









100 A, 200 A, 260 A, 400 A

Preliminary operations

Check the following upon delivery and after removal of the packaging:

- Packaging and contents are in good condition.
- The product reference corresponds to the order.
- Contents should include:

Qty 1 x ATyS FT

Qty 1 x C66 Controller

Qty 1 x Harness

Warning

Risk of electrocution, burns or injury to persons and / or damage to equipment.

This Quick Start is intended for personnel trained in the installation and commissioning of this product. For further details refer to the product instruction manual available on the SOCOMEC website.

- This product must always be installed and commissioned by qualified and approved personnel.
- Maintenance and servicing operations should be performed by trained and authorized personnel.
- Do not handle any control or power cables connected to the product when voltage may be, or may become present on the product, directly through the mains or indirectly through external circuits.
- Always use an appropriate voltage detection device to confirm the absence of voltage.
- Ensure that no metal objects are allowed to fall in the cabinet (risk of electrical arcing).

Failure to observe good engineering practices as well as to follow these safety instructions may expose the user and others to serious injury or death.

Alsk of damaging the device.

In case the product is dropped or damaged in any way it is recommended to replace the complete product. Installation standards must be respected.

Accessories

Accessories are not included and must be ordered seperatly

- Terminal shrouds (see step 6A).
- Additional aux contacts (ref. 96990021).
- Digiware I/O 10 (ref. 48290140).
- Transformer 480 240 VAC (SPARTAN SP350MQMJ).
- Controller 24 VDC aux power supply
- (6W minimum type SELV) mandatory with I/O 10 Modules.
- Power terminal lugs (see step 1D).

For further details refer to the product instruction manual under chapter "Spares and Accessories".

Spares

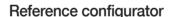
- ATyS C66 Controller (ref. 16000066).
- UL 1008 ATyS FT (ref. 960XXXXX).
- Connector kit (ref. 16090002).
- Controller Nema 3R gasket (ref. 16090001).
- Controller mounting screws (ref. 16090004).
- Controller mounting feet (ref. 16090005).
- Cable harness without transfomer (ref. 96964001).
- Cable harness with transfomer (ref. 96974001).











N° of poles **2**: 2P

3: 3P

Rating **010**: 100 A 020: 200 A 026: 260 A

9 6 X X X XXX

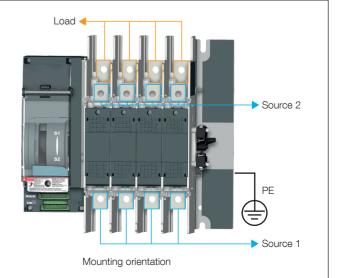
0: spare switch for networks up to 480 VAC 8: ATSE assembly for 480 V.a.c 3 wire network A: ATSE Assembly for networks up to 480 VAC

0: Without solid neutral 1: With solid neutral

Switch installation

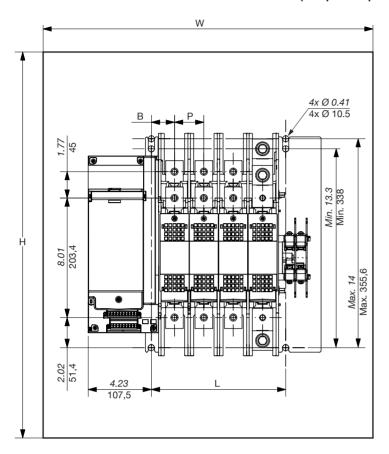


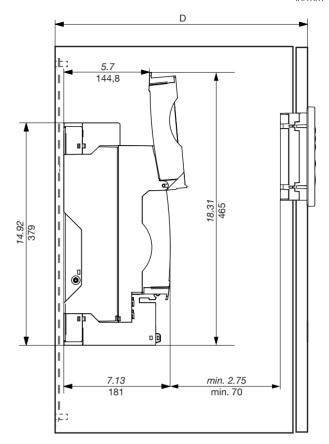
For Use on a Flat Surface of a Types 1, 3R, 12 and/or 12k enclosure.



