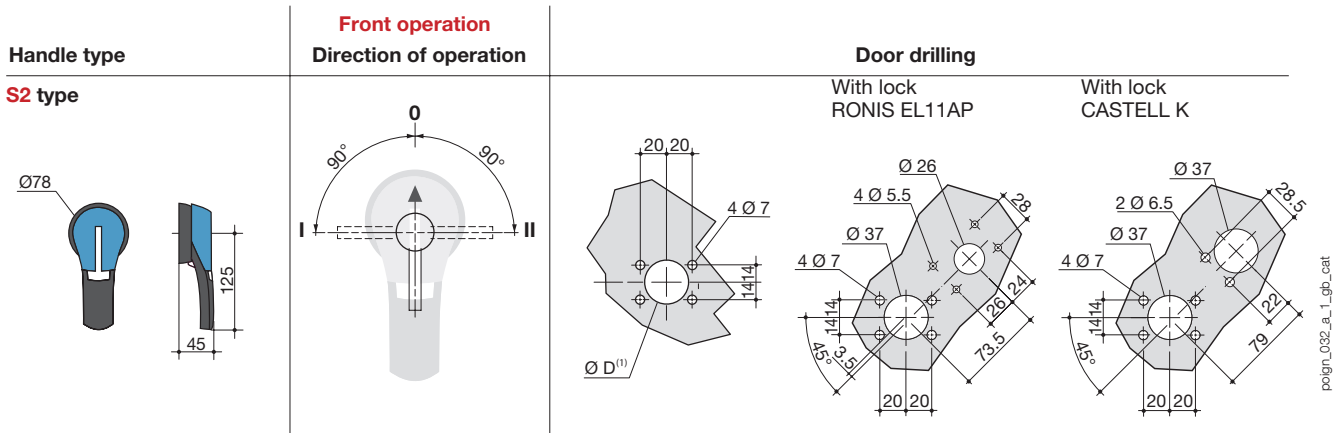
svr_078_b_1_x_cat

SIRCOVER 1600 to 3200 A / B7 to B8
SIRCOVER Bypass 1600 A / B7



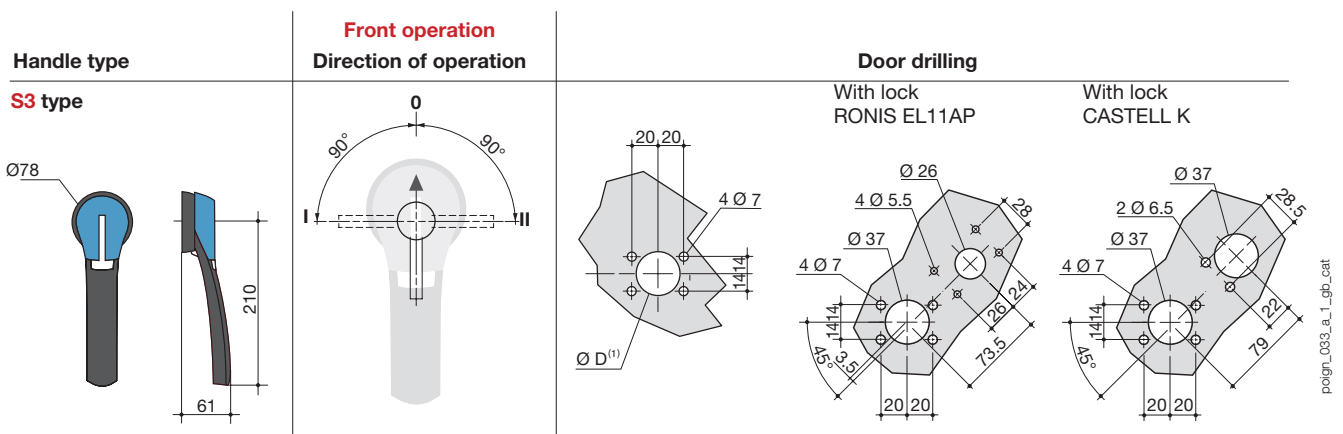
svr_088_a_1_x_cat

SIRCOVER Bypass 125 to 200 A / B3



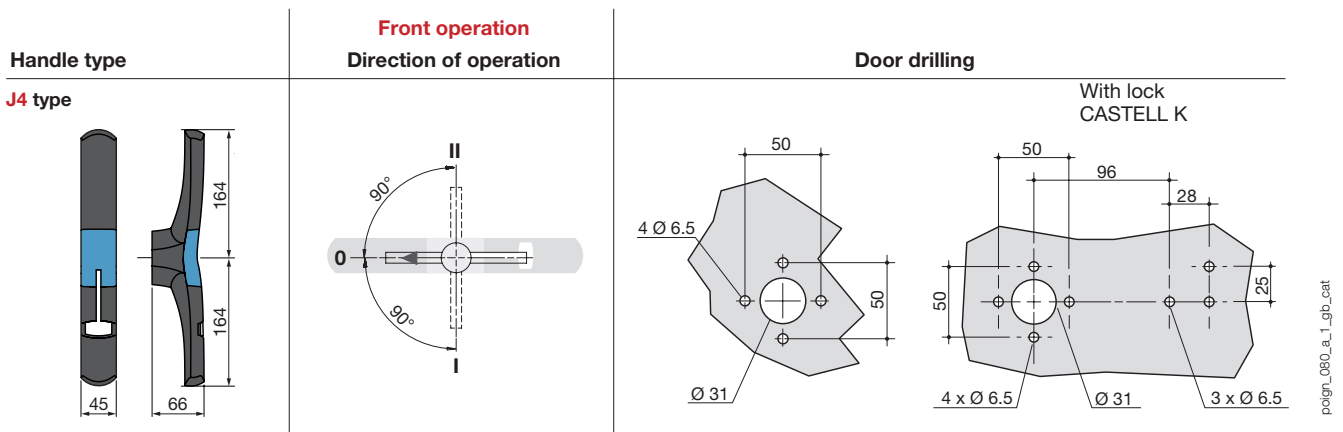
(1) Ø31 to Ø37: rear screw mounting,
Ø37: front clip mounting.

SIRCOVER Bypass 250 to 630 A / B4 to B5



(1) Ø31 to Ø37: rear screw mounting,
Ø37: front clip mounting.

SIRCOVER Bypass 800 to 1600 A / B6 to B7



Selection guide

Remotely operated and Automatic Transfer Switching Equipment

ATyS

Which type of power supply?



Which application?

RTSE (Remotely operated)				
40 to 125 A	40 to 160 A	125 to 3200 A	4000 to 6300 A	
<i>ATyS S</i> p. 256	<i>ATyS d S</i> p. 256	<i>ATyS d M</i> p. 242	<i>ATyS r</i> p. 264	<i>ATyS d H</i> p. 286

Type of power supply

Power supply 12, 24 or 48 VDC	•				
Single power supply 230 VAC	•			•	
Dual power supply 230 VAC		•	•		•

Connection of remote control interface

D10					
D20					

Application

Mains/Mains	• ⁽¹⁾	• ⁽¹⁾	• ⁽¹⁾	• ⁽¹⁾	• ⁽¹⁾
Mains/Genset	• ⁽¹⁾	• ⁽¹⁾	• ⁽¹⁾	• ⁽¹⁾	• ⁽¹⁾
Genset/Genset	• ⁽¹⁾	• ⁽¹⁾	• ⁽¹⁾	• ⁽¹⁾	• ⁽¹⁾

Configuration

Configuration using potentiometers and dip switches					
Configuration using display and keyboard					
Voltage and frequency auto-configuration					

Functions

Contact for product availability				•	
Fixed function inputs/outputs (defined by the factory)	•	•	•	•	•
Configurable inputs/outputs					
Voltage and frequency checks					
Phase rotation check					
Unbalanced phase check					
LED indication of source availability					
LED position indication					
Programming of genset startup					
Genset connected on switch II	•	•	•	•	•
Genset connected on switch I	•	•	•	•	•
Test On Load					
Test Off Load					
Load shedding					
Display and measurement of powers and energy (when utilising CTs)					

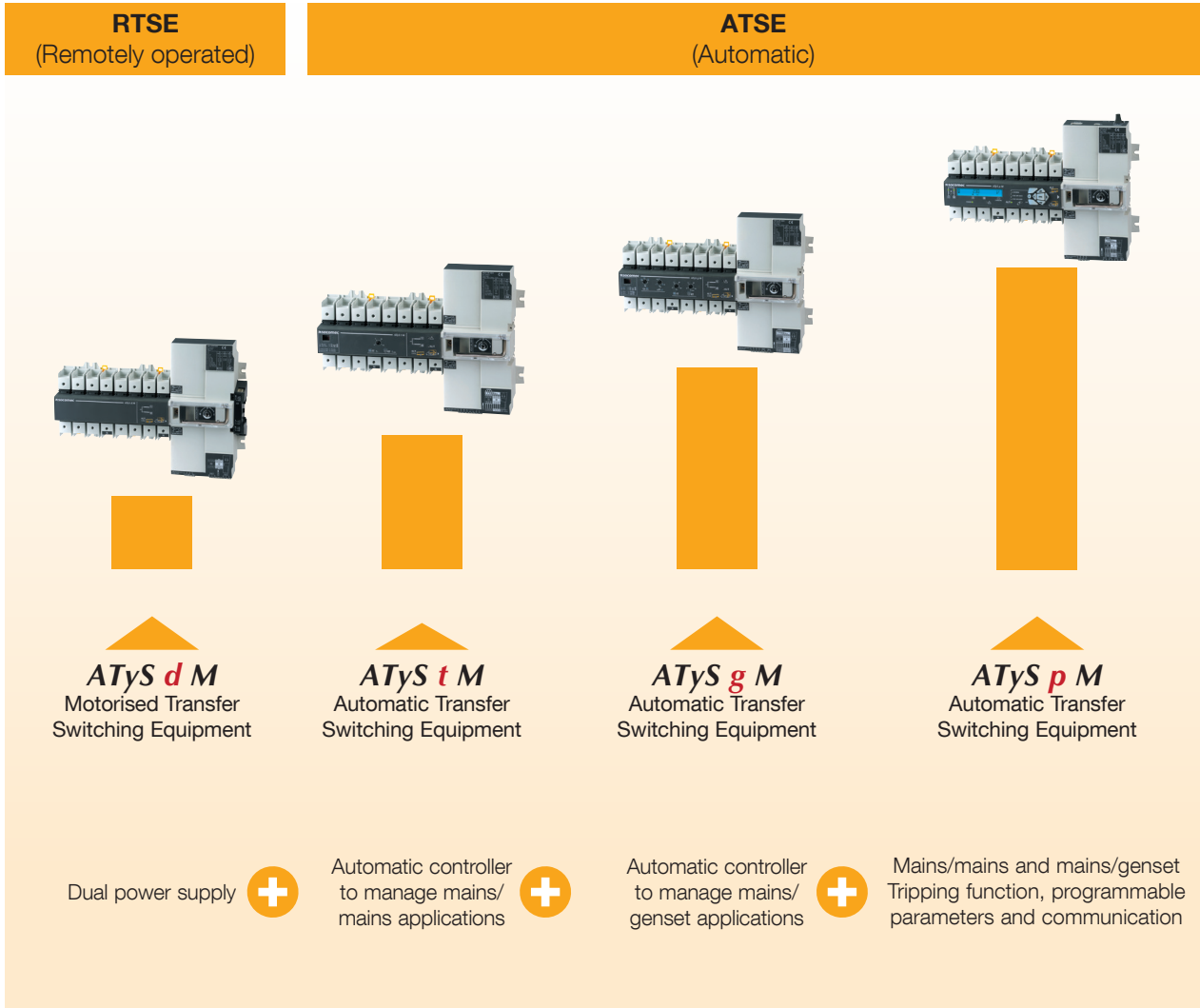
Supervision

Programming of genset startup					
RS485 communication					
Ethernet communication					
Websvrer via Ethernet module					
Data logging					

(1) With an external controller.
 (2) Only on two pole versions.
 (3) Only available on the version with COM.
 (4) Configurable output.

The *ATyS M* range: safe and reliable solutions

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



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
Class PC switch technology

IEC 60947-3

- > AC 23B - up to 160 A

Enclosed ATyS M



See "Enclosed transfer switches" pages.

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



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/T 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.

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).

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.

Immune to voltage fluctuations

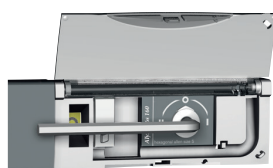
The power supply of the ATyS d M is only active during transfer. As the product is based on stable positions, it is not affected by network voltage fluctuations.

Operating modes



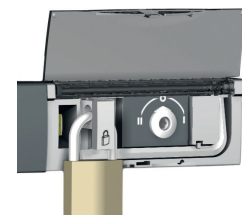
ATySm_014_c

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

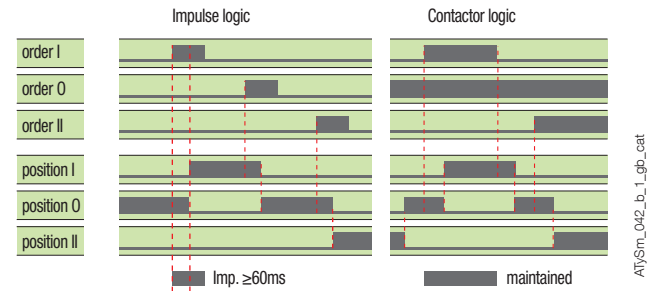
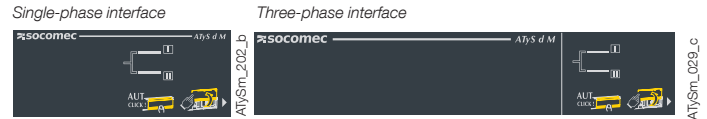
Electrical control

The positions are controlled by dry contacts on any external automated system (e.g. ATyS C25). 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.



Power supply

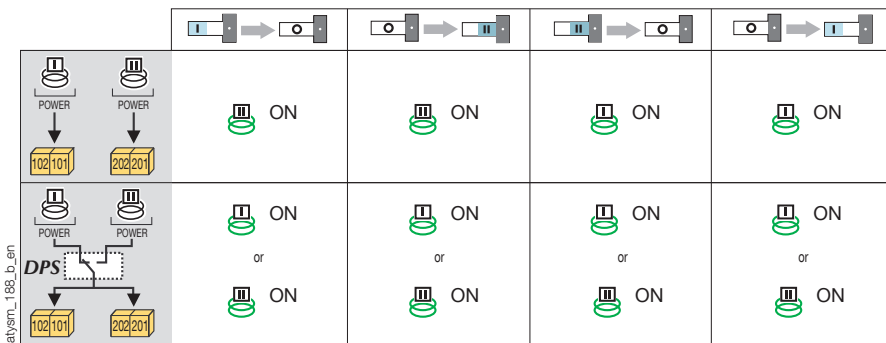
The ATyS d M is equipped with two independent 230 VAC power inputs (176-288 VAC), 50/60 Hz (45/65 Hz).

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			
	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				1309 2016	1309 4016	2 pieces 2294 4016 ⁽¹⁾	2 nd unit Separate common points 1309 1001 ⁽²⁾
	4 P	9323 4010							
125 A	2 P	9323 2012				1309 2016	1309 4016	2 pieces 2294 4016 ⁽¹⁾	Linked common points 1309 1011 ⁽²⁾
	4 P	9323 4012							
160 A	2 P	9323 2016	1309 2016	1309 4016	2 pieces 2294 4016 ⁽¹⁾	Linked common points 1309 1011 ⁽²⁾			
	4 P	9323 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



ATyS t M
1-0-II 4P

atys-tm_001_b_1_cat



ATyS g M
1-0-II 2P

atys-gm_001_eps

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/T 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 1001⁽²⁾ Linked common points 1309 1011⁽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 1001⁽²⁾ Linked common points 1309 1011⁽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



ATyS p M
I-O-II 4P

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).

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/T 14048.11

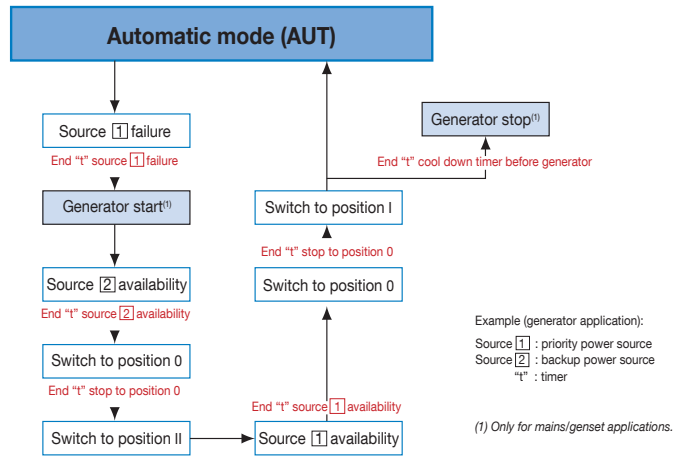


Approvals and certifications



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.



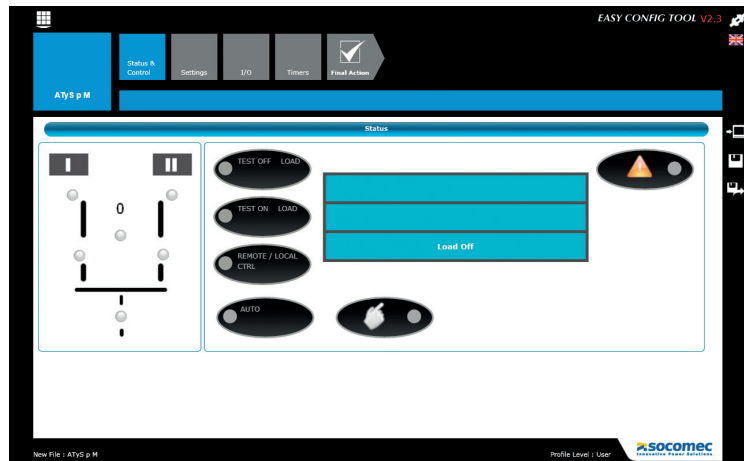
atys_028_h_1_glb_cat

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_b49_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 1001 ⁽²⁾	
80 A	4 P	230/400	9364 4008	9384 4008				Linked common points 1309 1011 ⁽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

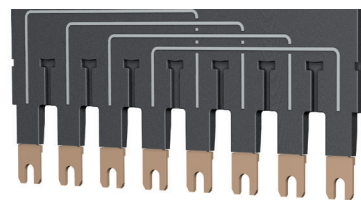
Accessories

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.eps

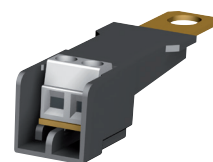
Voltage sensing and power supply tap

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.

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



atysm_026_a.eps

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.

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

(1) Reference composed of 2 pieces.



atysm_027_a.eps

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.

Rating (A)	Type	Reference
40 ... 160	Separate common points	1309 1001
40 ... 160	Linked common points	1309 1011



access_353.eps



access_398.eps

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.eps

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



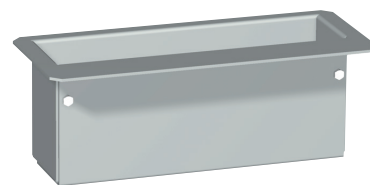
atysm_036.eps

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.eps

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.psd

Double power supply - DPS

Use

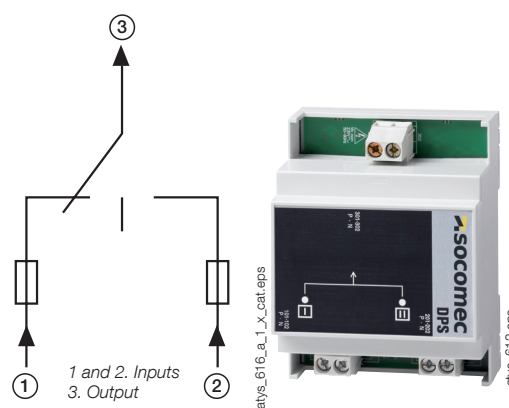
Allows an ATyS *d* M to be supplied by two 230 VAC 50/60 Hz networks.

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_612.eps

ATyS M range

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

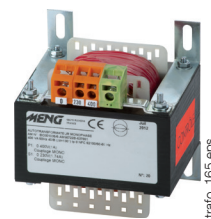
from 40 to 160 A

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.



trafo_165.eps

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

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.



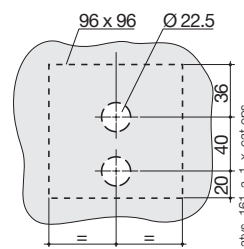
atyS_564.eps



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atyS_597.eps



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RJ45 to connect to ATyS p M

Drillings

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.



access_209.eps

Type	Length	Reference
RJ45 cable	3 m	1599 2009

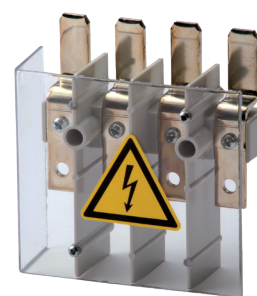
Cage-terminal interface

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.

