



# Mounting

## DIN rail mounting

### 1. Mounting

IEC 60715  
DIN rail

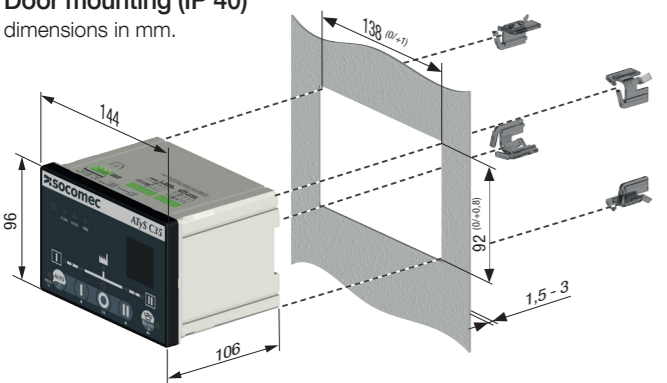


### 2. Unmounting



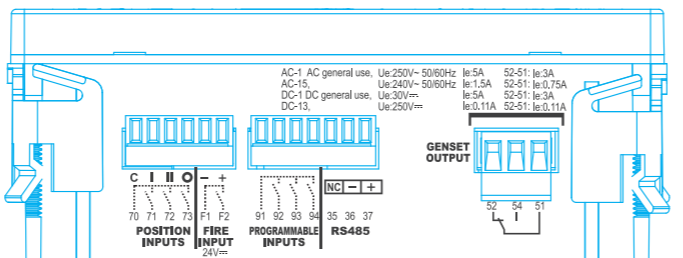
## Door mounting (IP 40)

dimensions in mm.

