

SIRIUS

three-phase
60-6000kVA

Sirius stabilizers are available for different ranges of input voltage fluctuation. In the $\pm 15\%$ / $\pm 20\%$ and $\pm 25\%$ / $\pm 30\%$ types, the change of input range is obtained through different internal connections (only up to 2000 kVA $\pm 15\%$ and equivalent).

Sirius stabilizers are equipped with columnar voltage regulators which enable the achievement of high ratings (up to 6000 kVA) and a solid and reliable construction, thus meeting the most diverse industrial applications.



The Sirius voltage stabilizers regulate the output voltage independently on each phase. Similarly to the other models, they can supply any single-phase, bi-phase and three-phase load even in case of and up to 100% unbalanced load current and asymmetrical mains distribution.

In any case, the presence of the neutral wire is required. The stabilizer can also operate without neutral wire by adding a device able to generate it (D/zn or D/yn isolating transformer or neutral point reactor). The stabilisers are cooled via natural air ventilation, assisted by extracting fans when the cabinet internal temperature exceeds 35°C.

The instrumentation consists of two multi-task digital line analyzers (fitted with RS485 port) able to provide with information regarding the status of the lines upstream and downstream the voltage stabilizer (phase and linked voltages, current, power factor, active power, apparent power, reactive power, etc.)

The operating status of the stabilizer can be monitored by means of the LEDs on the front panel displaying all the information regarding each phase operating mode ('power on'; reaching of voltage regulation limits; increase/decrease of voltage regulation) and the possible alarms (minimum and maximum voltage, maximum current: over temperature; ventilation failure). The alarm indicators are accompanied by an acoustic alarm.

Monitoring activities can be run remotely by installing the STABIMON software provided with the unit on a PC (connected to the stabilizer via Ethernet or a GPRS modem). The readings are stored locally by the control system and sent via the Internet (if an Ethernet or GPRS modem connection is established) to a server at HQ, thus providing the Service centre with the necessary information.

It is also possible to communicate with the stabilizer with the MODBUS TCP/IP protocol (standard communication protocol between electronic industrial equipment) via an Ethernet connection with RJ45 cable.

The control system is also provided with two USB ports for downloading stored data and uploading new releases of the control card software.

The Sirius stabilizer is provided with an electronic voltage regulator protection system activates in case of overload on the voltage regulator. In such condition the load supply is not interrupted, but the stabilizer output voltage is automatically set to the lower between the mains voltage and the pre-set output voltage. The service continuity is guaranteed, although the voltage is not stabilized. When the overload condition ceases to exist, the stabilizer switches automatically back to regular functioning.

Voltage stabilisation	Independent phase control
Output voltage selectable via display, PC and/or Ethernet*	from 210 to 255V (L-N) from 360 to 440V (L-L)
Frequency	50/60Hz \pm 5%
Admitted load variation	Up to 100%
Admitted load imbalance	100%
Cooling	Natural air ventilation. Up to 35°C aided with fans
Ambient temperature	-25/+45°C
Storage temperature	-25/+60°C
Max relative humidity	95%
Admitted overload	200% 2 min.
Harmonic distortion	None introduced
Colour	RAL 7035
Protection degree	IP21
Instrumentation	<ul style="list-style-type: none"> - Input & output digital multimeter with RS485 port - LCD display
Installation	Indoor
Regulator overload protection	Digital control
Communication system	Ethernet / GPRS / USB / MODBUS TCP/IP
Overvoltage protection	<ul style="list-style-type: none"> - Class I input surge arrester - Class II output surge arrester - Optimal voltage return through supercapacitors - in case of blackout

* The output voltage can be adjusted by choosing **one** of the indicated values.
 Such choice sets the new nominal value as a reference for all the stabilizer parameters.

Accessories - available on request

Interrupting devices
Load protection against over/undervoltage
Manual by-pass line
Total protection kit
Input isolating transformer
Integrated automatic power factor correction system
EMI/RFI filters
Neutral point reactor
IP54 protection degree for indoor and outdoor installation

All the stabilizers are designed and built in compliance with the Low Voltage and Electromagnetic Compatibility European Directives with regard to the CE marking requirements. The products are built with suitable quality components and that the manufacturing process is constantly verified in accordance with the Quality Control Plans which the manufacturer applies in compliance with the ISO 9001:2008 Standards. The commitment towards environmental issues and safety at work matters is guaranteed by the certification of the Management System according to the ISO14001:2004 and OHSAS18001:2007 Standards. In order to obtain better performance, the products described in the present document can be altered by the manufacturer at any date and without prior notice. Technical data and descriptions do hold therefore any contractual value.