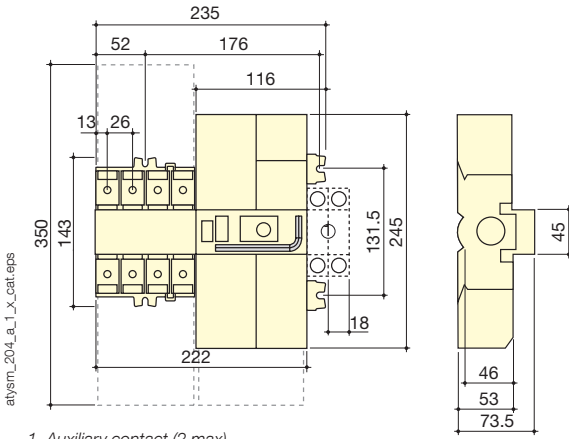


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Dimensions

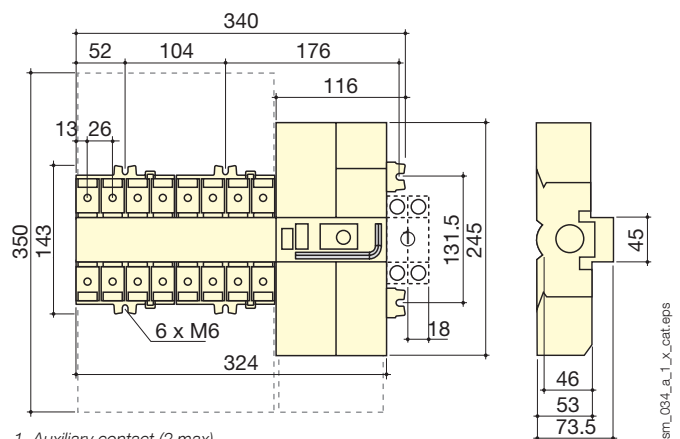
ATyS M 40 to 160 A

Single-phase ATyS M



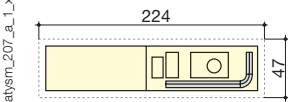
1. Auxiliary contact (2 max).

Three-phase ATyS M

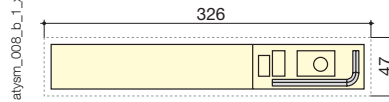


1. Auxiliary contact (2 max).

Single-phase ATyS M - door cut-out

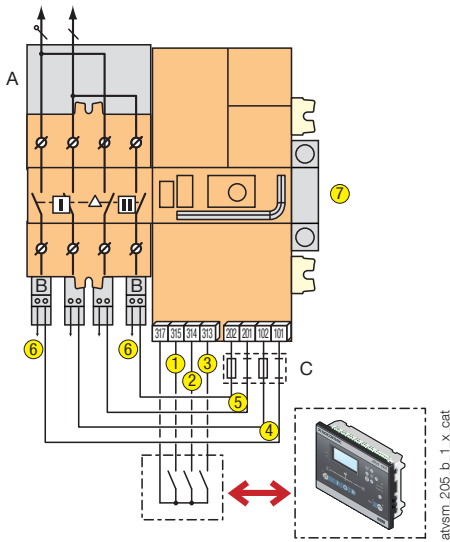


Three-phase ATyS M - door cut-out

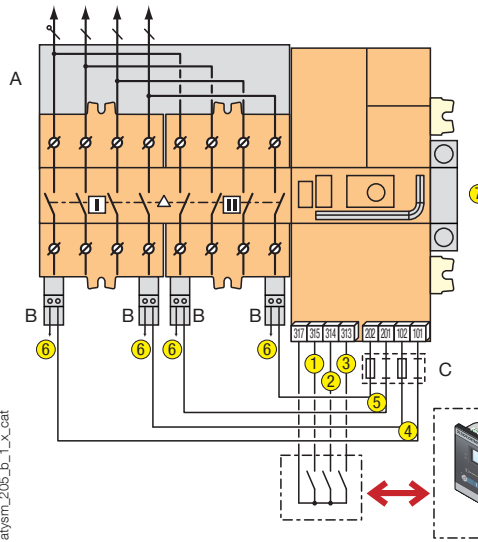


Terminals and connections

Single-phase ATyS d M



Three-phase ATyS d M



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

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

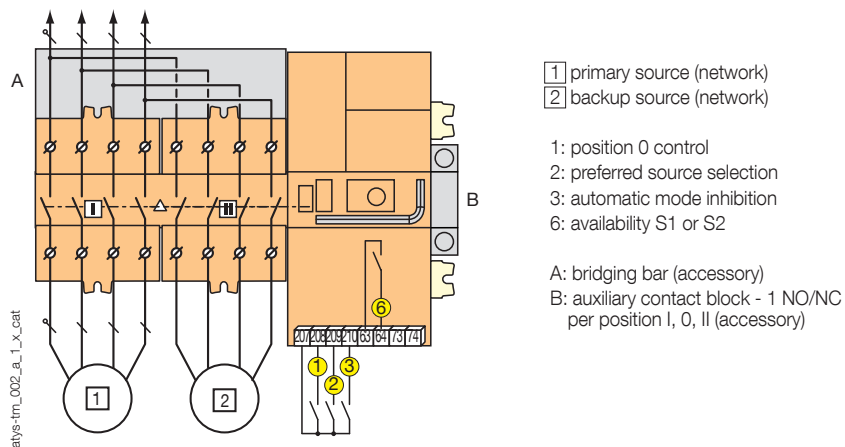
ATyS M range

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

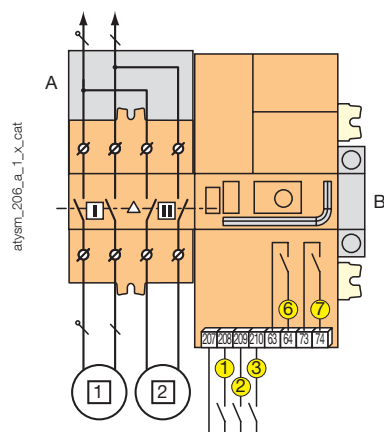
from 40 to 160 A

Terminals and connections (continued)

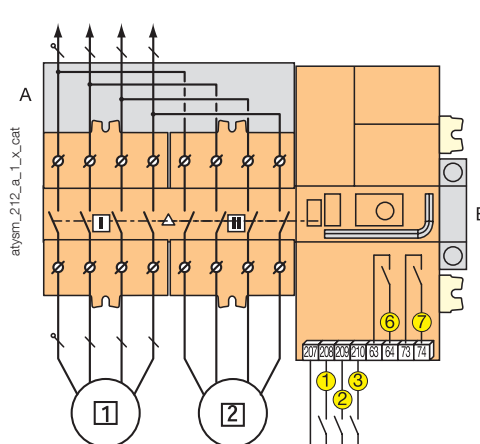
Three-phase ATyS t M



Single-phase ATyS g M



Three-phase ATyS g M

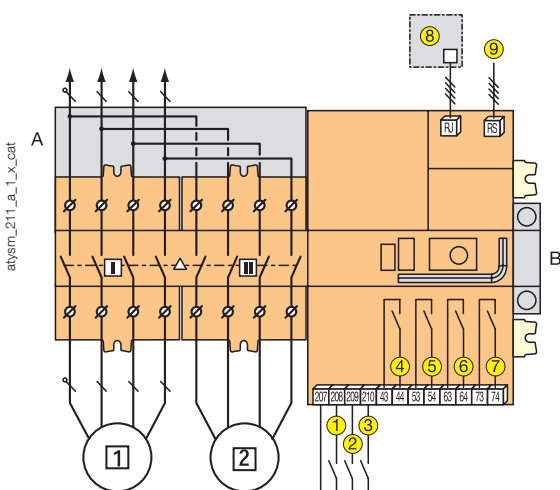


- 1 primary source
- 2 backup source

- 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 low 0.3s (kA rms)	7	7	7	7	7	7
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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

Minimum connection cross-section (mm ²)	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⁽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. auxiliary power supply (VAC) (ATyS d M, t M and g M)	176/288	176/288	176/288	176/288	176/288	176/288
Min./max. auxiliary power 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.

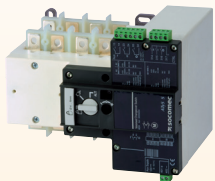
For coordination with specific circuit-breaker references, higher short-circuit current values are available. Please contact us.

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

The **ATyS S** range: a robust solution

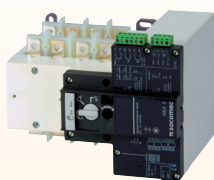
A range of transfer switches from 40 to 125 A

RTSE
(Remotely operated)



ATyS S

Motorised Transfer Switching Equipment

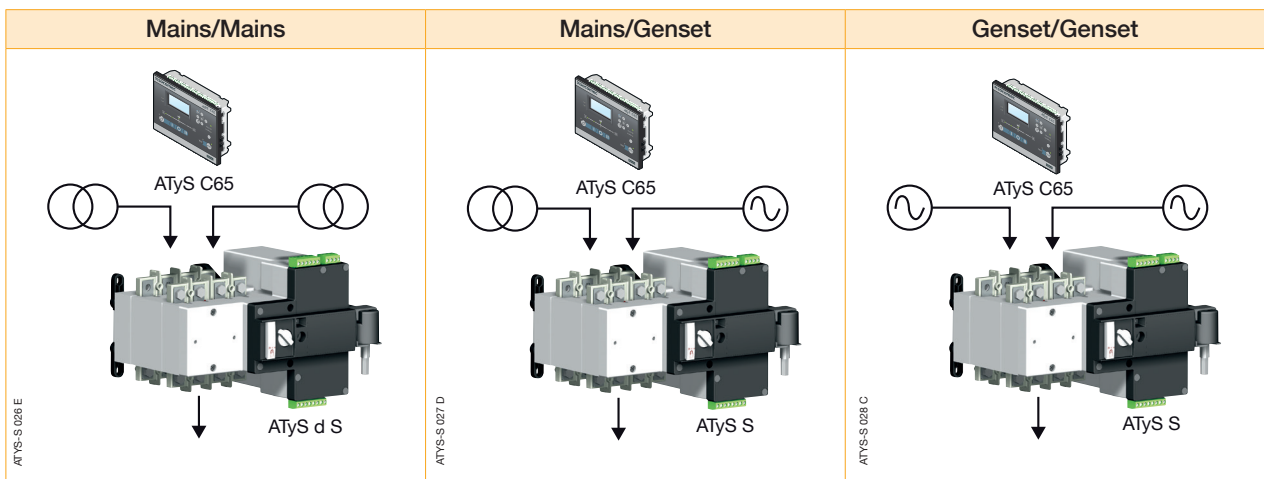


ATyS d S
Motorised Transfer Switching Equipment

Dual power supply

+ Dual power supply

Three application types



The advantages



Safe and reliable

- An extended lifetime thanks to a switching principle based on stable positions.
- Positive break indication.
- Mechanical position interlocking.
- Stable power supply to the loads because the ATyS S does not require power supply for the position to be maintained.
- Various power supply voltages are available: 12 or 24/48 VDC and 230 VAC or 2 x 230 VAC.



Easy to use

- Manual emergency control:
The product can be controlled **quickly and safely** using an emergency handle (motor installed or removed).
- Simple selection of the operating mode (Auto/Manual/Padlocked) using an integrated selector.



Total integration

- Integrated and tested solution: components factory assembled and wired.
- Reliable product: compliance with IEC 60947-6-1, the standard governing transfer switches.



Easy maintenance

- Self-cleaning sliding contacts.
- Easy replacement of the motor unit, even during on load operation.



Cost-saving

- Low power consumption thanks to a switching principle based on stable positions: power is only required during transfer.
- Easy and fast installation: only four fixing points, three connectors and the power cables to connect.
- Shorter bridging bars that are consequently more economical than any other solution on the market.

Compact design

- > Combining two switches mounted back-to-back and being only 197 mm wide, the ATyS S offers significant space saving when compared with a side-by-side solution.

Enclosed ATyS S



See "Enclosed transfer switches" pages.

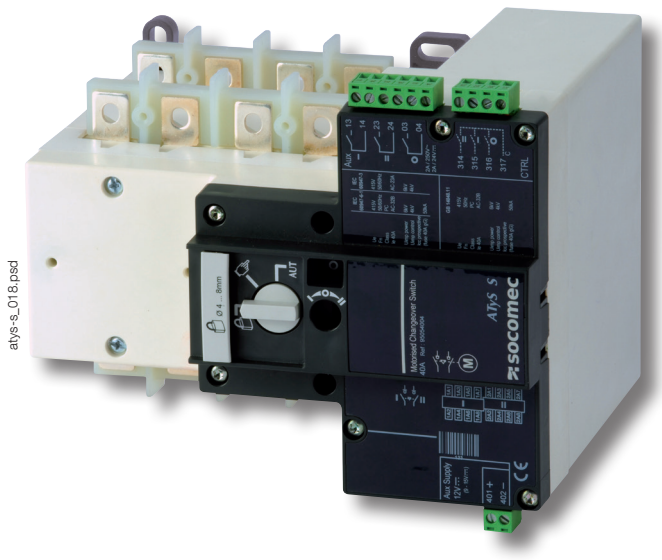
Expert Services

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



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 faults. 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

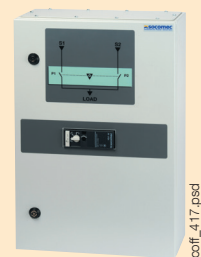
- IEC 60947-6-1
- IEC 60947-3
- GB/T 14048-11



Approvals and certifications



Enclosed ATyS S



See "Enclosed transfer switches".

References

ATyS S

Rating (A)	No. of poles	Power supply	ATyS S	Bridging bars	Terminal shrouds	Voltage tap	Terminal retainer	DIN rail
40 A	4 P	24/48 VDC	9506 4004	4 P 9509 4013	Source side 2 pieces 9594 4012 Load side 2 pieces 9594 9012		2 pieces 9599 4003	4 modules 9599 4002
	4 P	12 VDC	9505 4004					
	4 P	230 VAC	9503 4004					
63 A	4 P	24/48 VDC	9506 4006					
	4 P	12 VDC	9505 4006			9599 4001		
	4 P	230 VAC	9503 4006			9599 4001		
80 A	4 P	24/48 VDC	9506 4008					
	4 P	12 VDC	9505 4008			9599 4001		
	4 P	230 VAC	9503 4008			9599 4001		
100 A	4 P	24/48 VDC	9506 4010					
	4 P	12 VDC	9505 4010			9599 4001		
	4 P	230 VAC	9503 4010			9599 4001		
125 A	4 P	24/48 VDC	9506 4012					
	4 P	12 VDC	9505 4012	9599 4001				
	4 P	230 VAC	9503 4012	9599 4001				

ATyS d S

Rating (A)	No. of poles	Power supply	ATyS d S	Bridging bars	Terminal shrouds	Voltage tap	Terminal retainer	DIN rail
40 A	4 P	2 x 230 VAC	9513 4004	4 P 9509 4013	Source side 2 pieces 9594 4012 Load side 2 pieces 9594 9012	9599 4001	2 pieces 9599 4003	4 modules 9599 4002
63 A	4 P	2 x 230 VAC	9513 4006					
80 A	4 P	2 x 230 VAC	9513 4008					
100 A	4 P	2 x 230 VAC	9513 4010					
125 A	4 P	2 x 230 VAC	9513 4012					

Accessories

Bridging bars

Use

For bridging power terminals on the top or bottom side of the switch.

Rating (A)	No. of poles	Reference
40 ... 125	4 P	9509 4013



access_395.pptd

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 4001



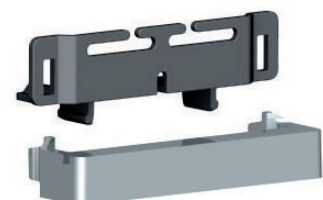
atys-s_022.eps

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 4003



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ATyS S - ATyS d S

Remotely operated Transfer Switching Equipment
from 40 to 125 A

Accessories (continued)

Terminal shrouds

Use

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 4012

Terminal shrouds for the load side

Rating (A)	Pack	Reference
40 ... 125	2 pieces	9594 9012



Autotransformer 400/230 VAC

Use

For applications without neutral, this autotransformer provides the 230 VAC required to power these ATyS products.

Dimensions

75 x 80 x 72 mm

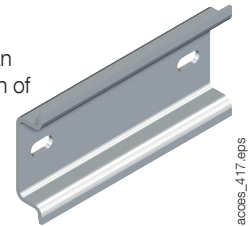
Rating (A)	Reference
40 ... 125	9599 4004

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 4002



Spares

Manual emergency operation handle

Use

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

Rating (A)	Reference
40 ... 125	9599 5012

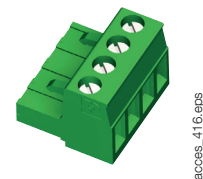


Connector kit

Use

This kit, including all the connector types for the different products, can be ordered in case of loss or breaking of one connector.

Rating (A)	Reference
40 ... 125	9509 0002



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 U_{imp} (kV) (power circuit)		6	6	6	6	6
Rated insulation voltage U_i (V) (control circuit)		300	300	300	300	300
Rated impulse withstand voltage U_{imp} (kV) (control circuit)		4	4	4	4	4

Rated operational currents I_e (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) 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 withstand (kA rms prospective)						
Prospective short-circuit current (kA rms)		50	50	50	25	15
Associated fuse rating (A)		40	63	80	100	125

Circuit breaker protected short-circuit withstand with any circuit breaker that ensures tripping in less than 0.3s⁽¹⁾						
Rated short-time withstand current 0.3s I_{cw} (kA rms)		3.5	3.5	3.5	3.5	3.5

Short-circuit capacity as per IEC 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 IEC 60947-3 (without protection)						
Rated short-time withstand current 1 s. I_{cw} (kA rms)		2.5	2.5	2.5	2.5	2.5
Rated peak withstand current (kA peak)		12	12	12	12	12

Connection						
Maximum Cu cable cross-section (mm ²)		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)						
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 24/48 VDC min / max (VDC)		17/62	17/62	17/62	17/62	17/62
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 24/48 VDC inrush / nominal (VA)		200/40	200/40	200/40	200/40	200/40
Supply 230 VAC inrush / nominal (VA)		200/40	200/40	200/40	200/40	200/40

Mechanical characteristics						
Durability (number of operating cycles)		25 000	25 000	25 000	25 000	25 000
Weight ATyS S and ATyS d S 4 P (kg)		3	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.

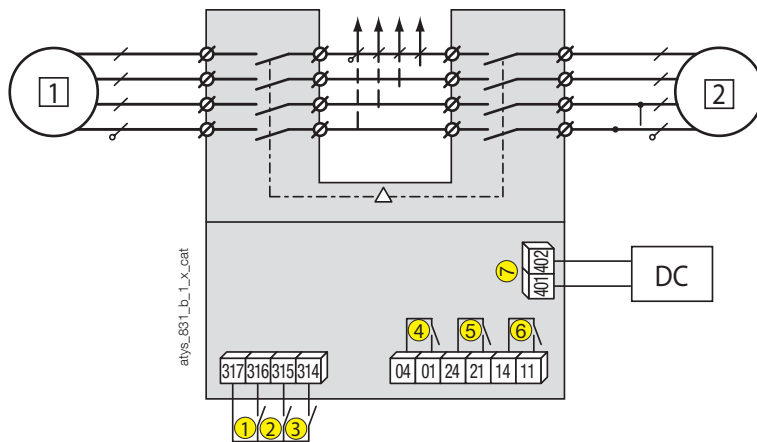
ATyS S - ATyS d S

Remotely operated Transfer Switching Equipment

from 40 to 125 A

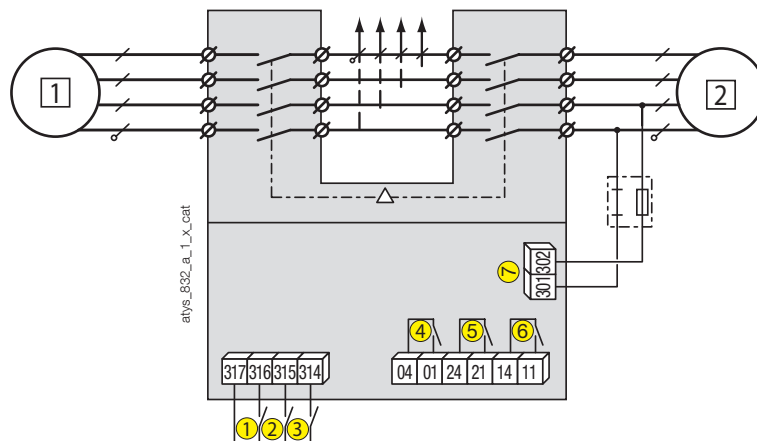
Terminals and connections

ATyS S DC version



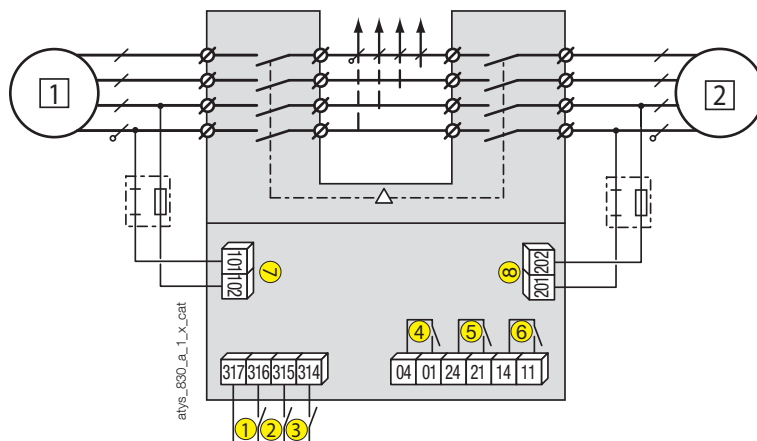
- 1 preferred source
- 2 alternate source
- 1: position 0 control
- 2: position I control
- 3: position II control
- 4: auxiliary contact, closed when the switch is in position 0
- 5: auxiliary contact, closed when the switch is in position II
- 6: auxiliary contact, closed when the switch is in position I
- 7: power supply 12 VDC (9-15 VDC) or 24 VDC / 48 VDC (17-62 VDC) depending on the version.