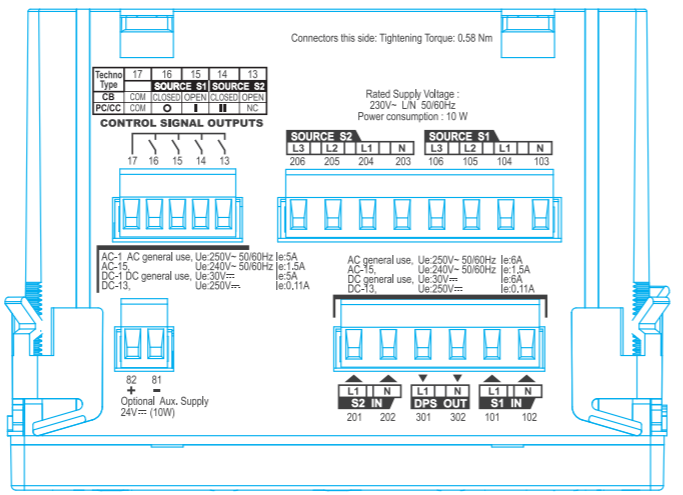


# Connectors

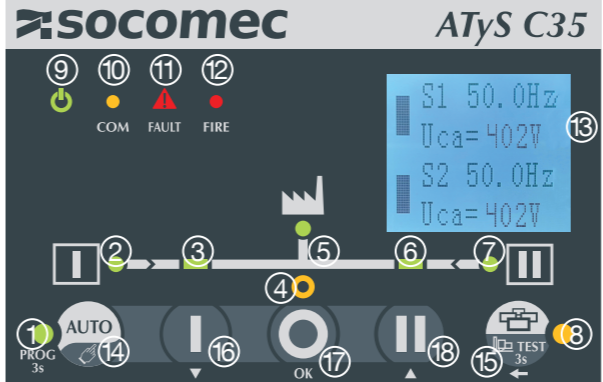
## Connectors top view



## Connectors bottom view



# HMI



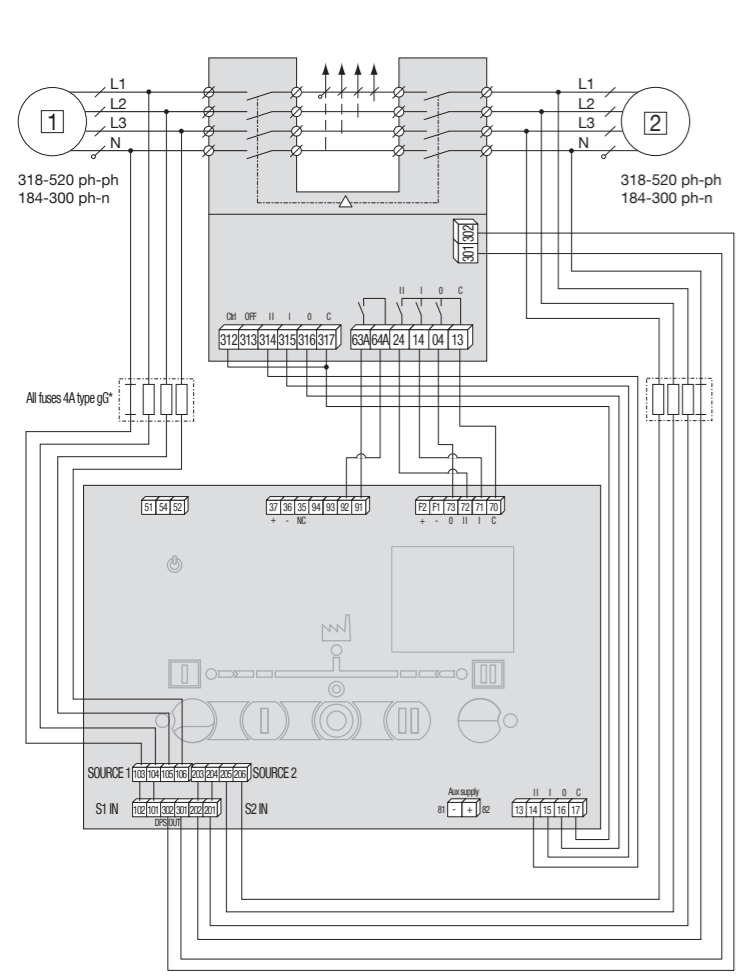
- ① Auto LED (Green fixed when in auto mode, green blinking when transfer or fault ongoing).
- ② Source 1 availability information (green fixed when source 1 is present and available and within threshold limits, green blinking when source 1 is present but outside of threshold limits, off when under 50VAC).
- ③ Switch 1 LED position indications (green fixed when in position 1).
- ④ Zero position LED indication (yellow when in position 0).
- ⑤ Load supplied information (green fixed when load is supplied by an available source) green blinking when load is supplied with a source which is present but outside of threshold limits).
- ⑥ Switch 2 LED position indications (green fixed when in position 2).
- ⑦ Source 2 availability information (green fixed when source 2 is present and available and within threshold limits, green blinking when source 2 is present but outside of threshold limits, off when under 50VAC).
- ⑧ Test LED (yellow fixed when a test ins ongoing or when in programming mode).
- ⑨ Run LED (Green when product is powered).
- ⑩ COM LED (yellow blinking when RS communications is ongoing).
- ⑪ Fault LED (red blinking – long blink when fault or inhibit is activated).
- ⑫ FIRE LED (red fixed when fire input is activated).
- ⑬ Multi line LCD screen.
- ⑭ AUTO/MANU/PROG button, short press (<3s) to switch between AUTO and MANU modes then add operator password to confirm (1000 default value). Long press (>3s) on this button to enter the programming mode.
- ⑮ DASHBOARD/TEST button, short press (<3s) to change the dashboard shown (7 screens) (after 30s will reset to default dashboard. A long press (>3s) will start a TEST ON LOAD, to validate enter the operator password (1000 default). To stop the test, long press on this button again).
- ⑯ DOWN/POS1 button, in MANU mode will switch to position 1. In programming mode or when password is requested, go up in the menu screen.
- ⑰ OK/POS0 button, in MANU mode will switch to position 0. Use to validate selection in programming mode or when a password is requested.
- ⑱ UP/POS2 button, in MANU mode will switch to position 2. In programming mode or when password is requested, go down in the menu screen.