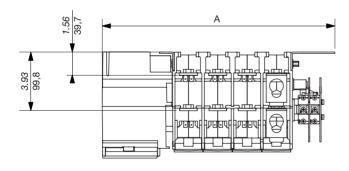
Switch & minimum enclosure size dimensions (4th pole represented with lugs installed.)

Dual Dimensions in/mm

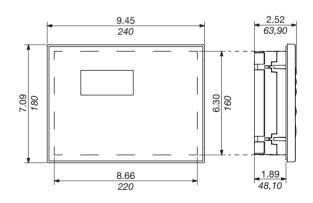




Switch top view



Controller dimensions

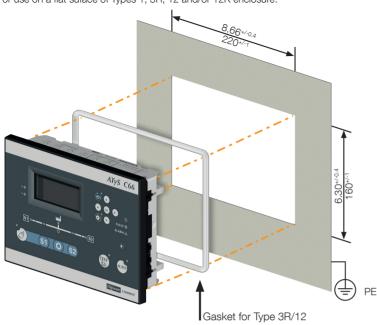


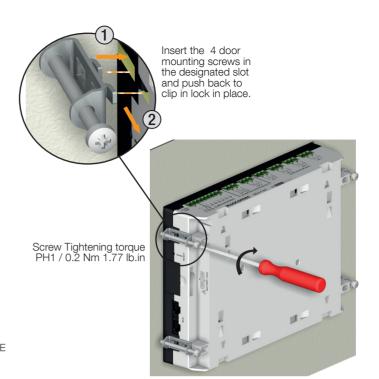
		Switch dimensions							Minimum enclosure size						
		-	4	E	3		L	F)	ŀ	1	V	٧	[)
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
	2P	10.47	266,30	1.25	31,80	3.85	98,70	1.38	35	20	508	16	406	12	305
100-200A	2P+N/3P	11.85	301,30	1.25	31,80	5.49	133,70	1.38	35	20	508	16	406	12	305
	3P+N/ 4P	13.24	336,30	1.25	31,80	6.60	168,70	1.38	35	20	508	16	406	12	305
	2P	11.67	296,30	1.55	39,30	5	128,60	1.97	50	48	1220	24	610	12	305
260-400A	2P+N/3P	13.63	346,30	1.55	39,30	7	178,60	1.97	50	48	1220	24	610	12	305
	3P+N/ 4P	15.60	396,30	1.55	39,30	8.97	228,60	1.97	50	48	1220	24	610	12	305

1C Mounting & connecting controller

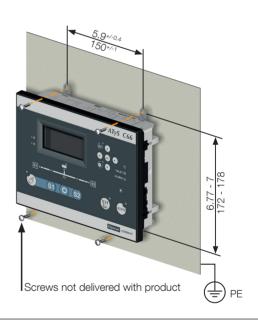
Door mounting

For use on a flat suface of Types 1, 3R, 12 and/or 12K enclosure.





Backplate mounting R0.24 R6.25 R0.24 R6.25 R0.24 R6.25 R0.24 R0.24 R0.25 R0.25 R0.24 R0.25 R0.25 R0.27 R0.25 R0.27 R0.25 R0.27 R0.25 R0.27 R0.2

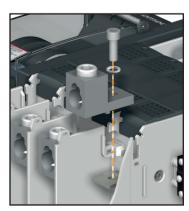


1D Installing terminal lugs (optional accessory)

Use terminal screws and washers supplied with the ATSE

Ose terminal screws and washers supplied with the ATSE																
Product Rating (A)	Designation	Ref. lugs Quantit		Openings per lug		/ Section (AWG)	Pr	essure torq		ew	ı	Bolt to	orqu	ıe	7	
riating (/ t)			reference	periag	min.	max.	lb.in	Nm	Siz	ze in	lb.in	Nm	0)	Size	in	mr
100A	Ilsco D0957	Contac	ot us	1	14	1/0	50	5,65	•	8	70.8	8	0	5mm	0.625	15,
200A	Ilsco D2831	Contac	ot us	1	6	250 KCMIL	275	31,1	0	5/16	70.8	8	0	5mm	1	25,
100-200 A		39542020 39543020	2	1	6	300 KCMIL	275	31,1	0	5/16	70.8	8	0	5mm	1.12	28
	CMC LA-300R	39544020	4													
	2	39542040	2													
260-400 A	3	39543040	3	1	4	600 KCMIL	550	62,1	0	1/2	310	35	0	8mm	1.79	45
	CMC LA-630R	39544040	4]												
260-400 A	Ilsco D3096	Contac	ot us	1	4	600 KCMIL	600	67,8	0	1/2	310	35	0	8mm	1.79	45

Power cable connections: For 100A use 1/0 AWG / For 200A use 250 KCMIL / For 260A use 300 Kcmil / For 400A use 600 Kcmil copper cables.