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 kit: 230 VAC (160-310 VAC)

ATyS d S: 2 x 230 VAC

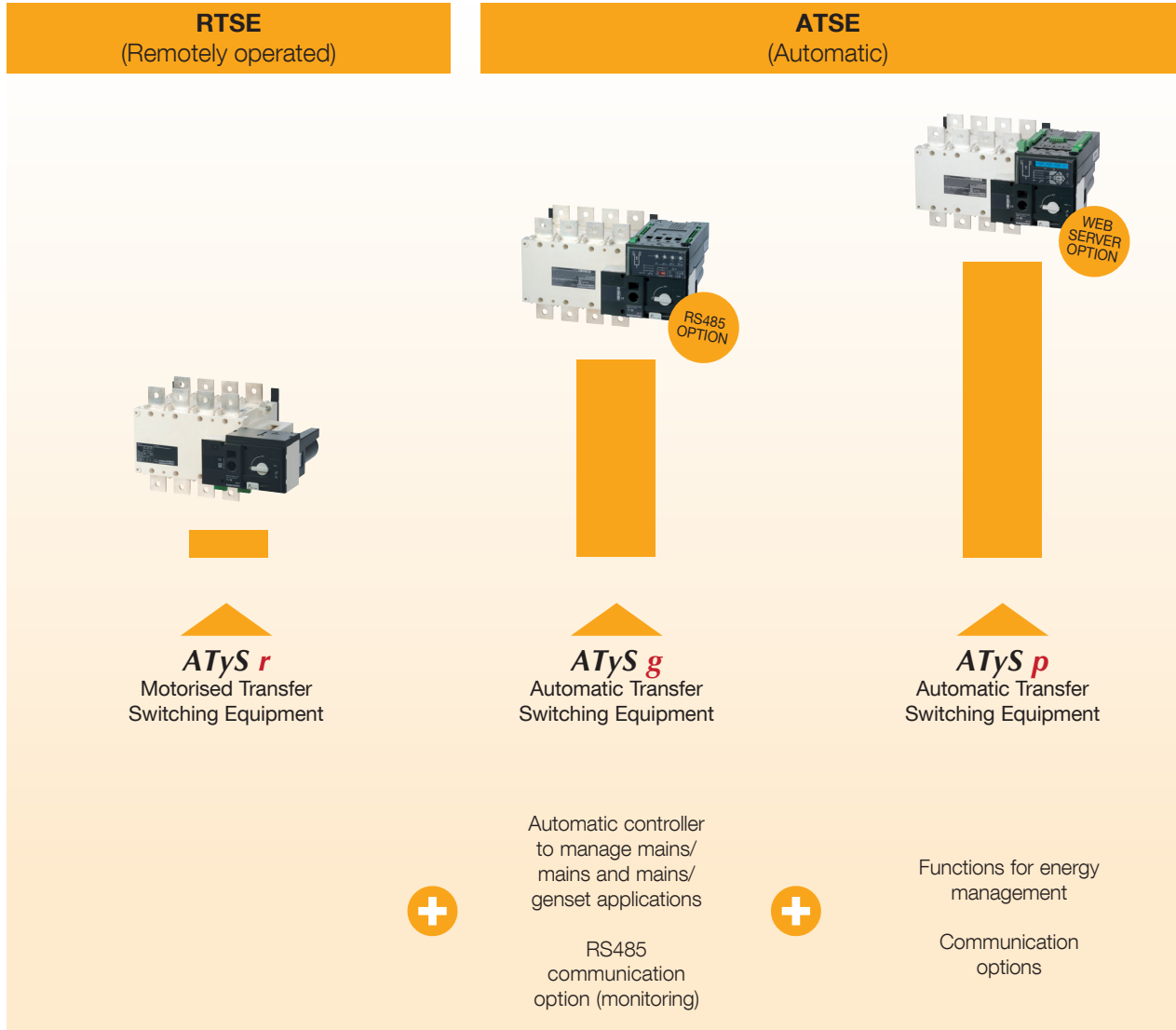


- 1 preferred source
- 2 alternate source
- 1: position 0 control
- 2: position I control
- 3: position II control
- 4: auxiliary contact, closed when the switch is in position 0
- 5: auxiliary contact, closed when the switch is in position II
- 6: auxiliary contact, closed when the switch is in position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

The *ATyS* range: intuitive, reliable and robust solutions

A complete range of automatic and remotely operated transfer switches from 125 to 3200 A

To meet the increasing demands of its users, the ATyS range is constantly evolving to offer new functions. Three product versions are available to find the right solution perfectly adapted to your application.



The ATyS range: intuitive, reliable and robust solutions

The advantages



Safe operation

- Permanent indication of product availability (Watchdog relay).
- Positive break indication.
- Mechanical position interlocking.
- Padlocked mode to secure maintenance operations (lockout).
- Secure access to the product configuration.



Robust integrated solution

A single product with all the functions:

- Integrated and tested solution: components factory assembled and wired.
- Greater reliability: compliance with IEC 60947-6-1, the standard governing transfer switches.

Proven SOCOMEC technology:

- Combination of two "back-to-back" (load break switch) PC class switches.
- Switching based on stable positions guaranteeing constant pressure on the contacts at all times.
- SIRCO contact technology used in numerous products for over 40 years.



Intuitive use

- Manual emergency control: The product can be controlled **quickly and safely** using an emergency handle (motor installed or removed).
- User friendly selection of the operating mode (Auto/Manual) using an integrated selector.



Rapid commissioning

- **ATyS**: no configuration required.
- **ATyS g**: configuration in just a few minutes using a screwdriver.
- **ATyS p**: simplified configuration (EASY CONFIG software and LCD display on the device).
- **ATyS g, p**: auto-configuration of the network parameters.



Easy maintenance

- Self-cleaning sliding contacts.
- Easy replacement of the motor and the electronic unit, even on-load.

Improved on load characteristics

IEC 60947-6-1/GB 14048-11

- AC 31B - up to 3200 A
- AC 32B - up to 2000 A
- AC 33B - up to 1250 A

IEC 60947-3

- AC 23B - up to 1250 A

Enclosed ATSE



See "Enclosed transfer switches".

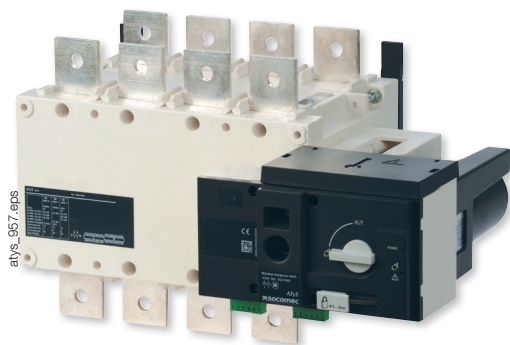
Expert Services

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ATyS r

Remotely operated Transfer Switching Equipment from 125 to 3200 A



Function

ATyS r are 3 or 4 pole remotely operated motorised transfer switches with positive break indication.

They enable the on-load transfer of two three-phase power 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 systems where interruption of the load supply is acceptable during transfer.

Advantages

Watchdog relay to check product availability

ATyS r products are equipped with a Watchdog relay which constantly monitors your product, thereby securing the installation.

This relay informs in real time the user of the product's availability, i.e. whether it is operational and ready for source switching.

Integrated auxiliary contacts

As part of the product monitoring function, the ATyS r enable the transmission of information relating to their position. This is possible thanks to the standard integration of an auxiliary contact for each position.

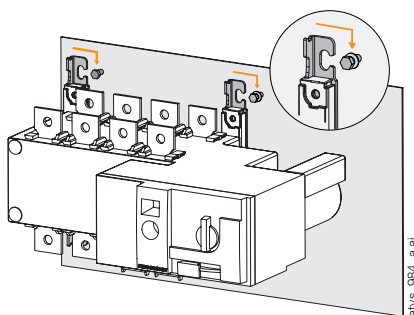
Extended power supply range

ATyS r products offer greater availability thanks to their extensive power supply range of 208 to 277 VAC \pm 20%.

More robust

The updated design includes metal mounting legs across the entire ATyS range, improving the overall robustness of the switches.

It also allows an easier and trouble-free mounting of the switches on a back plate with preassembled screws.



The solution for

- > Applications with an external ATS/AMF controller
- > Building Management Systems (BMS)



Strong points

- > Watchdog relay to check product availability
- > Integrated auxiliary contacts
- > Extended power supply range
- > Robust design

Conformity to standards

- > IEC 60947-6-1
- > IEC 60947-3
- > GB/T 14048.11



Approvals and certifications⁽¹⁾



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VERITAS



(1) Product references on request.

Compatible with



ATyS C25, ATyS C35, ATyS C55, ATyS C65
ATS Controller

Enclosed RTSE



See "Enclosed transfer switches".

References

ATyS r

Rating (A) / Frame size	No. of poles	ATyS r	Bridging bars ⁽⁴⁾	Terminal shrouds	Terminal screens	Auxiliary contact	3 position padlocking	Auto transformer										
125 A / B3	3 P	9523 3012	4109 0019	3 P 2694 3014 ⁽²⁾ 4 P 2694 4014 ⁽²⁾	3 P 1509 3012 4 P 1509 4012													
	4 P	9523 4012																
160 A / B3	3 P	9523 3016																
	4 P	9523 4016																
200 A / B3	3 P	9523 3020																
	4 P	9523 4020																
250 A / B4	3 P	9523 3025							4109 0025	3 P 2694 3021 ⁽²⁾ 4 P 2694 4021 ⁽²⁾	3 P 1509 3025 4 P 1509 4025	1599 0502	9599 0003 ⁽³⁾					
	4 P	9523 4025																
315 A / B4	3 P	9523 3031							4109 0039									
	4 P	9523 4031																
400 A / B4	3 P	9523 3040																
	4 P	9523 4040																
500 A / B5	3 P	9523 3050	4109 0050	3 P 2694 3051 ⁽²⁾ 4 P 2694 4051 ⁽²⁾	3 P 1509 3063 4 P 1509 4063			400/230 VAC 1599 4064 ⁽⁵⁾										
	4 P	9523 4050																
630 A / B5	3 P	9523 3063	4109 0063															
	4 P	9523 4063																
800 A / B6	3 P	9523 3080	4109 0080							3 P 1509 3080 4 P 1509 4080	1599 0532							
	4 P	9523 4080																
1000 A / B6	3 P	9523 3100																
	4 P	9523 4100																
1250 A / B6	3 P	9523 3120	4109 0120															
	4 P	9523 4120																
1600 A / B7	3 P	9523 3160	4109 0160		3 P 1509 3160 4 P 1509 4160		9599 0004 ⁽³⁾											
	4 P	9523 4160																
2000 A / B8	3 P	9523 3200	(1)												3 P 1509 3200 4 P 1509 4200	included		
	4 P	9523 4200																
2500 A / B8	3 P	9523 3250																
	4 P	9523 4250																
3200 A / B8	3 P	9523 3320																
	4 P	9523 4320																

(1) See "Copper bar connection pieces".

(2) For complete shrouding at front, rear, top and bottom, order quantity 4; if equipped with bridging bars order quantity 3.
For top and bottom shrouding for the front only, order quantity 2.

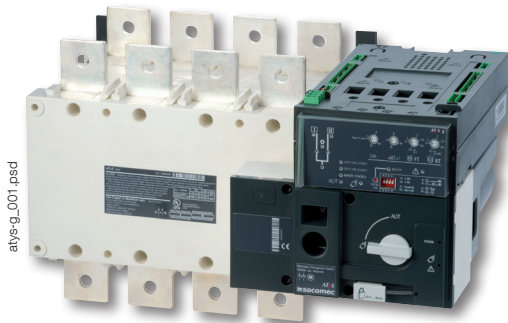
(3) Factory mounting only.

(4) For a 3 pole device order quantity 3 bridging bars, for a 4 pole device order quantity 4.

(5) Order 1 auto transformer per source without neutral line conductor.

ATyS g

Automatic Transfer Switching Equipment
from 125 to 3200 A



Function

ATyS g are 3 or 4 pole automatic transfer switches, with positive break indication. They incorporate all the functions offered by the ATyS r, as well as functions intended for **mains/mains** and **mains/genset** applications.

In automatic mode they enable the monitoring of, and the on-load changeover between, two power supply sources, in accordance with the parameters configured via potentiometers and DIP switches. Remote monitoring of the ATyS g is possible with the optional RS485 communication module.

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

Advantages

Rapid commissioning

ATyS g switches offer significant time saving during commissioning (process takes 2 to 3 minutes). Owing to the design that allows commissioning through just four potentiometers and four DIP switches, a screwdriver is all that is required to configure the parameters.

For added simplicity, they also offer an autoconfiguration function which enables automatic adjustment of the rated voltage and frequency.

Specifically designed for mains/mains and mains/genset applications

The ATyS g's integrated controller has been designed to provide specific functions for these applications (genset startup, on-load or off-load tests...) together with the monitoring of the voltage and frequency of both sources for three-phase and single-phase networks.

The generator supply must be connected to switch II, located at the rear.

RS485 communication

An optional RS485 communication module (p/n 4825 0092) can be fitted to the ATyS g controller.

It allows remote monitoring of available power sources and their parameters, timers, as well as displaying the product's status and configuration.

Communication speed is up to 38400 bauds.

The solution for

- Mains/mains and mains/genset applications



Strong points

- Rapid commissioning
- ATS with integrated DPS and controller for functions dedicated to mains/mains or mains/genset applications

Conformity to standards

- IEC 60947-6-1
- IEC 60947-3
- GB/T 14048.11



Approvals and certifications⁽¹⁾



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VERITAS



(1) Product references on request.

Enclosed RTSE



See "Enclosed transfer switches".

References

ATyS g

Rating (A) / Frame size	No. of poles	ATyS g	Bridging bars ⁽³⁾	Voltage sensing and power supply kit	Terminal shrouds	Terminal screens	Auxiliary contact					
125 A / B3	3 P	9553 3012	4109 0019	3 P 1559 3012 4 P 1559 4012	3 P 2694 3014 ⁽²⁾ 4 P 2694 4014 ⁽²⁾	3 P 1509 3012 4 P 1509 4012	1599 0502					
	4 P	9553 4012										
160 A / B3	3 P	9553 3016										
	4 P	9553 4016										
200 A / B3	3 P	9553 3020										
	4 P	9553 4020										
250 A / B4	3 P	9553 3025						4109 0025	1559 3025	3 P 2694 3021 ⁽²⁾ 4 P 2694 4021 ⁽²⁾	3 P 1509 3025 4 P 1509 4025	1599 0502
	4 P	9553 4025							1559 4025			
315 A / B4	3 P	9553 3031	4109 0039	3 P 1559 3040 4 P 1559 4040								
	4 P	9553 4031										
400 A / B4	3 P	9553 3040										
	4 P	9553 4040										
500 A / B5	3 P	9553 3050	4109 0050	3 P 1559 3063 4 P 1559 4063	3 P 2694 3051 ⁽²⁾ 4 P 2694 4051 ⁽²⁾	3 P 1509 3063 4 P 1509 4063	1599 0532					
	4 P	9553 4050										
630 A / B5	3 P	9553 3063	4109 0063									
	4 P	9553 4063										
800 A / B6	3 P	9553 3080	4109 0080	3 P 1559 3080 4 P 1559 4080								
	4 P	9553 4080										
1000 A / B6	3 P	9553 3100										
	4 P	9553 4100										
1250 A / B6	3 P	9553 3120	4109 0120	1559 3120								
	4 P	9553 4120		1559 4120								
1600 A / B7	3 P	9553 3160	4109 0160	1559 3160	1509 3160							
	4 P	9553 4160		1559 4160	1509 4160							
2000 A / B8	3 P	9553 3200	(1)	3 P 1559 3200 4 P 1559 4200	3 P 1509 3200 4 P 1509 4200	included						
	4 P	9553 4200										
2500 A / B8	3 P	9553 3250										
	4 P	9553 4250										
3200 A / B8	3 P	9553 3320										
	4 P	9553 4320										

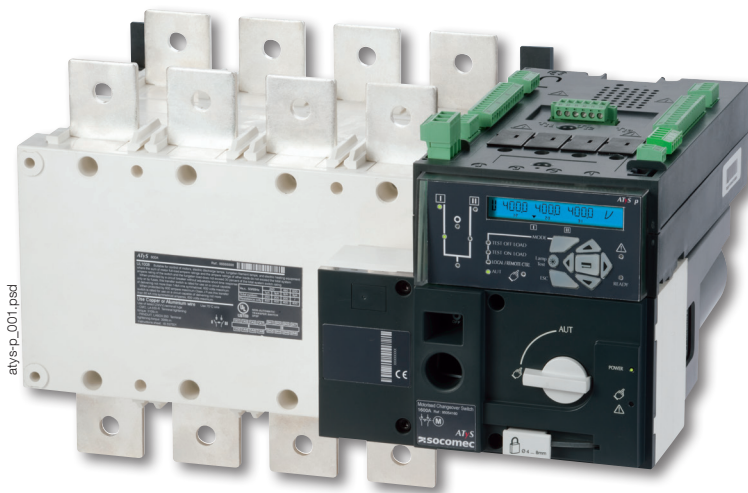
(1) See "Copper bar connection pieces".

(2) For complete shrouding at front, rear, top and bottom, order quantity 4; if equipped with bridging bars order quantity 3. For top and bottom shrouding for the front only, order quantity 2.

(3) For a 3 pole device order quantity 3 bridging bars, for a 4 pole device order quantity 4.

ATyS p

Automatic Transfer Switching Equipment
from 125 to 3200 A



The solution for

- Applications requiring power management and communication.



Strong points

- Optional communication modules
- Recording of events
- Configuration software
- Power measurements
- Possibility to set periodic genset startup

Conformity to standards

- IEC 60947-6-1
- IEC 60947-3
- GB/T 14048.11



Approvals and certifications⁽¹⁾



BUREAU
VERITAS



⁽¹⁾ Product references on request.

Webserver

The Webserver function comprises HTML pages embedded in the Ethernet communication module.

These pages can be accessed via an internet browser, simply by entering the IP address.

The webserver offers the following functionalities:

- Display of source status and switch position
- Display of the main measurements
- Extraction of the latest logged events
- Display of the product configuration

Function

ATyS p are 3 or 4 pole automatic transfer switches with positive break indication. They incorporate all the functions offered by the ATyS t and g, as well as functions designed for **power management and functions communication**.

In automatic mode they enable the monitoring of, and the on-load changeover between, two power supply sources, in accordance with the parameters configured through LCD display, or via communication.

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

Advantages

Recording of events

ATyS p switches enable effective monitoring of your installation thanks to timestamped event recording.

Events can be retrieved and read via communication.

Optional communication modules

The ATyS p offers communication functions through the addition of optional modules, such as RS485 Modbus or Ethernet with embedded Webserver.

Configuration software

Software (Easyconfig) is available enabling the ATyS p parameters to be easily configured and the existing configuration to be saved and sent to other units.

Power measurements

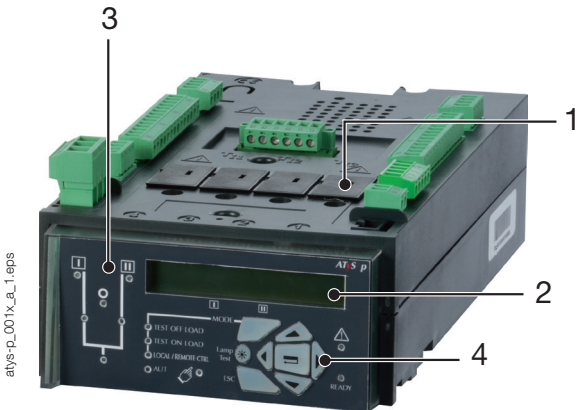
ATyS p products are particularly suited to energy management and monitoring.

In addition to their integrated power and energy measurement functions (with a 2% accuracy level), programmable inputs/outputs can be utilised to control load shedding based on a load level or tariff.

Possibility to set periodic genset startup

ATyS p switches offer additional functions for maintenance. They include a programmable genset starting function which allows the starting dates and operating times to be configured.

Front panel



1. Slots for optional plug-in modules.
2. Backlit LCD display.
3. Source availability and position indication LEDs.
4. Parameter programming keypad.