Input voltage variation $\pm 10\%$, Rated power 200 to 6000 kVA

The values listed in the table are referred to 400V nominal voltage (Output voltage 400 V $\pm 0,5\%$)

Rated Power [kVA]	Type	Input Variation	Max. Input Current [A]	Output Current [A]	Adjust. Speed [ms/V]	Dimension WxDxH [mm]	Weight [kg]
200	200-10	$\pm 10\%$	321	289	30	600x800x2000	650
250	250-10	$\pm 10\%$	401	361	30	600x800x2000	670
320	320-10	$\pm 10\%$	514	462	30	1200x800x1800	900
400	400-10	$\pm 10\%$	642	578	30	1200x800x1800	950
500	500-10	$\pm 10\%$	803	723	30	1200x800x1800	1050
630	630-10	$\pm 10\%$	1011	910	30	1200x800x1800	1300
800	800-10	$\pm 10\%$	1284	1156	30	1200x800x2000	1400
1000	1000-10	$\pm 10\%$	1606	1445	30	1800x1000x2000	1700
1250	1250-10	$\pm 10\%$	2007	1806	36	1800x1000x2000	2200
1600	1600-10	$\pm 10\%$	2569	2312	36	2400x1000x2000	2400
2000	2000-10	$\pm 10\%$	3211	2890	36	3000x1000x2000	3000
2500	2500-10	$\pm 10\%$	4014	3613	36	3600x1000x2100	4000
3200	3200-10	$\pm 10\%$	5138	4624	36	3600x1000x2100	4300
4000	4000-10	$\pm 10\%$	6422	5780	45	3600x1400x2200	6000
5000	5000-10	$\pm 10\%$	8028	7225	45	3600x1400x2200	7300
6000	6000-10	$\pm 10\%$	9634	8671	54	4200x2040x2400	11000



Input voltage variation $\pm 20\%$ or $\pm 15\%$, Rated power 100 to 4000 kVA

The values listed in the table are referred to 400V nominal voltage (Output voltage 400 V $\pm 0,5\%$)

Rated Power	Type	Input Variation	Max. Input Current	Output Current	Adjust. Speed	Dimension WxDxH	Weight
[kVA]			[A]	[A]	[ms/V]	[mm]	[kg]
100	100-20	$\pm 20\%$	180	144	15	600x800x2000	650
125	125-15	$\pm 15\%$	213	181	20		
125	125-20	$\pm 20\%$	226	181	15	600x800x2000	670
160	160-15	$\pm 15\%$	272	231	20		
160	160-20	$\pm 20\%$	289	231	15	1200x800x1800	900
200	200-15	$\pm 15\%$	340	289	20		
200	200-20	$\pm 20\%$	361	289	15	1200x800x1800	950
250	250-15	$\pm 15\%$	425	361	20		
250	250-20	$\pm 20\%$	452	361	15	1200x800x1800	1050
320	320-15	$\pm 15\%$	544	462	20		
320	320-20	$\pm 20\%$	578	462	20	1200x800x1800	1300
400	400-15	$\pm 15\%$	680	578	20		
400	400-20	$\pm 20\%$	722	578	15	1200x800x2000	1400
500	500-15	$\pm 15\%$	851	723	20		
500	500-20	$\pm 20\%$	903	723	15	1800x1000x2000	1700
630	630-15	$\pm 15\%$	1071	910	20		
630	630-20	$\pm 20\%$	1138	910	18	1800x1000x2000	2200
800	800-15	$\pm 15\%$	1360	1156	24		
800	800-20	$\pm 20\%$	1445	1156	18	2400x1000x2000	2400
1000	1000-15	$\pm 15\%$	1700	1445	24		
1000	1000-20	$\pm 20\%$	1806	1445	18	3000x1000x2000	3000
1250	1250-15	$\pm 15\%$	2125	1806	24		
1250	1250-20	$\pm 20\%$	2125	1806	18	3600x1000x2100	4000
1600	1600-15	$\pm 15\%$	2720	2312	24		
1600	1600-20	$\pm 20\%$	2890	2312	18	3600x1000x2100	4300
2000	2000-15	$\pm 15\%$	3400	2890	24		
2000	2000-20	$\pm 20\%$	3613	2890	22	3600x1400x2200	6000
2500	2500-15	$\pm 15\%$	4251	3613	30		
2500	2500-20	$\pm 20\%$	4516	3613	22	3600x1400x2200	7300
3200	3200-15	$\pm 15\%$	5440	4624	30		
3200	3200-20	$\pm 20\%$	5780	4624	27	4200x2000x2400	11000
4000	4000-15	$\pm 15\%$	6800	5780	36		

Input voltage variation $\pm 30\%$ to $\pm 25\%$, Rated power 60 to 2500 kVA

The values listed in the table are referred to 400V nominal voltage (Output voltage 400 V $\pm 0,5\%$)