Mount the load terminal lugs on the switch terminals before mounting source 2 terminal lugs.

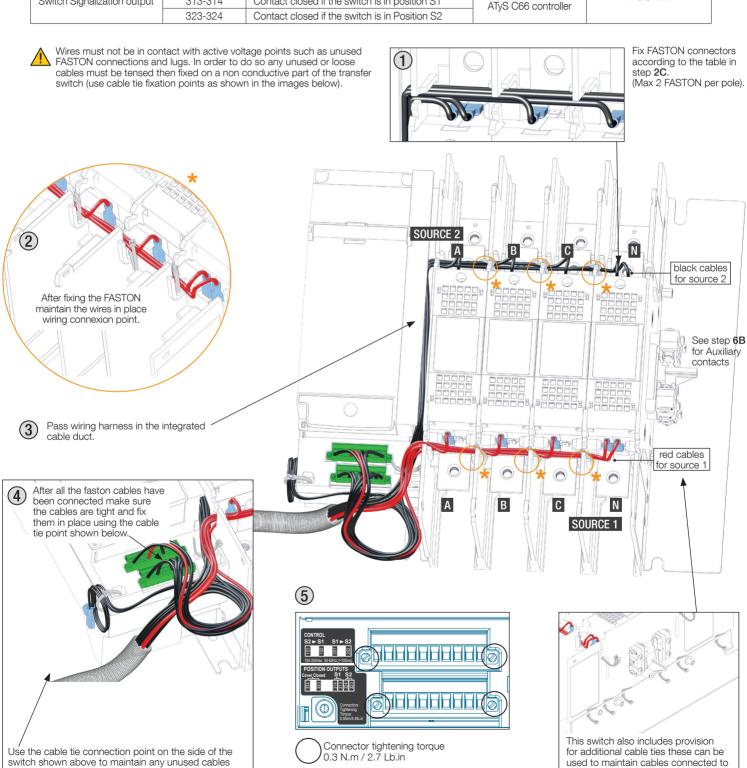
2A Mounting & connecting the cable harness

For details on the cable harness wiring diagram and integration see Cable harness Quickstart guide **ref 551401.** Cable harness without transformer (**ref. 96964001**) delivered with **96AX XXXX** products. Cable harness for connections with transformer (**ref. 96974001**) delivered with **968X XXXX** products. **Note: transformers not delivered with the product.**

Mounting the cable harness on the Switch

(for 2P, 2P+N or 3P switches).

Туре	Terminal N°	Description	Characteristics	Recomended Cross Section	
Outitals assuming the	101-102	Order switch to position S1	194-304 VAC 8 A for at		
Switch power input	201-202	Order switch to position S2	least 100 ms 50/60 Hz		
	333-334	Contact closed if cover is closed		17-14 AWG	
Switch Signalization output	313-314	Contact closed if the switch is in position S1 Internal use for ATyS C66 controller		1-2.5 mm ²	
	323-324	Contact closed if the switch is in Position S2	7.1170 000 00111101101		



the auxiliary contacts.