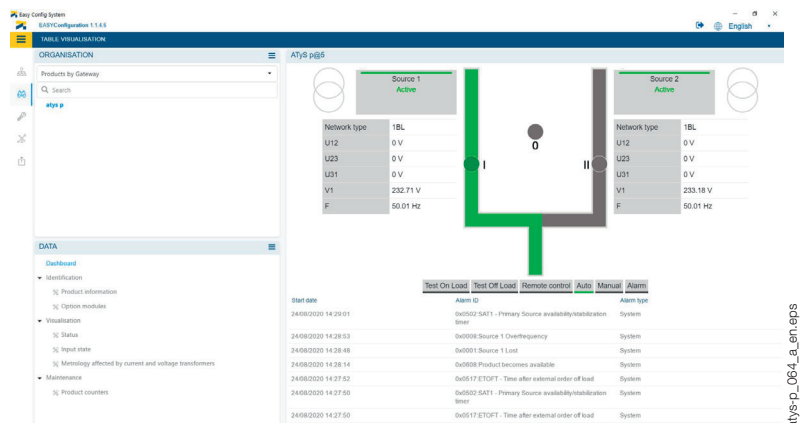
Communication and configuration

Easyconfig

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

Allows configuration of the following parameters:

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



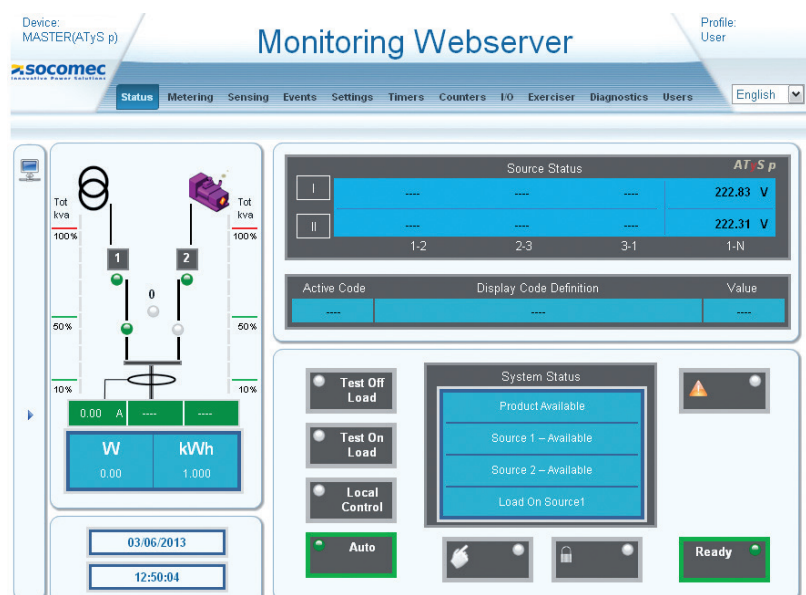
Webserver

Thanks to optional modules, ATyS p can communicate in **Modbus** and **Ethernet** protocols.

The Ethernet communication module includes the **Webserver** function for access to the ATyS p via an internet browser.

The Webserver function enables:

- display of source status and switch position,
- display of voltage measurements,
- display of parameters,
- access to the list of logged events.



References

ATyS p

Rating (A) / Frame size	No. of poles	ATyS p	Bridging bars ⁽³⁾	Voltage sensing and power supply kit	Terminal shrouds	Terminal screens	Optional modules	Auxiliary contact						
125 A / B3	3 P	9573 3012	4109 0019	3 P 1559 3012 4 P 1559 4012	3 P 2694 3014 ⁽²⁾ 4 P 2694 4014 ⁽²⁾	3 P 1509 3012 4 P 1509 4012								
	4 P	9573 4012												
160 A / B3	3 P	9573 3016												
	4 P	9573 4016												
200 A / B3	3 P	9573 3020												
	4 P	9573 4020												
250 A / B4	3 P	9573 3025							4109 0025	1559 3025			RS485 MODBUS communication 4825 0092	1599 0502
	4 P	9573 4025								1559 4025				
315 A / B4	3 P	9573 3031	4109 0039	3 P 1559 3040 4 P 1559 4040	3 P 2694 3021 ⁽²⁾	3 P 1509 3025	2 inputs / 2 outputs 1599 2001							
	4 P	9573 4031			4 P 2694 4021 ⁽²⁾	4 P 1509 4025								
400 A / B4	3 P	9573 3040												
	4 P	9573 4040												
500 A / B5	3 P	9573 3050	4109 0050	3 P 1559 3063 4 P 1559 4063	3 P 2694 3051 ⁽²⁾ 4 P 2694 4051 ⁽²⁾	3 P 1509 3063 4 P 1509 4063	Ethernet communication 4825 0203							
	4 P	9573 4050												
630 A / B5	3 P	9573 3063	4109 0063	3 P 1559 3080 4 P 1559 4080		3 P 1509 3080 4 P 1509 4080	Ethernet communication + RS485 MODBUS gateway 4825 0204	1599 0532						
	4 P	9573 4063							Analogue outputs 4825 0093					
800 A / B6	3 P	9573 3080	4109 0080	3 P 1559 3120 4 P 1559 4120			Pulse outputs 4825 0090							
	4 P	9573 4080												
1000 A / B6	3 P	9573 3100	4109 0120	3 P 1559 3160 4 P 1559 4160										
	4 P	9573 4100												
1250 A / B6	3 P	9573 3120	4109 0160	3 P 1559 3200 4 P 1559 4200										
	4 P	9573 4120												
1600 A / B7	3 P	9573 3160	4109 0160			1509 3160								
	4 P	9573 4160				1509 4160								
2000 A / B8	3 P	9573 3200	(1)					included						
	4 P	9573 4200												
2500 A / B8	3 P	9573 3250												
	4 P	9573 4250												
3200 A / B8	3 P	9573 3320												
	4 P	9573 4320												

(1) See "Copper bar connection pieces".

(2) For complete shrouding at front, rear, top and bottom, order quantity 4; if equipped with bridging bars order quantity 3. For top and bottom shrouding for the front only, order quantity 2.

(3) For a 3 pole device order quantity 3 bridging bars, for a 4 pole device order quantity 4.

ATyS p

Rating (A) / Frame size	No. of poles	ATyS p	DC power supply	3 position padlocking	Key handle interlocking system	Door protective surround	Remote control interface
125 A / B3	3 P	9573 3012	12 VDC/230 VAC 1599 5012 24 VDC/230 VAC 1599 5112 48 VDC/230 VAC 1599 5212	9599 0003 ⁽¹⁾	Using lock RONIS EL11AP in position 0 9599 1006 ⁽¹⁾	1539 0012	D20 9599 2020 + RJ45 cable connection 1599 2009
	4 P	9573 4012					
160 A / B3	3 P	9573 3016					
	4 P	9573 4016					
200 A / B3	3 P	9573 3020					
	4 P	9573 4020					
250 A / B4	3 P	9573 3025					
	4 P	9573 4025					
315 A / B4	3 P	9573 3031					
	4 P	9573 4031					
400 A / B4	3 P	9573 3040					
	4 P	9573 4040					
500 A / B5	3 P	9573 3050					
	4 P	9573 4050					
630 A / B5	3 P	9573 3063					
	4 P	9573 4063					
800 A / B6	3 P	9573 3080					
	4 P	9573 4080					
1000 A / B6	3 P	9573 3100					
	4 P	9573 4100					
1250 A / B6	3 P	9573 3120					
	4 P	9573 4120					
1600 A / B7	3 P	9573 3160					
	4 P	9573 4160					
2000 A / B8	3 P	9573 3200					
	4 P	9573 4200					
2500 A / B8	3 P	9573 3250					
	4 P	9573 4250					
3200 A / B8	3 P	9573 3320					
	4 P	9573 4320					
				9599 0004 ⁽¹⁾	Using lock RONIS EL11AP in position 0 9599 1004 ⁽¹⁾	1539 0080	

(1) Factory mounting only.

ATyS range

ATyS *r*, ATyS *g*, ATyS *p*
from 125 to 3200 A

Accessories

Terminal shrouds

Use

IP2X protection against direct contact with terminals or connecting parts.

Advantages

Perforations allow remote thermographic inspection without the need to remove the shrouds.

Rating (A)	Frame size	No. of poles	Position	Reference
125 ... 200	B3	3 P	top / bottom / front (I) / rear (II)	2694 3014 ⁽¹⁾⁽²⁾
125 ... 200	B3	4 P	top / bottom / front (I) / rear (II)	2694 4014 ⁽¹⁾⁽²⁾
250 ... 400	B4	3 P	top / bottom / front (I) / rear (II)	2694 3021 ⁽¹⁾⁽²⁾
250 ... 400	B4	4 P	top / bottom / front (I) / rear (II)	2694 4021 ⁽¹⁾⁽²⁾
500 ... 630	B5	3 P	top / bottom / front (I) / rear (II)	2694 3051 ⁽¹⁾⁽²⁾
500 ... 630	B5	4 P	top / bottom / front (I) / rear (II)	2694 4051 ⁽¹⁾⁽²⁾



acce_206_a_2_cat

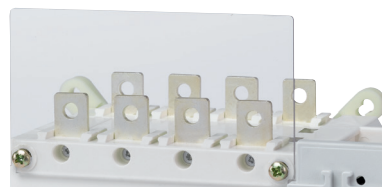
(1) For complete shrouding at front, rear, top and bottom, order quantity 4; if equipped with bridging bars order quantity 3.
(2) For top and bottom shrouding for the front only, order quantity 2.

Terminal screens

Use

Upstream and downstream protection against direct contact with terminals or connection parts.
For upstream and downstream protection, order quantity 1.

Rating (A)	Frame size	No. of poles	Position	Reference
125 ... 200	B3	3 P	top / bottom	1509 3012
125 ... 200	B3	4 P	top / bottom	1509 4012
250 ... 400	B4	3 P	top / bottom	1509 3025
250 ... 400	B4	4 P	top / bottom	1509 4025
500 ... 630	B5	3 P	top / bottom	1509 3063
500 ... 630	B5	4 P	top / bottom	1509 4063
800 ... 1250	B6	3 P	top / bottom	1509 3080
800 ... 1250	B6	4 P	top / bottom	1509 4080
1600	B7	3 P	top / bottom	1509 3160
1600	B7	4 P	top / bottom	1509 4160
2000 ... 3200	B8	3 P	top / bottom	1509 3200
2000 ... 3200	B8	4 P	top / bottom	1509 4200



acce_207_a_2_cat

Inter-phase barrier

Use

Safe isolation between the terminals, essential for use at 690 VAC or in a polluted or dusty atmosphere.

Rating (A)	Frame size	No. of poles	Reference
125 ... 200	B3	3 P	2998 0033
125 ... 200	B3	4 P	2998 0034
250 ... 400	B4	3 P	2998 0023
250 ... 400	B4	4 P	2998 0024
500 ... 630	B5	3 P	2998 0013
500 ... 630	B5	4 P	2998 0014
800 ... 3200	B6 ... B8	3/4 P	included

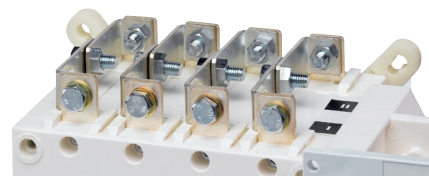
Bridging bars

Use

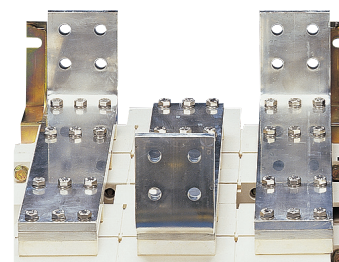
For bridging power terminals on the outgoing side of the switch.

Rating (A)	Frame size	Diameter (mm)	Reference ⁽¹⁾
125 ... 200	B3	20 x 2,5	4109 0019
250	B4	25 x 2,5	4109 0025
315 ... 400	B4	32 x 5	4109 0039
500	B5	32 x 5	4109 0050
630	B5	50 x 5	4109 0063
800 ... 1000	B6	50 x 6	4109 0080
1250	B6	60 x 8	4109 0120
1600	B7	90 x 10	4109 0160

(1) For a 3 pole device order quantity 3 bridging bars, for a 4 pole device order quantity 4.



access_205_a_2_cat



access_041_a_1_cat

Copper bar connection pieces

Use

For ratings 2000 to 3200 A.

Enables:

- Flat connection: the connection pieces provide a link between the two power terminals of the same pole (Fig. 1).
- Edgewise connection: the connection pieces provide a link between the two power terminals of the same pole and an edgewise bar connection terminal.
- Top or bottom bridging between two poles (Fig. 3).

Once installed, the power terminal is connection ready.

For 3200 A rating, connection pieces (part A) are supplied as standard. Bolt sets must be ordered separately.

Connection: the quantities given in the below table refer to the number of pieces required per pole, top or bottom.

Bridging connection: the quantities given refer to the number of pieces required to complete a single bridging connection between two poles.

	Reference	2000 – 2500 A			3200 A		
		Fig. 1	Fig. 2	Fig. 3	Fig. 1	Fig. 2	Fig. 3
		Connection		Bridging connection I - II	Connection		Bridging connection I - II
		Flat	Edgewise		Flat	Edgewise	
Connection - part A	2619 1200	1	1	2 ⁽²⁾	included	included	included
Bolt kit 35 mm - part B	2699 1201	1 ⁽¹⁾		2 ⁽²⁾	1 ⁽¹⁾		2 ⁽²⁾
Bolt kit 45 mm - part B	2699 1200	1 ⁽¹⁾			1 ⁽¹⁾		
T + Bolt kit - part C	2629 1200		1	1		1	1
Bracket + bolt kit - part D	2639 1200		1			1	
Bar + bolt kit - part E	4109 0320			1			1

(1) Choose the bolt length according to the thickness of the bars being connected; if bar thickness is greater than 20 mm, 45 mm bolts are required.

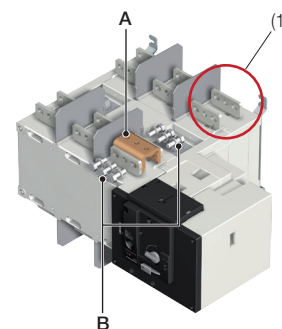
(2) For bridging connections, quantity 2 pieces are required for creating the link between the two power terminals of the same pole for switch bodies I and II.

The quantities of the applicable pieces then need to be multiplied by the number of connection points (power terminals) in order to determine the total quantity required of each part.

Example: For a 4 pole 2500 A SIRCOVER with upstream edgewise connection (Fig. 2) and downstream bridging (Fig. 3), the following quantities will be required:

Part	Upstream edgewise quantity	Downstream bridging quantity	Total quantity
A	8	8	16
B	0	8	8
C	8	4	12
D	8	0	8
E	0	4	4

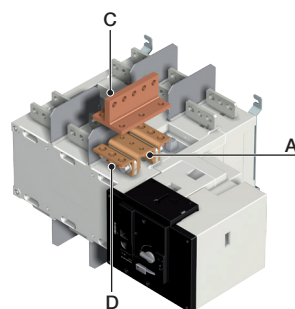
Fig. 1



access_459_a_1_x_cat

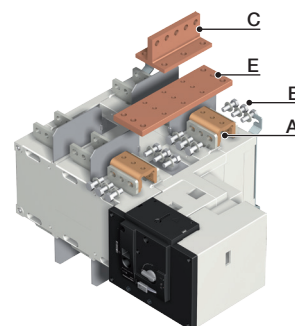
(1) Single pole connection: 1 pole (top or bottom) comprises two power terminals which are to be linked with the copper connection kit.

Fig. 2



access_460_a_1_x_cat

Fig. 3



access_461_a_1_x_cat

ATyS range

ATyS r, ATyS g, ATyS p
from 125 to 3200 A

Accessories (continued)

Autotransformer

Use

For applications without neutral, this autotransformer provides the 230 VAC required to power these ATyS products.

Specified protection for the autotransformer:

- Protection of the primary:
fuse holder ref 57010020 + fuse ref 60130000
- Protection of the secondary:
fuse holder ref 57010015 + fuse ref 60130001.

Rating (A)	Frame size	Reference
125 ... 3200	B3 ... B8	1599 4064

DC power supply

Use

Allows an ATyS to be supplied from a 12 or 24 VDC source. To be positioned as close as possible to the DC power supply source.

Rating (A)	Frame size	Operating voltage	Reference
125 ... 1600	B3 ... B7	24 VDC / 230 VAC	1599 5112

Voltage sensing and power supply kit

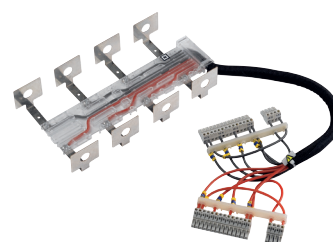
Use

For power supply and voltage measurement (4 wire, three-phase) for the ATyS g and p. 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.

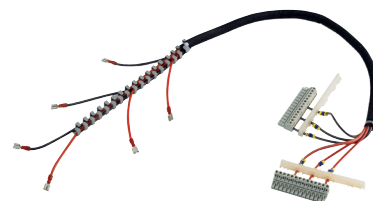
Note: the 3-pole version does not integrate the power supply.

125 to 630 A kit



atys_606_a_1_cat

800 to 3200 A kit



atys_603_a_2_cat

For ATyS g and ATyS p - 3 pole

Rating (A)	Frame size	Reference
125 ... 200	B3	1559 3012
250	B4	1559 3025
315 ... 400	B4	1559 3040
500 ... 630	B5	1559 3063
800 ... 1000	B6	1559 3080
1250	B6	1559 3120
1600	B7	1559 3160
2000 ... 3200	B8	1559 3200

For ATyS g and ATyS p - 4 pole

Rating (A)	Frame size	Reference
125 ... 200	B3	1559 4012
250	B4	1559 4025
315 ... 400	B4	1559 4040
500 ... 630	B5	1559 4063
800 ... 1000	B6	1559 4080
1250	B6	1559 4120
1600	B7	1559 4160
2000 ... 3200	B8	1559 4200

Voltage sensing tags

Use

For use with ATyS r, g and p, the voltage sensing tags allow voltage to be tapped directly off of ATyS power terminals to provide a supply to, for example, a control circuit or source presence indicator lamps.

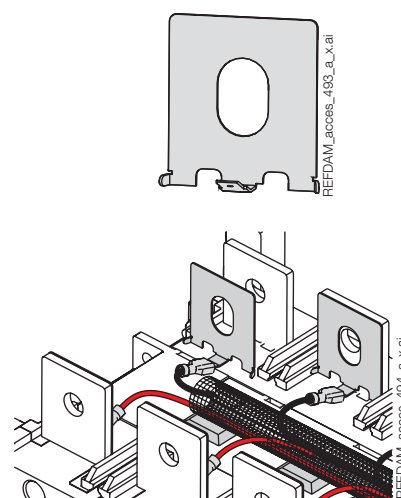
Voltage sensing tags are equipped with a Faston connector and can be mounted on the top or bottom side of the transfer switch.

With ATyS r, this accessory allows easy connection to an ATyS C25 / C35 controller via the ATyS C25 cable harness.

1 pack contains 8 voltage sensing tags.

Voltage sensing tags are integrated on ATyS $\geq 800A$.

Rating (A)	Frame size	Reference
125 ... 200	B3	9599 4020
250 ... 400	B4	9599 4040
500 ... 630	B5	9599 4063



ATyS C25 / C35 cable harness

Use

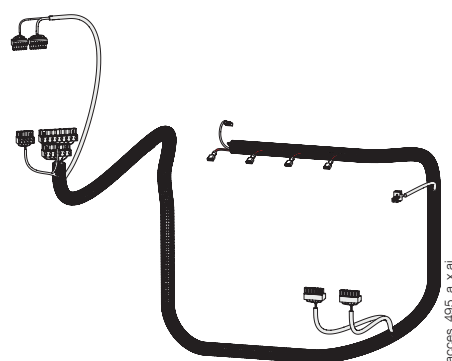
The ATyS C25 / C35 cable harness is a fast and reliable solution for connecting an ATyS r transfer switch to a C25 / C35 controller in order to create an Automatic Transfer Switch. It is equipped with Faston voltage tap-offs and provides a safe connection between the controller and changeover switch for:

- monitoring availability of the incoming power sources,
- monitoring changeover switch status,
- providing an electrical interlock function,
- automatic control and transfer between power sources.

Provides a DPS auxiliary supply to the ATyS r. Cable harness length is approximately 2 metres.

The cable harness is for use with 4 pole ATyS r only and requires neutral conductors to be on the right side of the transfer switch.

For ATyS r $\leq 630A$ it is necessary to order voltage sensing tags separately (required for voltage tap-off connections).