# Programming

To access the programming mode do a long press on button 14 and enter the password (Default 1000).

Menu	Submenu	Adjustment range	Default value	Description
System	NETWORK	1P+N, 2P, 3P, 3P+N	3P+N	Select the installation network type.
	NOM. VOLT.	220V/ph-N, 230V/ph-n, 240V/ph-N, 380V/ph-ph, 400V/ph-ph, 415V/ph-ph	400V/ph-ph <sup>(4)</sup>	Network nominal voltage.
	NOM. FREQ.	50, 60 Hz	50Hz	Network nominal frequency
	APP	S1-Mains S2-Gens, S1-Gens S2-Mains, S1-Mains S2-Mains	S1-Mains S2-Gens	Type of application.
	TECHNO TYPE	PC Type, CC Type, CB Type	PC Type	Type of RTSE technology.
	SIGNALTIME	0.1s-20s, MAINT	5.0s	Duration of the signal time (when CC type is selected the signal time is always maintained).
	PRIOR NET	S1, S2	S1	Priory source settings, the controller prioritize the source selected.
	RETURNS	AUTO RESTRANS, MANU RETRANS, NO RETRANS	AUTO RESTRANS	Retransfer mode, automatic, manual retransfer (needs user validation before transferring to priority source), or no retransfer (controller will not retransfer automatically to the priority source).
	ROT PH	L1L2L3, L3L2L1, OFF	OFF	Selection of the rotation order of phases, when "OFF" is selected controller will not check the phase rotation order.
	COM	Contains submenu for all RS485, Modbus settings cf. communication settings.		
PASSWORD	0000-9999	1000	1000	Password for required access settings such as mode change, test launch and programming.
BACKLIGHT	Keep-Active, 30min-1min	Keep-Active	30min	Duration of the backlight on LCD screen (if the product is using 24VDC only to power backlight will be off).
Language	ENGLISH, 中文	English	English	Controller language.
ABOUT	NA	NA	NA	Show software version, and serial number.
RST. FACTORY	NA	N/A	N/A	Press "OK" in this menu to reset all settings to default values.
Voltage <sup>(1)</sup>	S1-OVth	120-102%	115%	Over voltage threshold for loss of source 1 (must be greater than hysteresis setting).
	S1-OVhy	119-101%	110%	Over voltage hysteresis for return of source 1 (must be inferior to threshold setting).
	S1-UVth	98-80%	85%	Under voltage threshold for loss of source 1 (must be greater than to hysteresis setting).
	S1-UVhy	99-81%	95%	Under voltage hysteresis for return of source 1 (must be greater than to threshold setting).
	S2-OVth	120-102%	115%	Over voltage threshold for loss of source 2 (must be greater than hysteresis setting).
	S2-OVhy	119-101%	110%	Over voltage hysteresis for return of source 2 (must be inferior to threshold setting).
S2-UVth	98-80%	85%	Under voltage threshold for loss of source 2 (must be greater than to hysteresis setting).	
S2-UVhy	99-81%	95%	Under voltage hysteresis for return of source 2 (must be greater than to threshold setting).	
Frequency <sup>(2)</sup>	S1-OFth	120-102%	115%	Over frequency threshold for loss of source 1 (must be greater than hysteresis setting).
	S1-OFhy	119-101%	110%	Over frequency hysteresis for return of source 1 (must be inferior to threshold setting).
	S1-UFth	98-90%	90%	Under frequency threshold for loss of source 1 (must be inferior to hysteresis setting).
	S1-UFhy	99-91%	95%	Under frequency hysteresis for return of source 1 (must be greater than to threshold setting).
	S2-OFth	120-102%	115%	Over Frequency threshold for loss of source 2 (must be greater than hysteresis setting).
	S2-OFhy	119-101%	110%	Over frequency hysteresis for return of source 2 (must be inferior to threshold setting).
S2-UFth	98-90%	90%	Under frequency threshold for loss of source 2 (must be inferior to hysteresis setting).	
S2-UFhy	99-91%	95%	Under frequency hysteresis for return of source 2 (must be greater than to threshold setting).	
Timers	S1-FT	3-60s	5s	Source 1 fail timer.
	S2-FT	3-60s	5s	Source 2 fail timer.
	S1-RT	3-3600s	5s	Source 1 return timer.
	S2-RT	3-3600s	5s	Source 2 return timer.
	S1-S2 ODT	0-20s	0s	Source 1 dead band timer.
	S2-S1 ODT	0-20s	0s	Source 2 dead band timer.
	CT	0-3600s	180s	Generator Cool down timer.
	SD	0-6000s	0s	Generator start delay.
ST	1-3600s	30s	Generator start timeout timer.	
Test	BUTTON TEST	Test on load, Test off load	Test on load	Test mode for the HMI test button.
	LCD TEST			Starts a lamp test and LCD test.
In/Out	IN. FUN1	See full manual	NOT IN AUTO	Input function for input 1 (91-92).
	IN. TYPE 1	NO, NC	NC	Input type.
	IN. DELAY. 1	0.01-60.00s	0.05	Input delay timer.
	IN. FUN 2	See full manual	NONE	Input function input 2 (91-93).
	IN. TYPE 2	NO, NC	NO	Input type.
	IN. DELAY. 2	0.01-60.00s	0.05	Input delay timer.
	IN. FUN 3	See full manual	NONE	Input function input 3 (91-92).
	IN. TYPE 3	NO, NC	NO	Input type.
	IN. DELAY. 3	0.01-600.00s	0.05	Input delay timer.
OUT. FUN1 <sup>(3)</sup>	See full manual	GENSET	Output function for programmable output.	
OUT. TYPE <sup>(4)</sup>	NO, NC	NC	output type.	