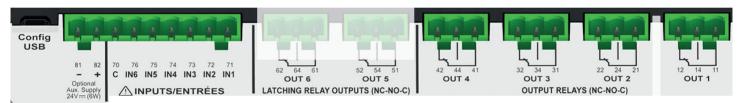
Connect the faston on the switch connexion according to your network and the table below:

						\	/oltage Tr	ansformer				
				RTSE fast	on connections		480 VAC		240 VAC			
							Primary Seconda					
Network type	Туре	Source	А	В	С	N	H1	H4	X1	X4		
240 VAC	2P	S2	S2A & 201	S2B	None (1)	None (1)						
240 VAC	2P	S1	S1A & 102	S1B	None (1)	None (1)						
120/240 VAC	2P + N	0D . N	OD . N	S2	S2A & 201	S2B	None (1)	S2N				
120/240 VAC		S1	S1A & 102	S1B	None (1)	S1N						
208 VAC	3P	S2	S2A & 201	S2B	S2C	None (1)						
200 VAC		S1	S1A & 102	S1B	S1C	None (1)						
120/208 VAC	3P+N / 4P	S2	S2A & 201	S2B	S2C	S2N						
120/200 VAC	3F+IN / 4F	S1	S1A & 102	S1B	S1C	S1N						
277/480 VAC	3P+N / 4P	S2	S2A	S2B	S2C	S2N & 201						
211/400 VAG	3P+N / 4P	S1	S1A	S1B	S1C	S1N & 102						
480 VAC + transfo	3P	S2	2xS2A	2xS2B	S2C	-	T2A	T2B	T2A'	T2B'		
400 VAC + (ransio	JP .	S1	2xS1A	2xS1B	S1C	-	T1A	T1B	T1A'	T1B'		

⁽¹⁾ Cables which are not used are to be fastened as shown in image 4 of step 2B.

Controller connection details

Wiring harness connectors to place on controller.



Top view



Bottom view

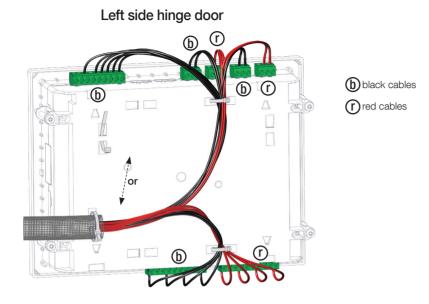
Туре	Terminal N°	Description	Characteristics	Recomended cross section	Tightening torque	
Sensing source 1	SOURCE 1 L1/L2/L3/N	Voltage sensing inputs source 1 & voltage supply (L1-L2)	Sensing voltage 50 - 575 V.a.c P-P - 50/60 Hz (+/- 10%)	AWG 18-14		
Sensing source 2	SOURCE 2 L1/L2/L3/N	Voltage sensing inputs source 2 & voltage supply (L1-L2)	Supply voltage (L1-L2) 88 - 576 V.a.c - 50/60Hz (+/- 10%) Ui 600V	0.75-2.5mm ²		
	71	IN1: SWITCH IN POS1				
	72	IN2: SWITCH IN POS 2				
	73	IN3: DOOR OPEN				
Inputs	74	IN4: programmable input 4	Do not connect to any external power supply	AVA/O 00 4 4		
	75	IN5: programmable input 5	Зарргу	AWG 20-14 0.5-2.5mm ²		
	76	IN6: programmable input 6			4.4-5.3 lb.in	
	70	Common point for inputs			0.5-0.6 Nm	
Aux power supply	81/82	- : negative terminal for aux supply +: positive terminal of aux supply	12-24 Vd.c.			
	12/14/11	OUT1: POS 1 ORDER				
	22/24/21	OUT2: POS 2 ORDER				
Outputs	32/34/31	OUT3: POS 1 ORDER	Dry contacts 8A / 277 VAC 50/60 Hz	*****		
Outputs	42/44/41	OUT4: POS 2 ORDER	5A / 24 VDC	AWG 16-14 1.5-2.5mm ²		
	52/54/51	OUT5: programmable output 5 (latching)		1.0 2.011111		
	62/64/61	OUT6: genset start relay				
Current transformers	IN/I3/I2/I1	CT neutal / CT phase C / CT phase B / CT phase A	CT input 1A or 5A			
Serial connection	RS485	Connection RS485 -: negative terminal of RS485 bus +: positive terminal of RS485 bus NC : Ground	RS485 bus insulated	LiYCY shielded twisted pair 30-14 AWG / 0.14 to 1.5 mm ²	1.9 - 2.2 Lb.in 0.22 -0.25 Nm	
Digiware*	DIGIBUS	Connection point for I/O 10 optional accessories & digiware connection (must use 24 VDC input)	RJ 45 digiware cable	-	-	