For ATyS r connection to a C25 / C35 controller		
Rating (A)	Frame size	Reference
125 ... 630	B3 ... B5	9529 4063
800 ... 3250	B6 ... B8	9529 4080

ATyS range

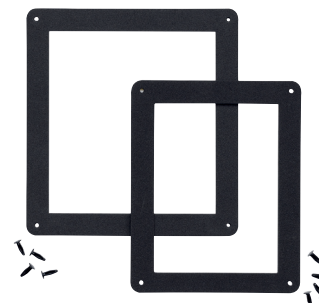
ATyS r, ATyS g, ATyS p
from 125 to 3200 A

Accessories (continued)

Door protective surround

Use

Door surround to provide a clean and safe finish to the panel's cut-out.



atys_595_a_2_cat

For ATyS

Rating (A)	Frame size	Reference
125 ... 630	B3 ... B5	1529 0012
800 ... 3200	B6 ... B8	1529 0080

For ATyS g and p

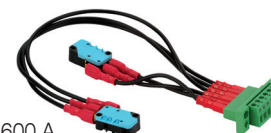
Rating (A)	Frame size	Reference
125 ... 630	B3 ... B5	1539 0012
800 ... 3200	B6 ... B8	1539 0080

Auxiliary contact

Use

Pre-break and signalling of positions I and II: each reference provides 1 NO/NC auxiliary contact for positions I and II. Possibility to install up to 2 auxiliary contacts for each position. Suitable for use as a 1st or 2nd auxiliary contact.

Low level AC: contact us. ATyS are supplied with 1 NO aux contact for all three positions as standard which are located in the motor unit.



800 to 1600 A

access_396_a

If additional auxiliary contacts are required please consult us.

Rating (A)	Frame size	Nominal current (A)	Operating current I _e (A)			
			250 VAC AC-13	400 VAC AC-13	24 VDC DC-13	48 VDC DC-13
125 ... 3200	B3 ... B8	16	12	8	14	6

Rating (A)	Frame size	Type of mounting	Reference
125 ... 630	B3 ... B5	Customer fit	1599 0502
800 ... 1600	B6 ... B7	Customer fit	1599 0532
2000 ... 3200	B8	-	2 AC per position fitted as standard



125 to 630 A

access_397_a

3 position padlocking (I - 0 - II)

Use

Enables the product to be padlocked in positions 0, I and II (factory fitted).

Rating (A)	Frame size	Reference
125 ... 630	B3 ... B5	9599 0003
800 ... 3200	B6 ... B8	9599 0004



atys_967_a

Key handle interlocking system

Use

With the product in manual mode, it enables locking in position 0 using a RONIS EL11AP lock (factory fitted).

As standard, locking in position 0. With the 3 position padlocking accessory: key interlocking in I, 0 & II.

Locks (key N° random) :

- RONIS EL11AP ref 4409 8511
- TRAYVOU XOP10 ref 4409 8601

Rating (A)	Frame size	Reference
125 ... 630	B3 ... B5	9599 1006
800 ... 3200	B6 ... B8	9599 1004

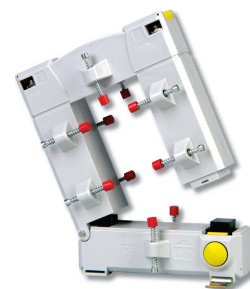
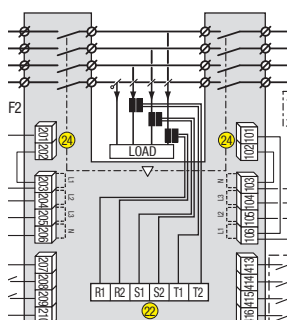


atys_968_a

Current transformer

Use - for ATyS p only

Used with ATyS p units, these current transformers enable information to be obtained on the load current.



Plug-in optional modules

Use - for ATyS g and ATyS p

Number of modules per device

ATyS g: Compatible with RS485 JBUS/MODBUS module only. One module maximum can be installed (can be fitted in any slot).

ATyS p: A maximum of four modules can be fitted. With Ethernet communication module installation, only 2 additional modules can be fitted.



RS485 JBUS / MODBUS® communication

- RS485 link with JBUS / MODBUS® protocol (speed up to 38400 bauds).



2 inputs - 2 outputs

- 2 inputs and 2 outputs (programmable) on each module.



Ethernet communication

- Ethernet link with MODBUS/TCP or JBUS/MODBUS RTU over TCP.
- Embedded Ethernet Webserver software.



Ethernet communication with RS485 JBUS/MODBUS gateway

- Ethernet link with MODBUS/TCP or JBUS/MODBUS RTU over TCP.
- Connect 1 to 247 RS485 JBUS/MODBUS slaves.
- Embedded Ethernet Webserver software.



Analogue outputs

- Allocate outputs to: 3I, In, 3V, 3U, F, ± ΣP, ± ΣQ, ΣS.



Pulse outputs

- 2 configurable pulse outputs (type, weight and duration) on ±kWh, ±kvarh and kVAh.

Description of accessories	Suitable for	Reference
RS485 MODBUS communication	ATyS g & p	4825 0092
2 inputs - 2 outputs	ATyS p	1599 2001
Ethernet communication (embedded Ethernet Webserver software)	ATyS p	4825 0203
Ethernet communication + RS485 JBUS/MODBUS gateway (embedded Ethernet Webserver software)	ATyS p	4825 0204
Analogue outputs	ATyS p	4825 0093
Pulse outputs	ATyS p	4825 0090

ATyS range

ATyS r, ATyS g, ATyS p
from 125 to 3200 A

Accessories (continued)

Remote interfaces

Use

To remotely display source availability and position indication typically used on the front of a panel when the product is enclosed.

Interfaces are powered from the ATyS transfer switch via the RJ45 connection cable.

Maximum cable length: 3 m.

D10 - for ATyS g

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

Protection degree: IP21

D20 - for ATyS p

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

Protection degree: IP21

Door mounting

2 holes Ø 22.5.

ATyS transfer switch via RJ45 cable, not isolated. Cable available as an accessory.

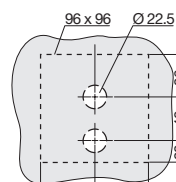


atys_564_d_1_cat

atys_565_d_1_cat



atys_597_a_1_cat



atys_161_a_1_x_cat

RJ45 port to connect to ATyS.

Drilling

Description of accessories	Suitable for	Reference
D10	ATyS g	9599 2010
D20	ATyS p	9599 2020

Connecting cable for remote interfaces

Use

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

Characteristics

RJ45 8 straight-through, non insulated cables, length 3 m.



access_209_a_2_cat

For ATyS g and p		
Type	Length	Reference
RJ45 cable	3 m	1599 2009

Sealable cover

Use - for ATyS g

Prevents access to the configuration of ATyS g devices (seals supplied).

Rating (A)	Frame size	Reference
125 ... 3200	B3 ... B8	9599 0000



atys_870_a

Auto/Manual key selector

Use

Replaces the standard Auto/Manual selector knob with a key selector.

Rating (A)	Frame size	Reference
125 ... 3200	B3 ... B8	9599 1007



atys_869_a

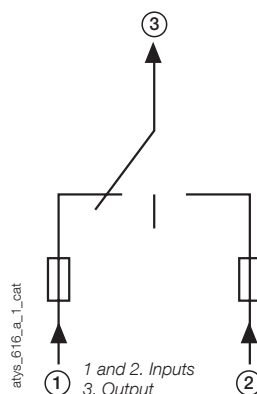
Double power supply - DPS

Use

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

	ATyS DPS	Modular DPS
Voltage (VAC)		
Min	166	200
Max	332	288
Current (A)		
Max Output	15	3.15
Connection (mm²)		
Max	2.5	6

Description	Suitable for ATyS r	Reference
Modular DPS	125 ... 1600 A	1599 4001
ATyS DPS	125 ... 3200 A	9539 2001



atys_616_a_1_cat

1 and 2. Inputs
3. Output



atys_612_a_2_cat



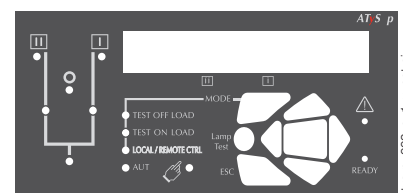
atys-d_001_psd

Spares

ATyS p front panel

This front panel is used, for the ATyS p only, if source 2 is connected to unit I and source 1 is connected to unit II. Positions I and II are reversed on the front panel.

Product model	Reference
ATyS p	9599 1008



atys-p_002_a_1_X_cat.ai

Electronic module - controller

The electrical components of the ATyS g and p are easy to replace in case there is a problem, even when on-load.

Product model	Reference
ATyS g	9559 2001
ATyS p	9579 2001



atys-p_001_b

Motorisation module

The motor units of the ATyS r, g and p are easy to replace in case there is a problem, even when on-load.

Rating (A)	Reference
125 ... 200	9509 5020
250 ... 400	9509 5040
500 ... 630	9509 5063
800 ... 1250	9509 5120
1600	9509 5160
2000 ... 3200	9509 5320



atys_571_a

Emergency manual operating handle

Rating (A)	Type	Reference
125 ... 630	J2	1122 1013
800 ... 1600	J4	1141 1013

ATyS range

ATyS r, ATyS g, ATyS p
from 125 to 3200 A

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

125 to 630 A

Thermal current I_{th} to 40°C	125 A	160 A	200 A	250 A	315 A	400 A	500 A	630 A		
Frame size	B3	B3	B3	B4	B4	B4	B5	B5		
Rated insulation voltage U_i (V) (power circuit)	800	800	800	1000	1000	1000	1000	1000		
Rated impulse withstand voltage U_{imp} (kV) (power circuit)	8	8	8	12	12	12	12	12		
Rated insulation voltage U_i (V) (control circuit)	300	300	300	300	300	300	300	300		
Rated impulse withstand voltage U_{imp} (kV) (control circuit)	4	4	4	4	4	4	4	4		
Rated operational currents I_e (A) according to IEC 60947-6-1										
Rated voltage	Utilisation category									
415 VAC	AC-31 B		125	160	200	250	315	400	500	630
415 VAC	AC-32 B					200	315	400	500	500
415 VAC	AC-33 B					200	200	200	400	400
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⁾	A/B⁽¹⁾	A/B⁽¹⁾	
415 VAC	AC-21 A / AC-21 B	125/125	160/160	200/200	250/250	315/315	400/400	500/500	630/630	
415 VAC	AC-22 A / AC-22 B	125/125	160/160	200/200	250/250	315/315	400/400	500/500	630/630	
415 VAC	AC-23 A / AC-23 B	125/125	160/160	200/200	200/200	315/315	400/400	500/500	500/630	
500 VAC	AC-21 A / AC-21 B	125/125	160/160	200/200	250/250	315/315	400/400	500/500	630/630	
500 VAC	AC-22 A / AC-22 B	125/125	160/160	200/200	200/250	200/315	200/400	500/500	500/500	
500 VAC	AC-23 A / AC-23 B	80/80	80/80	80/80	200/200	200/200	200/200	400/400	400/400	
690 VAC ⁽³⁾	AC-21 A / AC-21 B	125/125	160/160	200/200	200/200	200/200	200/200	500/500	500/500	
690 VAC ⁽³⁾	AC-22 A / AC-22 B	125/125	125/125	125/125	160/160	160/160	160/160	400/400	400/400	
690 VAC ⁽³⁾	AC-23 A / AC-23 B	63/80	63/80	63/80	125/125	125/125	125/125	400/400	400/400	
220 VDC	DC-21 A / DC-21 B	125/125	160/160	200/200	250/250	250/250	250/250	500/500	630/630	
220 VDC	DC-22 A / DC-22 B	125/125	160/160	200/200	250/250	250/250	250/250	500/500	630/630	
220 VDC	DC-23 A / DC-23 B	125/125	125/125	125/125	200/200	200/200	200/200	500/500	630/630	
440 VDC ⁽²⁾	DC-21 A / DC-21 B	125/125	125/125	125/125	200/200	200/200	200/200	500/500	630/630	
440 VDC ⁽²⁾	DC-22 A / DC-22 B	125/125	125/125	125/125	200/200	200/200	200/200	500/500	630/630	
440 VDC ⁽²⁾	DC-23 A / DC-23 B	125/125	125/125	125/125	200/200	200/200	200/200	500/500	630/630	
Current rated as conditional short-circuit with fuse gG DIN, according to IEC 60947-3										
Prospective fuse protected short-circuit withstand at 415 VAC (kA rms)	100	100	50	50	50	50	50	50		
Prospective fuse protected short-circuit withstand at 690 VAC (kA rms)				50	50	50	50	50		
Associated fuse rating (A)	125	160	200	250	315	400	500	630		
Short-circuit withstand without protection as per IEC 60947-3										
Rated short-time withstand current 0.3s I_{cw} at 415 VAC (kA rms)	12	12	12	15 ⁽⁴⁾	15 ⁽⁴⁾	15 ⁽⁴⁾	17 ⁽⁴⁾	17 ⁽⁴⁾		
Rated short-time withstand current 1s I_{cw} at 415 VAC (kA rms)	7	7	7	8 ⁽⁴⁾	8 ⁽⁴⁾	8 ⁽⁴⁾	11 ⁽⁴⁾	10 ⁽⁴⁾		
Rated peak withstand current at 415 VAC (kA peak)	20	20	20	30	30	30	45	45		
Connection										
Minimum Cu cable cross-section as per IEC 60947-1 (mm ²)	35	35	50	95	120	185	2 x 95	2 x 120		
Recommended Cu busbar cross-section (mm ²)							2 x 32 x 5	2 x 40 x 5		
Maximum Cu cable cross-section (mm ²)	50	95	120	150	240	240	2 x 185	2 x 300		
Maximum Cu busbar width (mm)	25	25	25	32	32	32	50	50		
Min./max. tightening torque (Nm)	9/13	9/13	9/13	20/26	20/26	20/26	40/45	40/45		
Power dissipation (W/pole)	1.9	3.2	4.1	5.9	7.8	15.1	17	32.4		
Switching time (rated voltage, after receiving command)										
Transfer time I-II or II-I (s)	0.85	0.85	0.85	0.9	0.9	0.9	0.95	0.95		
I-0 or II-0 (s)	0.55	0.55	0.55	0.5	0.5	0.5	0.55	0.55		
Contact transfer time ("black-out" I-II) minimum (s)	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4		
Power supply										
Min./max. auxiliary power supply (VAC)	166/332	166/332	166/332	166/332	166/332	166/332	166/332	166/332		
Control supply power demand										
Inrush / nominal power (VA) - ATyS r	184/92	184/92	184/92	276/115	276/115	276/115	276/150	276/150		
Inrush / nominal power (VA) - ATyS g, p	206/114	206/114	206/114	298/137	298/137	298/137	298/172	298/172		
Mechanical specifications										
Durability (number of operating cycles)	10,000	10,000	10,000	8,000	8,000	8,000	5,000	5,000		
Weight ATyS r 3 P / 4 P (kg)	5.7/ 6.9	5.7/ 6.9	5.7/ 6.9	6.6/ 7.4	6.7/ 7.8	6.7/ 7.8	11.4/ 13.3	11.9/ 14.0		
Weight ATyS g, p 3 P / 4 P (kg)	6.8/ 8.0	6.8/ 8.0	6.8/ 8.0	7.7/ 8.5	7.8/ 8.9	7.8/ 8.9	12.5/ 14.4	13.0/ 15.1		

(1) Category with index A = frequent operation - Category with index B = infrequent operation. (3) Interphase barriers must be installed on the products.
(2) 3-pole device with 2 pole in series for the "+" and 1 pole for the "-". (4) Values given at 690 VAC.
4-pole device with 2 poles in series by polarity.

800 to 3200 A

Thermal current I_{th} at 40°C	800 A	1000 A	1250 A	1600 A	2000 A	2500 A	3200 A		
Frame size	B6	B6	B6	B7	B8	B8	B8		
Rated insulation voltage U_i (V) (power circuit)	1000	1000	1000	1000	1000	1000	1000		
Rated impulse withstand voltage U_{imp} (kV) (power circuit)	12	12	12	12	12	12	12		
Rated insulation voltage U_i (V) (control circuit)	300	300	300	300	300	300	300		
Rated impulse withstand voltage U_{imp} (kV) (control circuit)	4	4	4	4	4	4	4		
Rated operational currents I_e (A) according to IEC 60947-6-1									
Rated voltage	Utilisation category								
415 VAC	AC-31 B		800	1000	1250	1600	2000	2500	3200
415 VAC	AC-32 B		800	1000	1250	1250	2000	2000	2000
415 VAC	AC-33 B		800	1000	1000	1000	1250	1250	1250
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⁾	A/B⁽¹⁾	
415 VAC	AC-21 A / AC-21 B	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/2500	-/3200	
415 VAC	AC-22 A / AC-22 B	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/2500	-/3200	
415 VAC	AC-23 A / AC-23 B	800/800	1000/1000	1250/1250	1250/1250	-/1600	-/1600	-/1600	
500 VAC	AC-21 A / AC-21 B	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/2000	-/2000	
500 VAC	AC-22 A / AC-22 B	630/630	800/800	1000/1000	1600/1600				
500 VAC	AC-23 A / AC-23 B	630/630	630/630	800/800	1000/1000				
690 VAC ⁽³⁾	AC-21 A / AC-21 B	800/800	1000/1000	1250/1250	1600/1600	-/2000	-/2000	-/2000	
690 VAC ⁽³⁾	AC-22 A / AC-22 B	630/630	800/800	1000/1000	1000/1000				
690 VAC ⁽³⁾	AC-23 A / AC-23 B	630/630	630/630	800/800	800/800				
220 VDC	DC-21 A / DC-21 B	800/800	1000/1000	1250/1250	1250/1250				
220 VDC	DC-22 A / DC-22 B	800/800	1000/1000	1250/1250	1250/1250				
220 VDC	DC-23 A / DC-23 B	800/800	1000/1000	1250/1250	1250/1250				
440 VDC ⁽²⁾	DC-21 A / DC-21 B	800/800	1000/1000	1250/1250	1250/1250				
440 VDC ⁽²⁾	DC-22 A / DC-22 B	800/800	1000/1000	1250/1250	1250/1250				
440 VDC ⁽²⁾	DC-23 A / DC-23 B	800/800	1000/1000	1250/1250	1250/1250				
Current rated as conditional short-circuit with fuse gG DIN, according to IEC 60947-3									
Prospective fuse protected short-circuit withstand at 415 VAC(kA rms)		50	50	100	100				
Prospective fuse protected short-circuit withstand at 690 VAC(kA rms)		50	50	50					
Associated fuse rating (A)		800	1000	1250	2x800				
Short-circuit withstand without protection as per IEC 60947-3									
Rated short-time withstand current 0.3s I_{sc} at 415 VAC (kA rms)		64	64	64	78	78	78	78	
Rated short-time withstand current 1s I_{sc} at 415 VAC (kA rms)		35	35	35	50	50	50	50	
Rated peak withstand current at 415 VAC (kA peak)		55	55	80	110	120	120	120	
Connection									
Minimum Cu cable cross-section as per IEC 60947-1 (mm ²)		2 x 185							
Recommended Cu busbar cross-section (mm ²)		2 x 50 x 5	2 x 63 x 5	2 x 60 x 7	2 x 100 x 5	3 x 100 x 5	2 x 100 x 10	3 x 100 x 10	
Maximum Cu cable cross-section (mm ²)		4 x 185	4 x 185	4 x 185	6 x 185				
Maximum Cu busbar width (mm)		63	63	63	100	100	100	100	
Min./max. tightening torque (Nm)		9/13	9/13	20/26	40/45	40/45	40/45	40/45	
Power dissipation (W/pole)		41.7	46.9	93.3	122	178	255	330	
Switching time (rated voltage, after receiving command)									
Transfer time I-II or II-I (s)		2.8	2.8	2.8	2.9	2.8	2.8	2.8	
I-0 or II-0 (s)		1.4	1.4	1.4	1.4	1.8	1.8	1.8	
Contact transfer time ("black-out" I-II) minimum (s)		1.4	1.4	1.4	1.5	1	1	1	
Power supply									
Min./max. auxiliary power supply (VAC)		166/332	166/332	166/332	166/332	166/332	166/332	166/332	
Control supply power demand									
Inrush / nominal power (VA) - ATyS r,		460/184	460/184	460/184	460/230	812/322	812/322	812/322	
Inrush / nominal power (VA) - ATyS g, p		482/206	482/206	482/206	482/252	834/344	834/344	834/344	
Mechanical specifications									
Durability (number of operating cycles)		4,000	4,000	4,000	3,000	3,000	3,000	3,000	
Weight ATyS r 3 P / 4 P (kg)		27.9/ 32.2	28.4/ 32.9	28.9/ 33.6	33.1/ 39.4	50.7/ 61.6	50.7/ 61.6	61.0/ 75.3	
Weight ATyS g, p 3 P / 4 P (kg)		29.0/ 33.3	29.5/ 34.0	30.0/ 34.7	34.2/ 40.5	51.8/ 62.7	51.8/ 62.7	62.1/ 76.4	

(1) Category with index A = frequent operation - Category with index B = infrequent operation. (3) Interphase barriers must be installed on the products.

(2) 3-pole device with 2 pole in series for the "+" an 1 pole for the "-".

(4) Values given at 690 VAC.

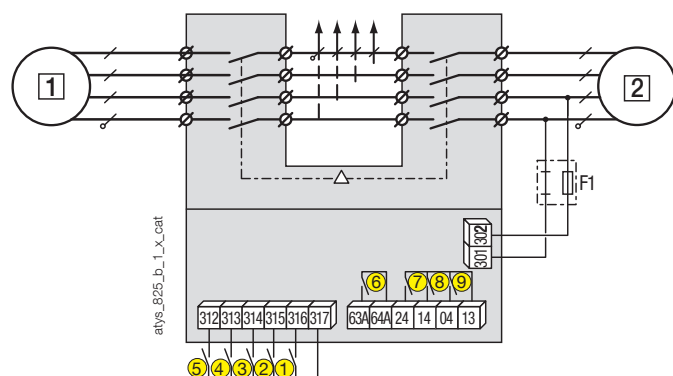
4-pole device with 2 poles in series by polarity.