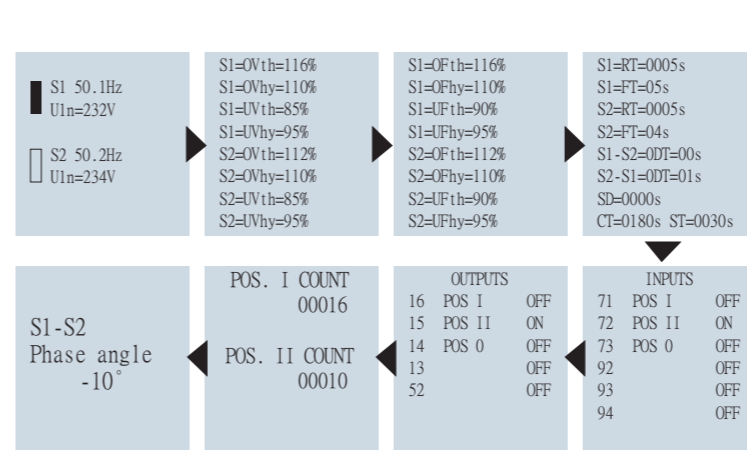
# Connection with ATyS



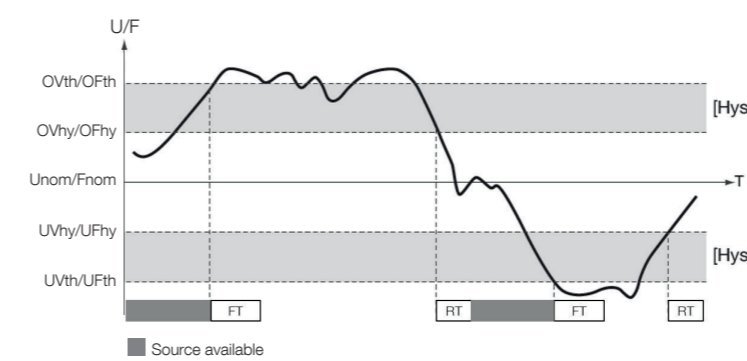
# Technical characteristics

Denomination	Terminal	Description	Characteristics
Control signal outputs (orders to RTSE)	13	Not used / Source 2 open	AC1 – General use – Ie: 5A , Ue: 250 V.a.c DC1 – General use – Ie: 5A , Ue: 30 V.d.c
	14	Position II order / Source 2 closed	AC15 – Ie: 3A, Ue: 120 V.a.c AC15 – Ie: 1.5A, Ue: 240 V.a.c
RS485	15	Position I order / Source 1 open	DC13 – Ie: 0.22A, Ue: 125 V.d.c DC13 – Ie: 0.11A, Ue: 250 V.d.c
	16	Position 0 order / Source 1 closed	
	17	Common point for position output	
	35	NC – Not connected	
Genset output	36	Negative electrode	RS485 isolated bus
	37	Positive electrode	
	51	Common point	
Controller programmable inputs	52	Closed to start the Genset (closed when controller is powered off)	AC1 – General use – Ie: 3A , Ue: 250 V.a.c DC1 – General use – Ie: 3A , Ue: 30 V.d.c
	54	Open to start the genset	AC15 – Ie: 5A/51: 3A 52/51: 1.5A Ue: 120 V.a.c AC15 – Ie: 5A/51: 1.5A 52/51: 0.75A Ue: 240 V.a.c DC13 – Ie: 5A/51: 0.22A 52/51: 0.22 A 125 V.d.c DC13 – Ie: 5A/51: 0.11A 52/51: 0.11 A 250 V.d.c
Return of information from RTSE (Position inputs)	91	Common point for programmable inputs	Do not use external voltage Power from common point
	92	Programmable input 1 (Set as default to "NOT IN AUTO.")	
	93	Programmable input 2	
	94	Programmable input 3	
Fire input	70	Common point for position inputs	Do not use external voltage Power from common point
	71	Position I RTSE	
	72	Position II RTSE	
Optional Aux supply 24V.d.c	73	Position 0 RTSE	12-24 V.d.c
	F1	Negative electrode of the d.c power source	
Source 1 and 2 voltage inputs	F2	Positive electrode of the d.c power source	
	81	Negative electrode of the d.c power source	10-30 V.d.c (Auxiliary supply for controller, does not supply RTSE)
	82	Positive electrode of the d.c power source	
	103	Source 1 N	Sensing range: 184-300 V.a.c* (ph-n) 50-300 V.a.c (ph-n) 45-65 Hz
	104	Source 1 L1	
	105	Source 1 L2	
DPS output (RTSE power supply)	106	Source 1 L3	
	203	Source 2 N	Supply: 184-300 V.a.c* (ph-n) 45-65 Hz Max consumption 10 W *200-300 V.a.c in maintained mode
	204	Source 2 L1	
	205	Source 2 L2	
	206	Source 2 L3	
	301	Phase output	AC – General use – Ie: 6A , Ue: 250 V.a.c DC – General use – Ie: 6A , Ue: 30 V.d.c
	302	Neutral output	AC15 – Ie: 3A, Ue: 120 V.a.c AC15 – Ie: 1.5A, Ue: 240 V.a.c DC13 – Ie: 0.22A, Ue: 125 V.d.c DC13 – Ie: 0.11A, Ue: 250 V.d.c

# Dashbord order



# Voltage / frequency settings



(1) % of Voltage set in "NOM VOLT" must be within the working limits of the controller 184-300 V.a.c P-N.  
 (2) % of Frequency set in "NOM FREQ".  
 (3) Only configurable when "APP" is set to S1-Mains S2-Mains.  
 (4) If voltage is set to 1PPH-N the default value for NOM. VOLT. Will automatically be set to 230Vph-n.

\*Using a Socomec cable harness kit excludes the need for fuses