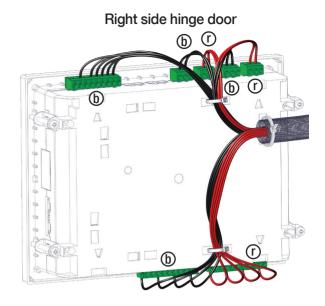
 $^{^{\}star}$ For more information check I/O module instruction sheet ref 545597

2E

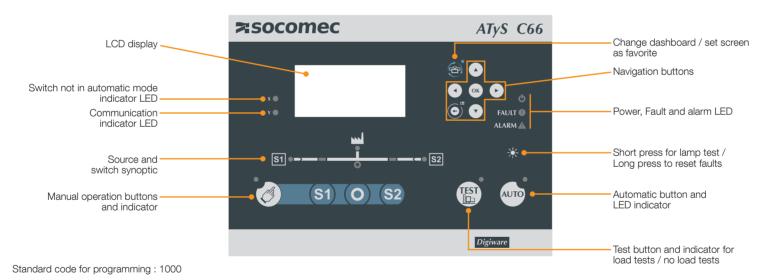
Mounting the cable harness on the controller

For details on the controller connectors refer to step 2D, after inserting the required connectors use the cable tie connection points shown below to maintain the cables in place:





3 Controller Interface



SMART WIZARD CONFIG:

When powered for the first time the controller will prompt the user to configure using the wizard. To access the wizard input code 1000 then the configuration will go as follow:



For advanced configuration go to parameters menu.

In STEP 5/8 of the wizard config make sure the network detected matches your network. In STEP 6/8 make sure the "switch technology" parameter is set to "ATyS FT".

1 If a fault is shown on the controller, correct the associated fault and clear by doing a long press (>3s) on the lamp test button.

4 Operational limits

Operating voltage @ 50/60 (+/- 10%) Hz								
Network	Minimum Coil Operating voltage (VAC)	Maximum Coil Operating voltage (VAC)						
277/480 VAC	194 (Ph/N)	304 (Ph/N)						
120/208 VAC	194 (Ph/Ph)	304 (Ph/Ph)						
120/240 VAC	194 (Ph/Ph)	304 (Ph/Ph)						
480 VAC with transformer	194 (Ph/N)	304 (Ph/N)						

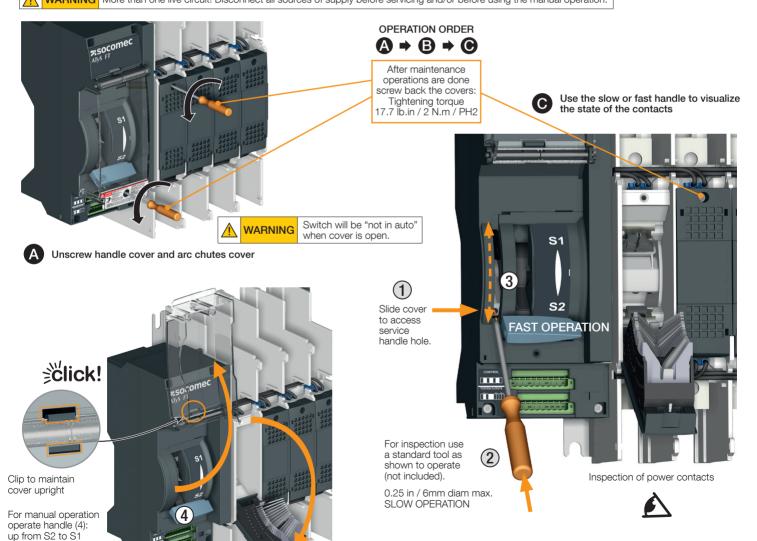
Operating temperature									
Switch and Transformer	10 /10	Controller							
32 to 131°F 0 to +55°C	14 to 158°F -10 to +70°C	-22 to 158°F -30 to +70°C with limitation on the LCD screen that may show distortion below 32°F / 0°C							