ATyS range

ATyS r, ATyS g, ATyS p
from 125 to 3200 A

Connections and terminals

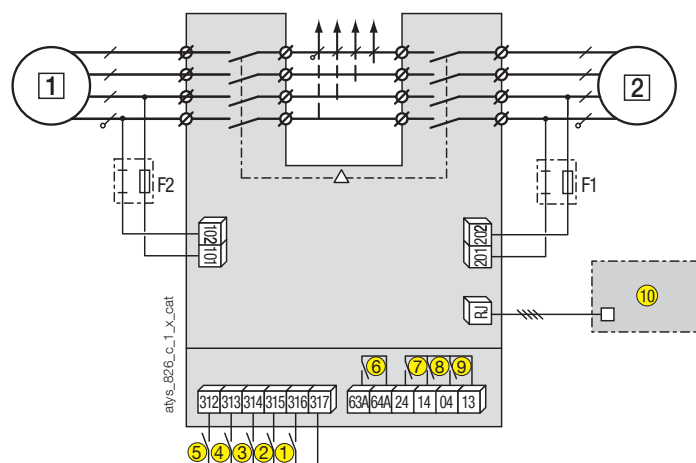
ATyS r



- 1 primary source (network or genset)
- 2 backup source (mains network or genset)

- 1 : position 0 control (contact or logic if closed)
- 2: position I control
- 3: position II control
- 4: primary control position 0
- 5: closing this contact allows position control commands
- 6: product availability relay
- 7: auxiliary contact - closed when the switch is in position II
- 8: auxiliary contact - closed when the switch is in position I
- 9: auxiliary contact - closed when the switch is in position 0

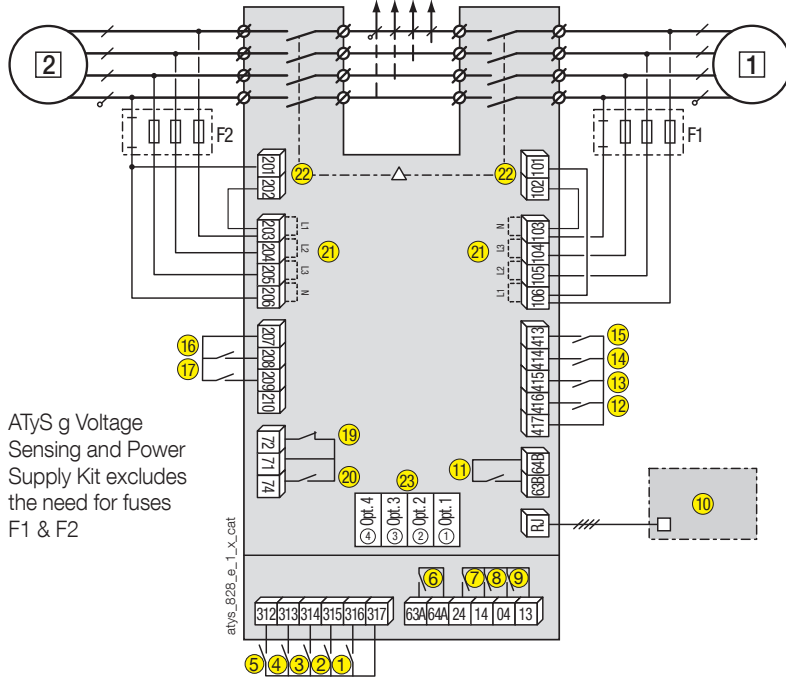
ATyS r with ATyS DPS



- 1 primary source (mains network or genset)
- 2 backup source (mains network or genset)

- 1 : position 0 control (contact or logic if closed)
- 2: position I control
- 3: position II control
- 4: primary control position 0
- 5: closing this contact allows position control commands
- 6: product availability relay
- 7: auxiliary contact - closed when the switch is in position II
- 8: auxiliary contact - closed when the switch is in position I
- 9: auxiliary contact - closed when the switch is in position 0
- 10: D10 remote interface

ATyS g



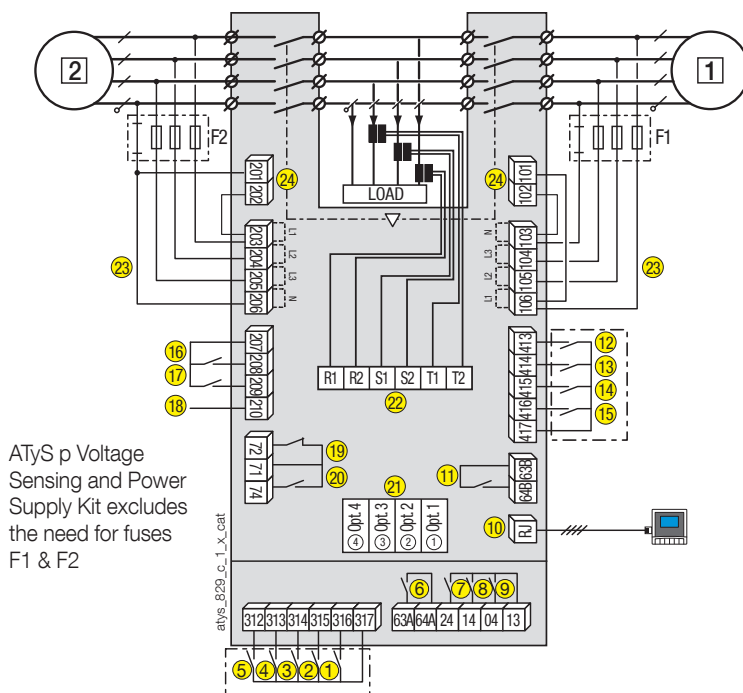
ATyS g Voltage Sensing and Power Supply Kit excludes the need for fuses F1 & F2

- 1 primary source (mains network)
- 2 backup source (genset or network)
- 1: position 0 control (contact or logic if closed)
- 2: position I control
- 3: position II control
- 4: primary control position 0
- 5: closing this contact allows position control commands
- 6: Motor unit availability relay
- 7: auxiliary contact - closed when the switch is in position II
- 8: auxiliary contact - closed when the switch is in position I
- 9: auxiliary contact - closed when the switch is in position 0
- 10: D10 remote interface
- 11: Electrical unit availability relay
- 12: automatic operation inhibited
- 13: confirm manual retransfer
- 14: bypass for time delay 2AT
- 15: M/G: priority test on load.
M/M: with or without priority.
- 16: remote test without load
- 17: M/G: test on load
M/M: preferred source selection
- 19-20: genset start and stop commands

Order	71/72 (19)	71/74 (20)
Genset start-up	Closed contact	Open contact
Genset stop	Open contact	Closed contact

- 21: voltage inputs
- 22: power inputs
- 23: 4 slots for optional RS485 communication module

ATyS p



ATyS p Voltage Sensing and Power Supply Kit excludes the need for fuses F1 & F2

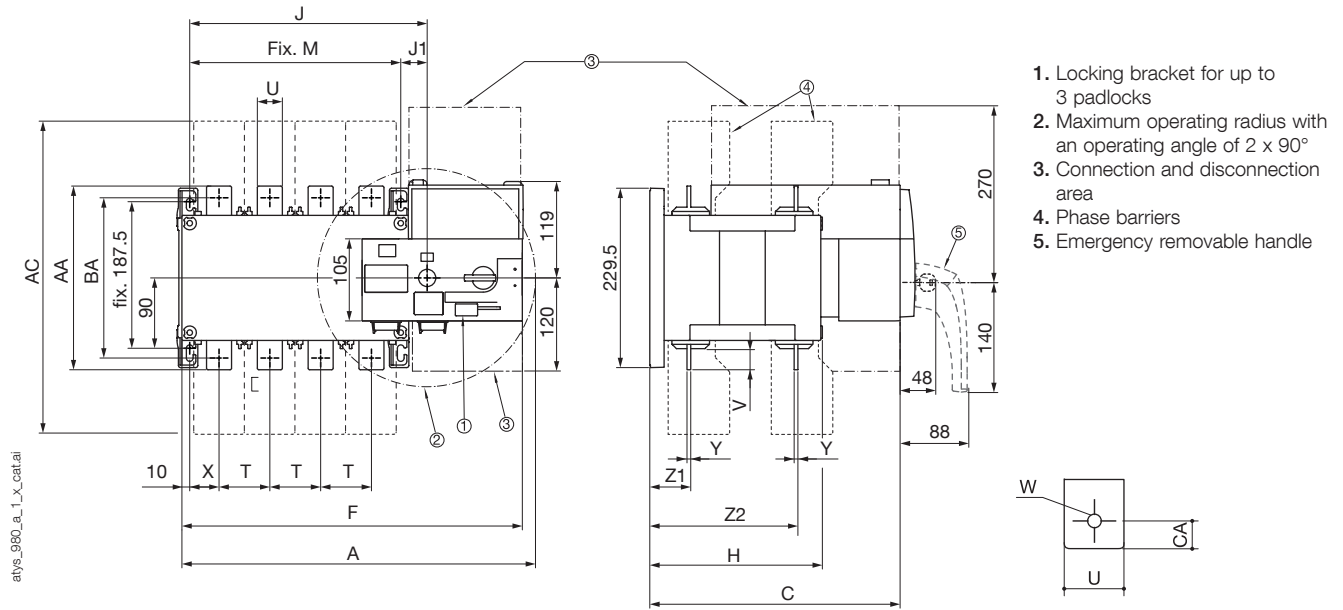
- 1 primary source (network or genset)
- 2 backup source (network or genset)
- 1: position 0 control (contact or logic if closed)
- 2: position I control
- 3: control position II
- 4: primary control position 0
- 5: closing this contact allows position control commands
- 6: Motor unit availability relay
- 7: auxiliary contact - closed when the switch is in position II
- 8: auxiliary contact - closed when the switch is in position I
- 9: auxiliary contact - closed when the switch is in position 0
- 10: D20 remote interface
- 11: Electrical unit availability relay
- 12-17: programmable inputs
- 18: auxiliary power supply for optional modules
- 19-20: genset start and stop commands

Order	71/72 (19)	71/74 (20)
Genset start-up	Closed contact	Open contact
Genset stop	Open contact	Closed contact

- 21: 4 slots for optional modules
- 22: TI measurement connection
- 23: voltage inputs
- 24: power inputs

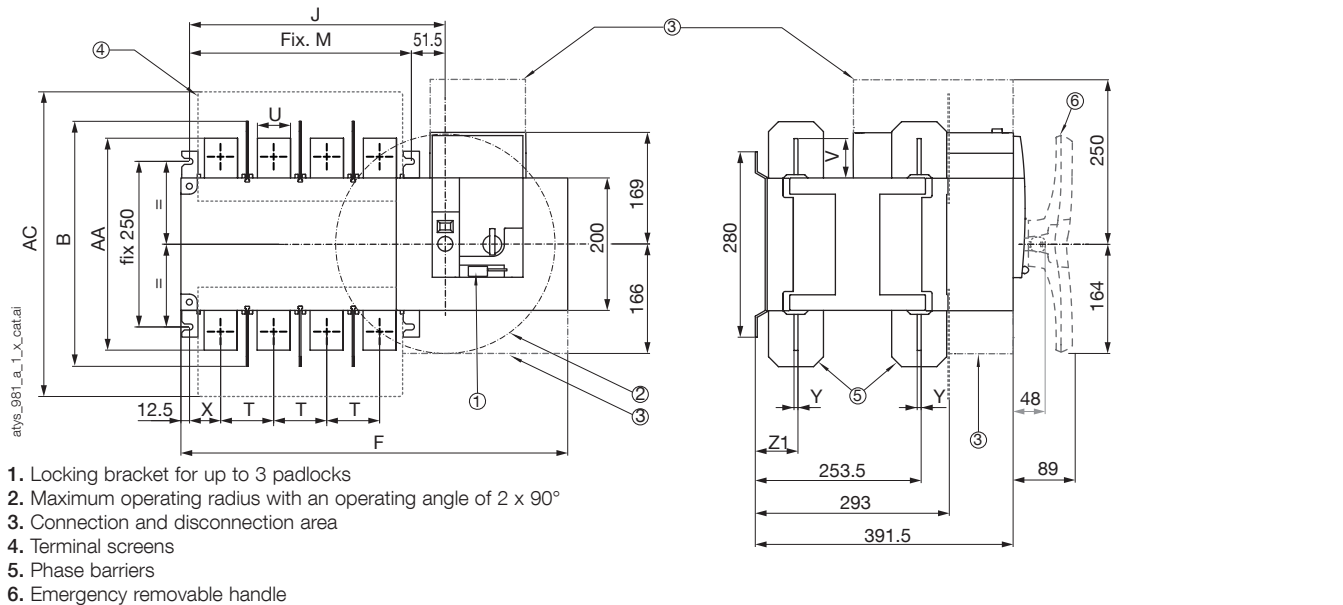
Dimensions

125 to 630 A / B3 to B5



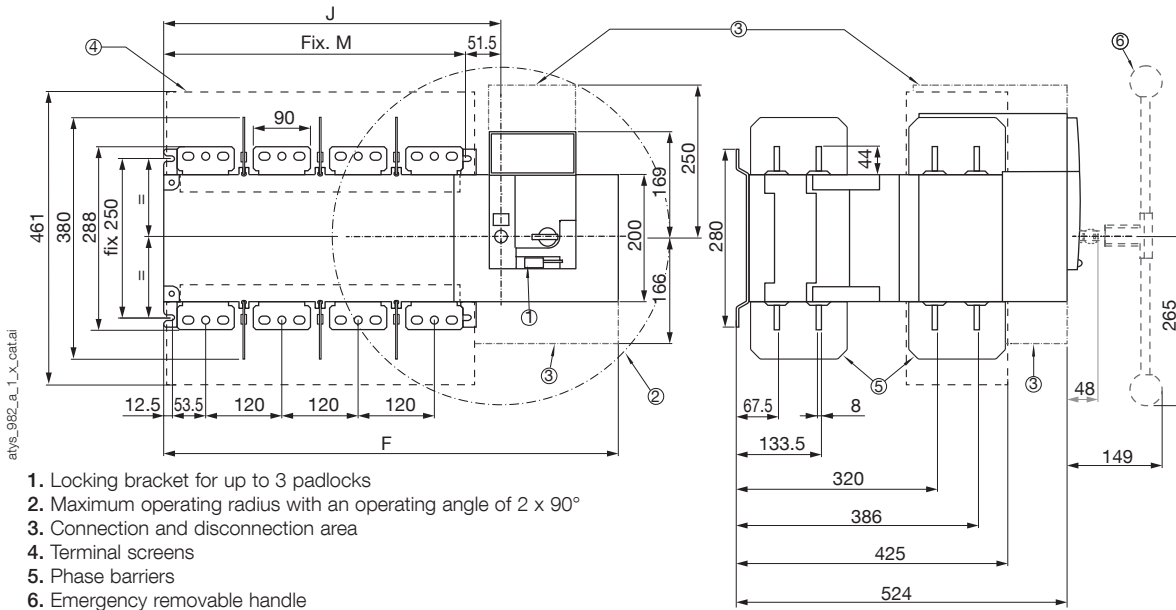
Rating (A) / Frame size	Overall dimensions			Terminal shrouds	Switch body						Switch mounting				Connection									
	A 3p.	A 4p.	C	AC	F 3p.	F 4p.	H	J 3p.	J 4p.	J1	M 3p.	M 4p.	T	U	V	W	X 3p.	X 4p.	Y	Z1	Z2	AA	BA	CA
125 / B3	304	334	244	233	286.5	317	151	154	184	34	120	250	36	20	25	9	28	22	3.5	38	134	135	115	10
160 / B3	304	334	244	233	286.5	317	151	154	184	34	120	250	36	20	25	9	28	22	3.5	38	134	135	115	10
200 / B3	304	334	244	233	286.5	317	151	154	184	34	120	250	36	20	25	9	28	22	3.5	38	134	135	115	10
250 / B4	345	395	244	288	328	378	152	195	245	35	160	210	50	25	30	11	33	33	3.5	39.5	133.5	160	130	15
315 / B4	345	395	244	288	328	378	152	195	245	35	160	210	50	35	35	11	33	33	3.5	39.5	133.5	160	130	15
400 / B4	345	395	244	288	328	378	152	195	245	35	160	210	50	35	35	11	33	33	3.5	39.5	133.5	170	140	15
500 / B5	394	454	321	402	377	437	221	244	304	34	210	270	65	32	50	14	42.5	37.5	5	53	190	260	220	20
630 / B5	394	454	321	402	377	437	221	244	304	34	210	270	65	45	50	13	42.5	37.5	5	53	190	260	220	20

800 to 1600 A / B6 to B7



Rating (A) / Frame size	Overall dimensions	Terminal shrouds	Switch body				Switch mounting		T	U	V	Connection			
	B	AC	F 3p.	F 4p.	J 3p.	J 4p.	M 3p.	M 4p.				X	Y	Z1	AA
800 / B6	370	461	504	584	307	387	255	335	80	50	60.5	47.5	7	66.5	321
1000 / B6	370	461	504	584	307	387	255	335	80	50	60.5	47.5	7	66.5	321
1250 / B6	370	461	504	584	307	387	255	335	80	60	65	47.5	7	66.5	330
1600/B7	380	531	596	716	399	519	347	467	120	90	44	53	8	67.5	288

2000 to 3200 A / B8



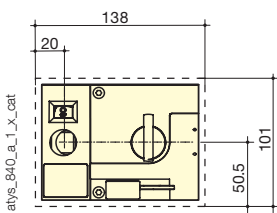
1. Locking bracket for up to 3 padlocks
2. Maximum operating radius with an operating angle of $2 \times 90^\circ$
3. Connection and disconnection area
4. Terminal screens
5. Phase barriers
6. Emergency removable handle

Rating (A)	Switch body				Switch mounting	
	F 3p.	F 4p.	J 3p.	J 4p.	M 3p.	M 4p.
2000 ... 3200	596	716	398.5	518.5	347	467

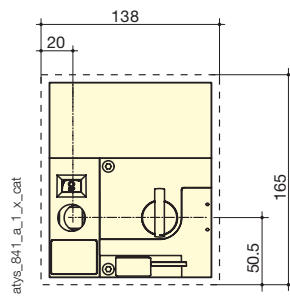
Door cutout

125 to 630 A / B3 to B5

ATyS r

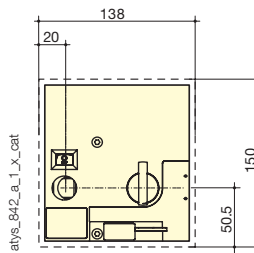


ATyS g, p

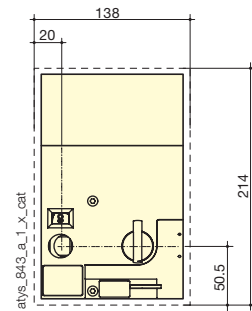


800 to 1600 A / B6 to B7

ATyS r

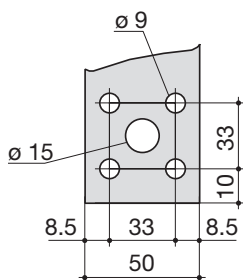


ATyS g, p



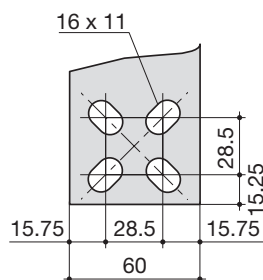
Connection terminals

800 to 1000 A / B6



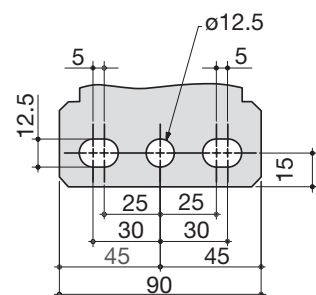
svr_077_a_1_x_cat

1250 A / B6



svr_078_b_1_x_cat

1600 to 3200 A / B7 to B8



svr_088_a_1_x_cat

ATyS d H

Remotely operated Transfer Switching Equipment
from 4000 to 6300 A



The solution for

- > Data centre
- > Telecommunications
- > Industries



Strong points

- > Ready for installation in the enclosure of your choice
- > High-performance switching
- > Safe on-load transfer: I-0-II

Conformity to standards

- > IEC 60947-6-1



Enclosed solution

- > Please contact your SOCOMECC office

External automatic controller

- > The ATyS d H is an RTSE which is compatible with most building management systems. It may also be supplied as an ATSE by including an ATyS C55 / C65 controller with a door mounted external display.

Function

The ATyS d H is a three-phase transfer switch, 3 and 4 poles, designed for low voltage high power applications that require high-performance and fast reliable switching. The open transition transfer is performed on-load in line with IEC 60947-6-1 standards (Class PC) with minimal power supply interruption to the load during transfer.

The ATyS d H is remote transfer switching equipment (RTSE) with an integrated dual power supply (DPS) that accepts remote orders through volt-free contacts.

Advantages

Ready for installation in the enclosure of your choice

The ATyS d H has been designed to facilitate installation. It is composed of two switches that are mounted one above the other with easily accessible power connections located at the rear. Furthermore the ATyS d H does not need any external bridging bars as the load side is connected within the product. This enables to save time during installation.

High-performance switching

The ATyS d H offers high withstand short circuit current ratings of 143 kA I_{cm} (making) and 65 kA for 0.1sec I_{cw} (withstand). Further to its high short circuit withstand, the ATyS d H performance in terms of load switching capacity is AC-33iB ($6 \times I_n \cos \phi 0.5$) without derating.

Safe on-load transfer: I-0-II

The ATyS d H includes two mechanically interlocked switches to ensure fast switching whilst providing a neutral (Off - 0) position. This ensures that the main and alternative power supplies do not overlap.

References

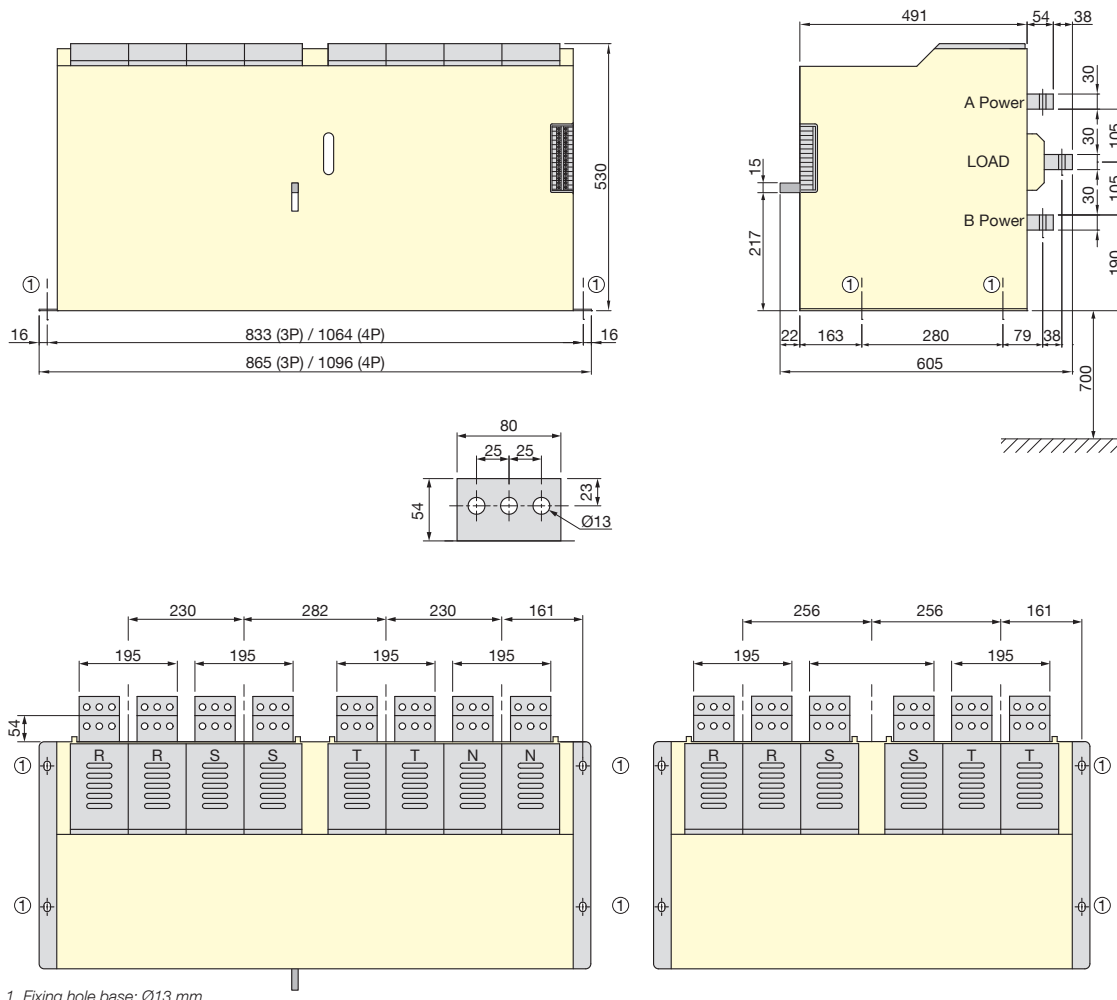
Rating (A)	Number of poles	ATyS d H Reference	Control relay Reference
4000 A	3P	9533 3400	ATyS C55 1600 0055
	4P	9533 4400	
5000 A	3P	9533 3500	ATyS C65 1600 0065
	4P	9533 4500	
6300 A	3P	9533 3630	
	4P	9533 4630	

Characteristics according to IEC 60947-6-1

Thermal current I_{th} at 40°C	4000 A	5000 A	6300 A
Rated operating voltage U_e (V)	660		
Rated insulation voltage U_i (V)	660		
Rated impulse withstand voltage U_{imp} (kV)	12		
Rated short-circuit withstand at 660 VAC			
Rated short-time withstand current 0.1s I_{cw} (kA rms)	65		
Rated peak withstand current (kA peak)	143		
Rated operational current I_b (A), at 660 VAC - AC32B	4000	5000	6300
Rated operational current I_b (A), at 660 VAC - AC33iB (6xIn cos Ø 0.5)	4000	5000	6300
Connection			
Rear connection with busbar	•	•	•
Power dissipation (W/pole)	128	200	317
Switching time			
I to 0 (ms)	≤ 150		
0 to I and 0 to II (ms)	≤ 90		
II to 0 (ms)	≤ 200		
I-0-II / II-0-I (s)	1.2		
Operating frequency	10 operations per hour		
Power supply			
VAC power supply (powered directly on terminals S1 and S2)	230		
Main coil operating current (peak during transfers)	65 A ⁽¹⁾		
Mechanical characteristics			
Durability (number of operating cycles)	3000		
Weight (kg) - Fixed 3/4P model	200 / 250	200 / 250	200 / 250

(1) Instantaneous value. For a complete operation, power should be available during 0.5 s.

Dimensions





1. Fixing hole base: Ø13 mm

Selection guide

ATS Controller

Which type of power supply?

Which application?

Classic functions	Simple and digital functions
	
ATyS C25 <i>p. 290</i>	ATyS C35 <i>p. 292</i>

Power supply

AC Supply voltage Phase-Neutral	184-300 VAC	184-300 VAC
AC Supply voltage Phase-Phase	N/A	N/A
Frequency supply range	45-65 Hz	45-66 Hz
DC Supply voltage (optional)	12-24 VDC	12-24 VDC
Powered by USB port		
30s energy backup during blackout		
Integrated external DPS to switch (6A AC1) ⁽²⁾	•	•
Internal DPS from voltage sensing ⁽³⁾	•	•

Measurement

Voltage measurement range	90-520 VAC (Phase-phase)	90-520 VAC (Phase-phase)
Voltage measurement accuracy		
Frequency measurement accuracy		
Phase angle measurement		•
Current / Power / and energy measurement		

Application

RTSE class compatibility	PC (switch based) / CC (contactor)	PC (switch based) / CC (contactor) / CB (circuit breaker)
Main-Main	•	•
Main-Gen	•	•
Gen-Gen		

HMI

LCD Screen		96x64 pixels
Wizard configuration		
Remote display (D70 / D50)		
Compatible with webview (D70/M70)		
Configuration with ECS		

Communication

RS485 - Modbus	•	•
Digibus (digiware RJ45 connexion)		

Functions

Tests	On load	On load / Off-load
Inhibition	•	•
Password protection		1 level
Breaker trip management		
In-phase transfer		
Genset Cyclers		
Genset scheduler		
Bypass timers		
Configurable alarms		
Event reccording		
Load shedding		

I/O

Inputs	5 fixed	4 fixed 3 programmable
Outputs	4 fixed	4 fixed 1 programmable ⁽¹⁾



Environment

IP rating (front face)	IP4X	IP4X
IK	IK 08	IK 08
EMC (according to IEC 61326-1 & IEC 60947-6-1)	Class A	Class A
Overvoltage category	III	III
Pollution CAT	PD 2	PD 2
Temperature use range	-25 - +70°C	-25 - +70°C

(1) In Main-Main mode only fixed in Main-Gen. (2) Supplies voltages from both source to motor. (3) Product can be powered by both sources.

Functionalities?

Digiware connectivity

	Smart functions	Connected functions
		
	ATyS C55 <i>p. 294</i>	ATyS C65 <i>p. 296</i>
	N/A	N/A
	80-576 VAC	80-576 VAC
	45-66 Hz	45-66 Hz
	9-28 VDC	9-28 VDC
	•	•
		•
	•	•
	50-576 VAC	50-576 VAC
	0.5%	0.5%
	0.1%	0.1%
	•	•
		•
	PC (switch based) / CC (contactor) / CB (circuit breaker)	PC (switch based) / CC (contactor) / CB (circuit breaker)
	•	•
	•	•
	•	•
	350x160 pixels	350x160 pixels
	•	•
	•	•
	•	•
	•	•
	•	•
	On load / Off-load	On load / Off-load
	•	•
	3 level	3 level
	•	•
	•	•
	•	•
	1 program	4 programs
	•	•
	•	•
	300 events	3000 events
	basic load shed	Basic & smart load shed
	6 programmable	6 programmable (+24 optional)
	6 programmable	6 programmable (+18 optional)
	IP4X (IP65 with gasket)	IP 65
	IK 08	IK 08
	Class A & B	Class A & B
	III	III
	PD 3	PD3
	-30 - +70°C	-30 - +70°C

ATyS C25

ATS Controller
simple functions



ATyS C25

Function

ATyS C25 is an entry level ATSE controller with communications. It can be used to pilot a remotely operated transfer switch, such as ATyS r, ATyS S and ATyS d M, as well as contactors type transfer switches, for circuit breaker type transfer switches see ATyS C55 and ATyS C65. ATyS C25 ensure the automatic or remotely controlled transfer from one source to another with fixed timers and thresholds.

Advantages

Flexible space saving

The ATyS C25 controller can be mounted on either a DIN rail or to the panel door, offering flexibility and optimising space.

Cost-effective

The ATyS C25 has an integrated DPS, for supplying the motorisation of the switch, and can be door mounted, therefore there's no need for an external DPS or display, reducing installation time and costs.

Fast commissioning & testing

- 8 dip-switches allow very fast commissioning, even offline.
- All main functions such as remote position control, mode selection, lamp test and genset test on load are available on the front of the product allowing quick and easy operation.
- Remote product information is available through RS485 Modbus communication.

General characteristics

- Self-powered from sensing.
- Voltage supply range (184 - 300 VAC).
- DC aux power supply (for optional use).
- Main/Main or Main/Genset networks.
- Fixed I/Os.
- RS485 Modbus communication.
- Voltage sensing on all phases.
- Three-phase + Neutral & Single-phase + Neutral networks.
- Phase rotation checking.
- Door or DIN rail mounting.

The solution for

- > ATS panels
- > Compact transfer enclosures
- > Basic ATS controls



Strong points

- > Self-supplied from sensing circuit
- > Integrated AC Double Power Supply
- > RS485 Communications
- > Multiple mounting options

Conformity to standards

- > IEC 61010-2-201
- > IEC 60947-6-1
- > GB/T 14048.11 Annex C



Compatible with



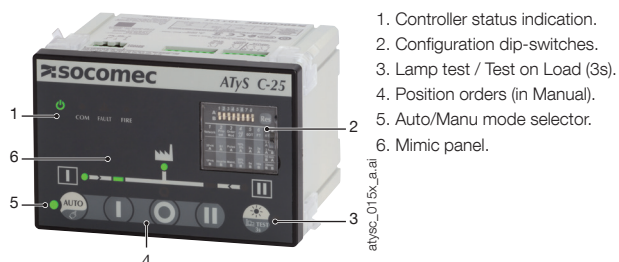
ATyS r
Transfer Switching Equipment

References

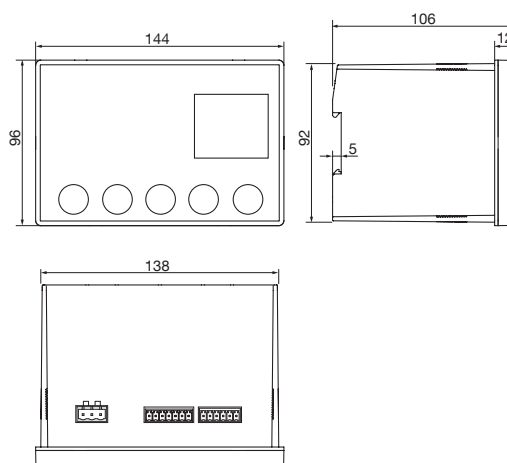
Description	Reference
ATyS C25 – ATS controller	1600 0025
ATyS r - Remotely operated Transfer Switching Equipment	9523 xxxx ⁽¹⁾

(1) xxxx variable based on the number of poles and rating.

Front panel



Dimensions (mm)



atysc_001_lb_1_x_catal

Characteristics

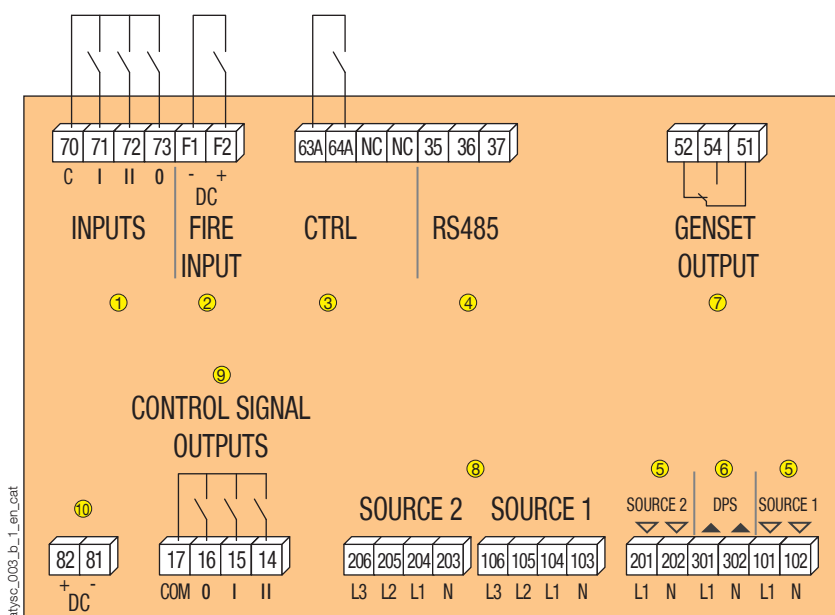
Electrical characteristics	
AC operating limits	184 ⁽¹⁾ - 300 VAC
Optional DC supply	10-30 VDC
Frequency limits	45 - 65 Hz
Power consumption	< 10 W
Inputs	5 - fixed (auto inhibit & DC fire input, position indication I-0-II)
Outputs	4 - fixed (position control I-0-II & genset start)
Impulse withstand	6/4 kV ⁽²⁾
Overvoltage category	CAT 3
Mechanical characteristics	
Weight	845 gr
Door cutout	138 x 92 mm
Operating temperature	-25 ... +70°C
Communications	
Interface type	RS485. 2 to 3 half duplex wires
Protocol	MODBUS RTU
Baudrate	2400-38400

Measurement characteristics	
Nominal voltage DIP 1 (1PH+N / 3P+N)	230 / 400 VAC
Nominal frequency (fixed)	50 Hz
Voltage threshold settings DIP 4	10% / 20% of Nominal voltage
Frequency threshold settings DIP 4	5% / 10% of nominal frequency
Voltage and frequency Hysteresis (fixed)	20% of ΔU/ΔF
Other settings	
ODT dead-band timer DIP 5	0 / 2 s
FT Source 1 and 2 fail timer DIP 6	3 / 10s
RT Source 1 and 2 return timer DIP 7&8	0 (3s) / 3 / 10 / 30 min
Source priority DIP 2	Priority source 1 / No priority
Position Output signal DIP 3	Impulse / Maintained

(1) 200 VAC in contactor mode.

(2) 6 kV tested between phases of a different source and 4 kV tested between phases of the same source.

Terminals



1. Switch position inputs
2. DC fire input (forces 0 & inhibit)
3. Control inputs
4. RS485 communication
5. DPS input (source 1 and 2)
6. DPS output to motor
7. Genset NO/NC output
8. Voltage sensing S1 & S2
9. Control outputs to transfer device
10. DC aux power supply (for optional use)

atysc_003_b_1_en_cat

ATyS C35

ATS Controller
digital functions



ATyS C35

Function

ATyS C35 is an ATS controller with a display screen and communication functionality. It is specifically designed to pilot Socomec remotely operated transfer switches, such as ATyS r, ATyS S and ATyS dM, and can also function with other brands using switch based, contactor based or circuit breaker based remote transfer switches.

ATyS C35 ensures the automatic or remote transfer in open transition from one source to another with programmable thresholds and timers. This controller also displays the information that it collects from the network and switch both on screen as well as on the LED synoptic, enabling users to keep track of the installation status.

Advantages

Flexible space saving

The ATyS C35 controller can be mounted on either a DIN rail or to the panel door, offering flexibility and optimising space.

Cost-effective

The ATyS C35 has an integrated DPS, for supplying the motorisation of the switch, and can be door mounted, therefore there's no need for an external DPS or display, reducing installation time and costs.

Flexible configuration options

- Programmable thresholds and timers.
- 3 programmable inputs.
- Functional with PC, CB or CC.

Display and communications

- Displays voltages, frequencies and phase angle.
- Timer counters displayed on screen.
- RS485 Modbus communications for monitoring and programming.

General characteristics

- Self-powered from sensing.
- Voltage supply range (184 - 300 VAC).
- DC aux power supply (for optional use).
- Main/Main or Main/Genset networks.
- Programmable inputs.
- RS485 Modbus communication.
- Voltage sensing on all phases.
- Three-phase + Neutral & Single-phase + Neutral networks.
- Phase rotation checking.
- Door or DIN rail mounting.

The solution for

- > ATS panels
- > Compact transfer enclosures
- > Simple ATS controls



Strong points

- > Self-supplied from sensing circuit
- > Integrated AC Double Power Supply
- > RS485 Communications
- > Multiple mounting options
- > LCD Display

Conformity to standards

- > IEC 61010-2-201
- > IEC 60947-6-1
- > GB/T 14048.11 Annex C



Compatible with



ATyS r
Transfer Switching Equipment

References

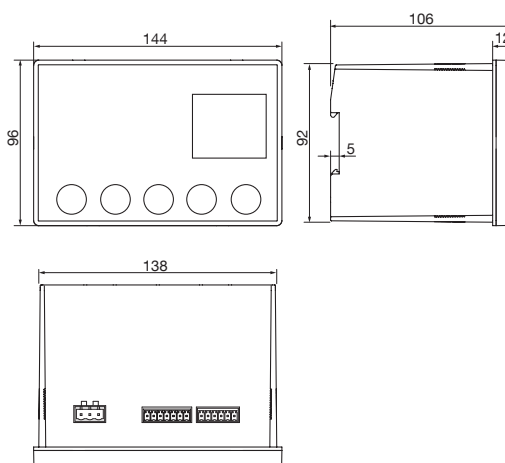
Description	Reference
ATyS C35 – ATS controller	1600 0035
ATyS r - Remotely operated Transfer Switching Equipment	9523 xxxx ⁽¹⁾

(1) xxxx variable based on the number of poles and rating.

Front panel



Dimensions (mm)



atysc_001_lb_1_x_catal

Characteristics

Electrical characteristics	
AC operating limits	184 ⁽¹⁾ - 300 VAC
Optional DC supply	10-30 VDC
Frequency limits	45 - 65 Hz
Power consumption	< 10 W
Inputs	4 fixed 3 programmable
Outputs	4 fixed - 1 programmable ⁽³⁾
External DPS max current (240 VAC)	6A AC1 - 1.5A AC15
Impulse withstand	6/4 kV ⁽²⁾
Overvoltage category	CAT 3

Mechanical characteristics

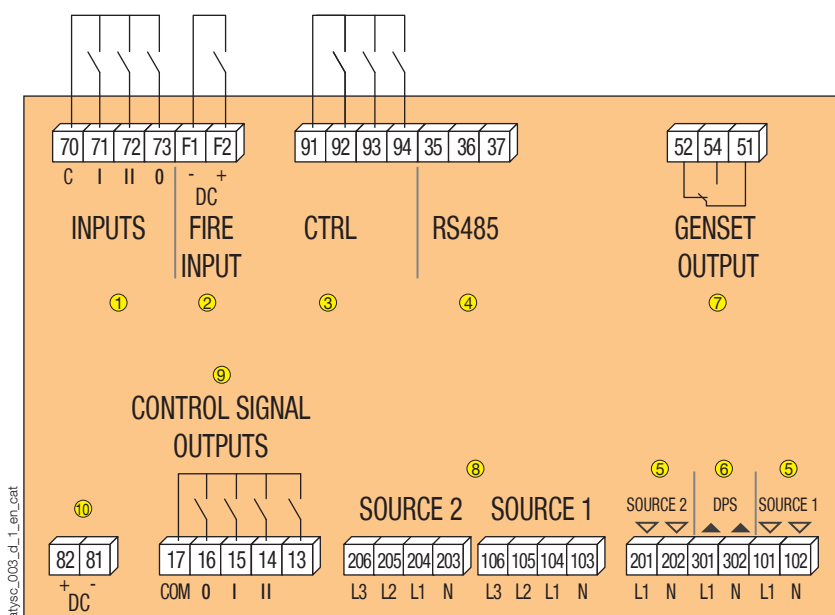
Weight	845 gr
Door cutout	138 x 92 mm
Operating temperature	-25 ... +70°C
Communications	
Interface type	RS485. 2 to 3 half duplex wires
Protocol	MODBUS RTU
Baud rate	2400-38400

(1) 200 VAC in contactor mode.