	Operating times (1)									
Rating	Transfer description	Minimum transfer time (ms) (Normal to alternate)	Minimum transfer time (ms) (Atlternate to normal)	Maximum transfer time (ms) (Normal to alternate)	Maximum transfer time (ms) (Atlternate to normal)					
100-200 A	Contact transfer time (2)	24	21	31	27					
100-200 A	Total transfer time (3)	100	280	127	486					
260-400 A	Contact transfer time (2)	30	27	45	32					
200-400 A	Total transfer time (3)	106	286	141	491					

- (1) All times measured without load and at 240 VAC at ambient temperature, actual times may vary depending on network and load. (2) Time for which load is disconnected from both source 1 and source 2 with both sources available.
- (2) Time for which load is disconnected from both source 1 and source 2 with both sources available.
 (3) Total time to transfer including detection of source total failure and transfer times.

Manual operation (for maintenance purpuses only) Instructions for manual, non-electric, offload operations for service

WARNING More than one live circuit! Disconnect all sources of supply before servicing and/or before using the manual operation.



B Open the cover and click in place and open the arc chute

down from S1 to S2

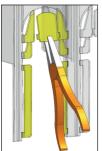
FAST OPERATION

Recommendation: carry out one offload manual operation with handle ④ (FAST OPERATION) before putting the switch back in service.

Reverse the procedure to close. Ensure that all is closed properly before putting back in service. In case any part of the ATyS FT switch is found to be damaged in any way, replace the complete switch.

Installing power terminal shrouds (optional accessories)

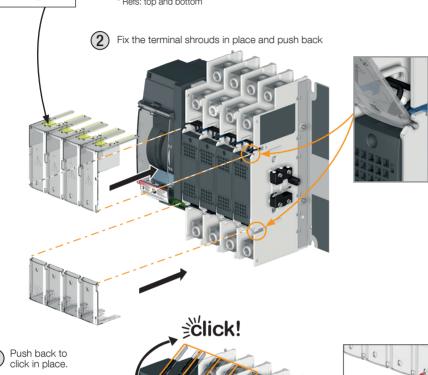
Top and bottom protection against direct contact with terminals or connecting parts.



For 250, 300 & 600 KCMIL (200, 260 400A) break off all removable parts (highlighted on the picture). For 1/0 & (100A) do not remove any parts.

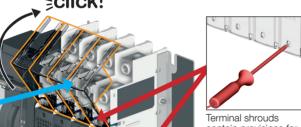
	No. of poles	Reference*
100-200A	2P	96982020
	3P/2P+N	96983020
	4P/3P+N	96984020
	2P	96982040
260-400A	3P/2P+N	96983040
	4P/3P+N	96984040

* Refs: top and bottom





be locked in place using locking points



contain provisions for voltage sensing



PERIODIC MAINTENANCE

The ATyS FT shall be maintained in accordance with industry standards and as per instructions in the ATyS FT instruction sheet.

As per NFPA 110 requirements for emergency and standby power systems the ATyS FT should be inspected and should be exercised under load at least monthly.

Refer to step 5 for instructions for manual, "non-electric", offload operations for service.



More than one live circuit.

Disconect all sources of supply before servicing and/or before using the manual operation.

Additional auxiliary contacts

Switch has 2 pre-installed auxilliary contacts, the kit below is for 2 additional contacts with protection against direct contact.



Terminal tightening torque 7.9 lb.in / 0.9 Nm

Auxiliary contact electrical characteristics						
Rated current (125-480 VAC)	22 A					
Rated current (125 VDC)	0.5A					
Rated current (250 VDC)	0.25 A					
Rated horse power up to 250 VAC	1/2 HP					
Rated horse power up to 480 VAC	1/4 HP					
Recommended wire section for 22A	10 AWG 4 mm ²					



Use the correct protection according to your auxiliary contact circuit and your load



Remove pre-installed auxillary contact



PH2 screwdriver



Assemble contacts with parts from kit as shown below



Assemble optional aux contact and pre-installed aux contact together



Tightening torque 17.7 lb.in / 2 N.m / PH2



Make sure contact is correctly activated



Place the transparent plastic piece to cover the auxiliary conacts and lock in place in order to protect from direct contacts.