(2) 6 kV tested between phases of a different source and 4 kV tested between phases of a the same source.

(3) Only in main-main mode.

Terminals



1. Switch position inputs
2. DC fire input (forces 0 & inhibit)
3. Control inputs
4. RS485 communication
5. DPS input (source 1 and 2)
6. DPS output to motor
7. Genset NO/NC output
8. Voltage sensing S1 & S2
9. Control outputs to transfer device
10. DC aux power supply (for optional use)

atysc_003_d_1_en_cat

ATyS C55

ATS Controller
smart functions



ATyS C55

Function

ATyS C55 is a complete ATSE controller that can be used to pilot a remotely operated transfer switch of any technology: motorised switches (e.g. ATyS r, ATyS S or ATyS d M), circuit breakers or contactors. ATyS C55 ensure the automatic or remotely controlled transfer from one source to another, with configurable timers and thresholds, for any combination of sources: 2 transformers, 1 transformer and 1 genset or 2 gensets.

Advantages

Fast commissioning

On initial power up, the ATyS C55's smart wizard will guide the operator through the commissioning process.

Versatile

The ATyS C55 is compatible with contactors, breakers and switches. It can also work for all type of 2-source applications combining mains and gensets.

Clear visualisation and operation

- High-resolution LCD screen with clear defined messages.
- Real-time pop-ups to show timers, alarms, faults and information alerts.
- Quick and easy access to main functions through the front face with direct key input.
- Complete configuration can be achieved through the front face or via software (EasyConfig).

General characteristics

- Self-powered from sensing.
- Wide voltage range (88-576VAC).
- 24 VDC aux power supply (for optional use).
- 2 latching relays.
- Smart commissioning wizard.
- IP65 degree of protection with gasket (accessory).
- 1000 Alarms and Events.
- 6 fully configurable I/O.
- Genset scheduler.
- Door or back plate mounting.
- Main/Main, Main/Genset and Genset/Genset applications.
- Easyconfig configuration software.
- RS485 Modbus communication.
- Ethernet, SNMP, BACnet using DIRIS M-70 gateways. Includes Webserver.
- A DIRIS Digiware D-70 gateway can be utilised as a remote display for multiple ATyS C55/C65 controllers; the D-70 also provides Ethernet, SNMP & BACnet connectivity.

The solution for

- > Commercial buildings
- > Applications:
 - Genset/Genset
 - Network/Genset
 - Network/Network
 - External/portable systems



Strong points

- > Smart commissioning
- > Intuitive use
- > Hi-resolution LCD screen

Conformity to standards

- > IEC 61010-2-201
- > IEC 60947-6-1
- > GB/T 14048.11 Annex C

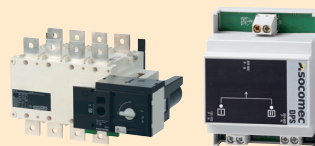


Communication gateways



DIRIS Digiware M-70 & D-70

Compatible with



ATyS r
Transfer Switching
Equipment

Double power supply
DPS Optional for use
with ATyS r, breakers
and contactors without
integrated DPS

References

Description	Reference
ATyS C55 – ATS controller (includes mounting kits)	1600 0055
IP65 gasket for door cut-out (1)	1609 0001
DIRIS Digiware M-50 multi-protocol Ethernet gateway	4829 0221
DIRIS Digiware D-50 multipoint display, Ethernet output	4829 0204
DIRIS Digiware M-70 communication gateway for Ethernet & Webserver	4829 0222
DIRIS Digiware D-70 communication gateway for Ethernet & Webserver and multi-product display	4829 0203
Double power supply - DPS	1599 4001
ATyS r - Remotely operated Transfer Switching Equipment	9523 xxxx (2)

(1) The gasket provides an IP65 seal between the controller and the panel door; the front face (display & keys) is IP65 as standard.

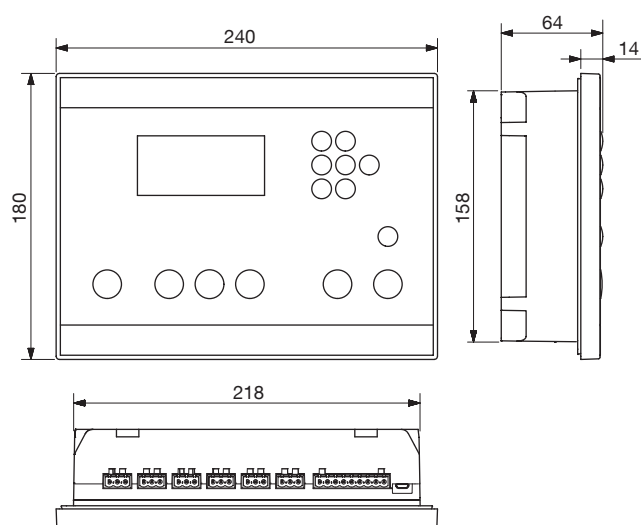
(2) xxxx variable based on the number of poles and rating.

Front panel



1. Dashboard displays.
2. Navigation keypad.
3. Mimic LED indication.
4. Lamp test button / LED info.
5. AUTO mode select.
6. TEST button.
7. CONTROL mode select.
8. Position orders (only in CONTROL mode).
9. Inhibit and communication indication.
10. Hi-res LCD screen.

Dimensions (mm)



Characteristics

Electrical characteristics

AC operating limits	110 - 480 VAC ±20%
Optional DC supply	24 VDC
Frequency limits	45 - 65 Hz
Power consumption	< 10 W
Inputs	6, fully programmable
Outputs	6, fully programmable
Output relays	8 A AC15
EMC classification	Class A and B
Impulse withstand	8/6 kV ⁽¹⁾
Overvoltage category	CAT 3

(1) 8 kV tested between phases of a different source and 6 kV tested between phases of a the same source.

Mechanical characteristics

Weight	1080 gr
Door cutout	220 x 160 mm
Protection degree	IP65 with optional gasket
Operating temperature	-30 ... +70 °C

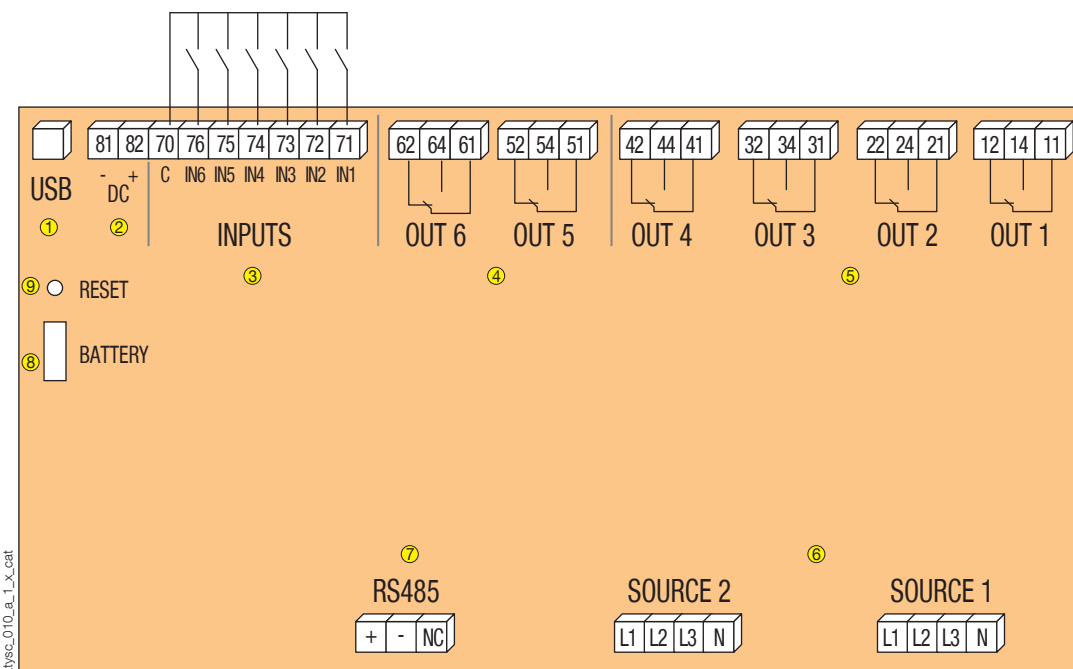
Communications

Interface type	RS485. 2 to 3 half duplex wires
Protocol	MODBUS RTU
Baudrate	programmable 1200 - 115200 bps

Display

Screen resolution	350 x 160 pixels
Event recorder	1000 events

Terminals



1. Configuration USB
2. 24 VDC aux power supply (for optional use)
3. 6 x inputs
4. 2 x latching relay outputs
5. 4 x relay outputs
6. Source sensing (110-480 ±20%)
7. RS485 communication
8. Replaceable RTC battery
9. Hard reset button

ATyS C65

ATS Controller

connected functions



ATyS C65

Function

ATyS C65 is an advanced ATSE controller offering all the functions of the ATyS C55 with the addition of current, power & energy monitoring, increased I/O capacity and functions, load shedding, lift control function, energy backup, increased number of events and alarms (measurement and combination alarms) and DIRIS Digiware module compatibility.

Advantages

Fast commissioning

On initial power up, the ATyS C65's smart wizard will guide the operator through the commissioning process.

User customisable

Front face LEDs, Load shedding, Genset schedulers and the lift control signal are just a few of the many customisable features available on ATyS C65.

Intuitive operation

- The high-resolution LCD screen provides several dashboards enabling easy monitoring of all parameters, including power and energy consumption of the loads.

- Quick and easy access to main functions through the front face with direct key input.
- Complete configuration can be achieved through the front face or via software (EasyConfig).

Energy backup

The integrated energy backup provides transitional power to the product enabling status indication (switch position, timer status, fault notifications) and communication to remain active with no supply present for up to 30 seconds.

General characteristics

- Self-powered from sensing.
- Wide voltage range (88 - 576 VAC).
- 24 VDC aux power supply (for optional use).
- 2 latching relays.
- Digiware IO-10: I/O extension up to 30 inputs and 18 outputs.
- Power & Energy metering with /1 A or /5 A current transformers.
- Energy backup.
- IP65 degree of protection (panel gasket included).
- 3000 Alarms and Events.
- Multiple fully configurable timers, thresholds and I/O.
- Easyconfig configuration software.
- Shock resistant IK08+.
- Digiware compatible (replaces U module).
- Ethernet, SNMP, BACnet using DIRIS M-70 gateway. Includes Webserver.
- A DIRIS Digiware D-70 gateway can be used as a remote display for multiple ATyS C55/ C65 controllers; the D-70 also provides Ethernet, SNMP & BACnet connectivity.

The solution for

- > Data centre
- > Healthcare
- > Infrastructure & Transport
- > Industry
- > Building

Strong points

- > Fast commissioning
- > User customisable
- > Intuitive operation
- > Energy backup

Conformity to standards

- > IEC 61010-2-201
- > IEC 60947-6-1



Compatible with

> Communication gateways:



DIRIS Digiware M-70 & D-70

> Transfer switches:



ATyS r & Double power supply

DPS Optional for use with ATyS r, breakers and contactors without integrated DPS

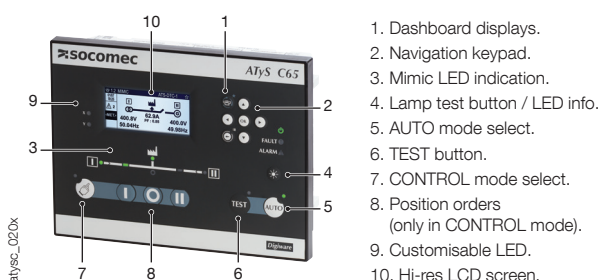
> Current sensors and transducer:



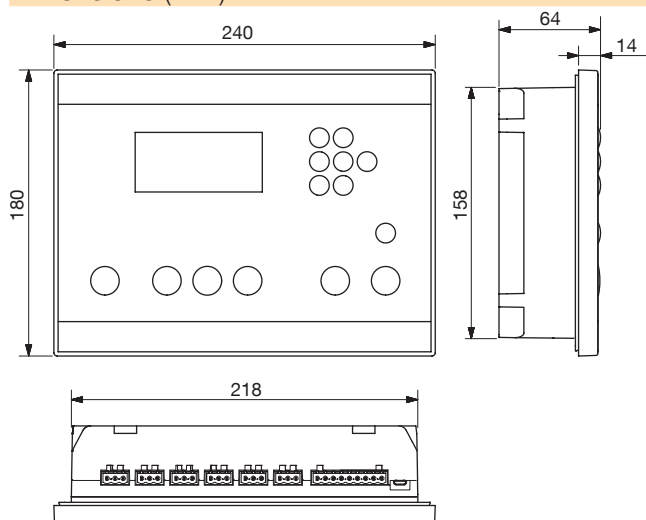
RGW sensors & RAC-1A integrator

Discover RGW flexible current sensors combined with the RAC-1A integrator: accurate measurement up to 5000A, ideal for retrofit installations. Choose from 6 diameters for the most appropriate installation solution. Enhanced compatibility with meters and PMDs with 1A input(s). Get a scalable offer that can be adjusted to meet your specific needs.

Front panel



Dimensions (mm)

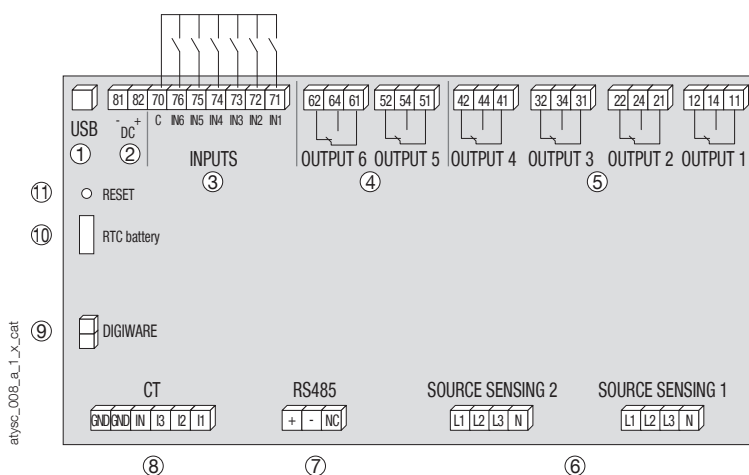


Characteristics

Electrical characteristics	
AC operating limits	110 - 480 VAC $\pm 20\%$
Optional DC supply	24 VDC
Frequency limits	45 - 65 Hz
Power consumption	< 10 W
Current transformers	1 or 5A
Measurement type	true RMS (TRMS)
Inputs	6, fully programmable
Outputs	6, fully programmable
Output relays	8 A AC15
I/O Extension (IO10)	up to 30 inputs and 18 outputs
EMC classification	class A and B
Impulse withstand	8/6 kV ⁽¹⁾
Overvoltage category	CAT 3
Mechanical characteristics	
Weight	1080 gr
Door cutout	220 x 160 mm
Protection degree	IP65
Operating temperature	-30 ... +70 °C
Communications	
Interface type	RS485. 2 to 3 half duplex wires
Protocol	MODBUS RTU
Baudrate	programmable 1200 - 115200 bps
Digiware bus	RJ45 cable
Display	
Screen resolution	350 x 160 pixels
Event recorder	3000 events
Energy backup	up to 30 seconds

(1) 8 kV tested between phases of a different source and 6 kV tested between phases of a the same source.

Terminals



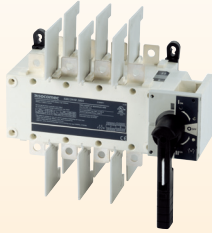





References

Description	Reference
ATyS C65 – ATS controller (includes mounting kits) and IP65 gasket	1600 0065
DIRIS Digiware M-50 multi-protocol Ethernet gateway	4829 0221
DIRIS Digiware D-50 multipoint display, Ethernet output	4829 0204
DIRIS Digiware M-70 communication gateway for Ethernet & Webserver	4829 0222
DIRIS Digiware D-70 communication gateway for Ethernet & Webserver and multi-product display	4829 0203
Double power supply - DPS	1599 4001
ATyS r - Remotely operated Transfer Switching Equipment	9523 xxxx ⁽¹⁾

(1) xxxx variable based on the number of poles and rating.

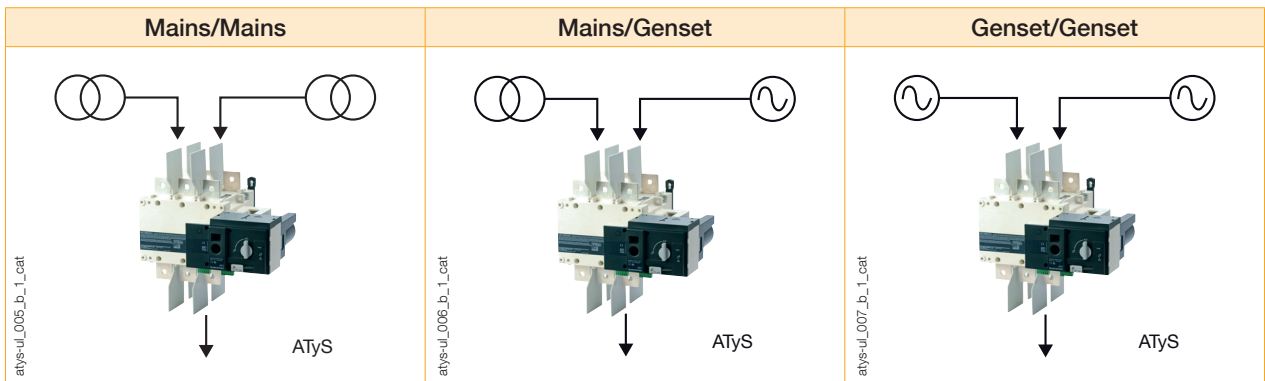
The UL product range

A range of manual or remotely operated transfer switches up to 1200 A

MTSE (Manual)	RTSE (Remotely operated)
	
	
	
<p>SIRCOVER UL1008 Manual Transfer Switching Equipment</p>	<p>ATyS UL1008 Motorised Transfer Switching Equipment</p>

Typical applications

The ATyS UL 1008 range provides safe transfer for mains/genset and genset/genset applications.



Function

ATYS and SIRCOVER UL 1008 transfer switching equipment ensure:

- Maintenance free transfer switching equipment with a robust and reliable design.
- Power control and safety between a normal and an alternate source.
- Integrated and robust switch disconnection.
- A stable OFF position with integrated padlocking to facilitate safe downstream maintenance.
- Positive break indication with clear visible position indication I - 0 - II.
- An inherent failsafe mechanical interlock prevents asynchronous paralleling of the two sources.
- Stable positions (I - 0 - II) non-affected by typical vibration and shock.
- Constant pressure on the contacts non affected by network voltage perturbation.
- Quick, easy and extremely safe manual operation.

Further to the above the ATyS also includes:

- A simple and secure motorisation remote controls interface.
- Integrated switch position auxiliary contacts.
- An active "product availability" status feedback.
- Compatibility with virtually any make of ATS, AMF and Genset controller provided with volt-free contacts.

Power supply continuity for most electrically controlled total system optional standby power applications.

SOCOMEc UL products

The ATYS UL is a full load break transfer switch where the main switching components are from proven technology devices (SIRCOVER - Manual Transfer Switches) also fulfilling requirements in UL 98 and IEC 60947-3 standards. The transfer is done in open transition with a minimum supply interruption during transfer ensuring full compliance with UL 1008 and IEC 60947-6-1 international TSE standards.

As a stand-alone product, the ATyS is a non-automatic power transfer switch (an electrically operated transfer switch that is not self-acting), generally used in applications where the load is non-emergency, does not require automatic transfer and where operating persons can be made available to initiate the transfer.

The electrical control of the ATyS UL may be direct through push-buttons and dry contacts fitted onto the enclosure door or through a dedicated local or remote ATS controller.

Your preferred brand of ATS controller, genset / AMF controller or power / building management system, may easily be paired with the ATyS to provide a complete automatic transfer switch to suit your needs.

ATyS have three stable positions (I-0-II) which can be selected remotely, via volt-free contacts, or directly, through use of the emergency operation handle; emergency operation requires no supply to be present. The OFF position provides disconnection of both supplies ensuring downstream isolation for safe maintenance.

UL Applications

ATYS UL 1008 transfer switches are rated from 100 to 1200 A and designed for use in total system optional standby power applications for the safe transfer of a load supply between a normal and an alternate source.

Optional standby systems are those systems installed to provide an alternate source of power for structures for which a power outage could cause discomfort or interruption or damage to products or processes.