Rated Power	Type	Input Variation	Max. Input Current	Output Current	Adjust. Speed	Dimension WxDxH	Weight
[kVA]			[A]	[A]	[ms/V]	[mm]	[kg]
60	60-30	$\pm 30\%$	124	87	10	600x800x2000	650
80	80-25	$\pm 25\%$	154	116	12		
80	80-30	$\pm 30\%$	165	116	10	600x800x2000	670
100	100-25	$\pm 25\%$	193	144	12		
100	100-30	$\pm 30\%$	206	144	10	1200x800x1800	900
125	125-25	$\pm 25\%$	241	181	12		
125	125-30	$\pm 30\%$	258	181	10	1200x800x1800	950
160	160-25	$\pm 25\%$	308	231	12		
160	160-30	$\pm 30\%$	330	231	10	1200x800x1800	1050
200	200-25	$\pm 25\%$	385	289	12		
200	200-30	$\pm 30\%$	413	289	10	1200x800x1800	1300
250	250-25	$\pm 25\%$	482	361	12		
250	250-30	$\pm 30\%$	516	361	10	1200x800x2000	1400
320	320-25	$\pm 25\%$	617	462	12		
320	320-30	$\pm 30\%$	661	462	10	1800x1000x2000	1700
400	400-25	$\pm 25\%$	770	578	12		
400	400-30	$\pm 30\%$	826	578	12	1800x1000x2000	2200
500	500-25	$\pm 25\%$	963	723	15		
500	500-30	$\pm 30\%$	1032	723	12	2400x1000x2000	2400
630	630-25	$\pm 25\%$	1214	910	15		
630	630-30	$\pm 30\%$	1300	910	12	3000x1000x2000	3000
800	800-25	$\pm 25\%$	1541	1156	15		
800	800-30	$\pm 30\%$	1651	1156	12	3600x1000x2100	4000
1000	1000-25	$\pm 25\%$	1927	1445	15		
1000	1000-30	$\pm 30\%$	2064	1445	12	3600x1000x2100	4300
1250	1250-25	$\pm 25\%$	2408	1806	15		
1250	1250-30	$\pm 30\%$	2580	1806	15	3600x1400x2200	6000
1600	1600-25	$\pm 25\%$	3083	2312	18		
1600	1600-30	$\pm 30\%$	3303	2312	15	3600x1400x2200	7300
2000	2000-30	$\pm 30\%$	4130	2892	18		
2000	2000-25	$\pm 25\%$	3853	2890	18	4200x2000x2400	11000
2500	2500-25	$\pm 25\%$	4817	3613	22		

Input voltage variation +15% to -35%, Rated power 80 to 2500 kVA

The values listed in the table are referred to 400V nominal voltage (Output voltage 400 V \pm 0,5%)

Rated Power	Type	Input Variation	Max. Input Current	Output Current	Adjust. Speed	Dimension WxDxH	Weight
[kVA]			[A]	[A]	[ms/V]	[mm]	[kg]
80	80-15/35	+15% -35%	178	116	12	600x800x2000	770
100	100-15/35	+15% -35%	222	144	12	600x800x2000	800
125	125-15/35	+15% -35%	278	181	12	1200x800x1800	1050
160	160-15/35	+15% -35%	356	231	12	1200x800x1800	1150
200	200-15/35	+15% -35%	444	289	12	1200x800x1800	1250
250	250-15/35	+15% -35%	556	361	12	1200x800x1800	1700
320	320-15/35	+15% -35%	711	462	12	1200x800x1800	1800
400	400-15/35	+15% -35%	889	578	12	2400x1000x2000	2100
500	500-15/35	+15% -35%	1111	723	15	2400x1000x2000	2900
630	630-15/35	+15% -35%	1400	910	15	3000x1000x2000	3050
800	800-15/35	+15% -35%	1778	1156	15	3600x1000x2100	3800
1000	1000-15/35	+15% -35%	2223	1445	15	3600x1000x2100	4450
1250	1250-15/35	+15% -35%	2779	1806	15	4800x1000x2100	4800
1600	1600-15/35	+15% -35%	3557	2312	18	4800x1400x2200	7700
2000	2000-15/35	+15% -35%	4446	2890	18	4800x1400x2200	9050
2500	2500-15/35	+15% -35%	5558	3613	22	6000x2000x2400	13500

Input voltage variation +15% to -45%, Rated power 60 to 2000 kVA

The values listed in the table are referred to 400V nominal voltage (Output voltage 400 V \pm 0,5%)

Rated Power	Type	Input Variation	Max. Input Current	Output Current	Adjust. Speed	Dimension WxDxH	Weight
[kVA]			[A]	[A]	[ms/V]	[mm]	[kg]
60	60-15/45	+15% -45%	158	87	10	600x800x2000	850
80	80-15/45	+15% -45%	211	116	10	600x800x2000	900
100	100-15/45	+15% -45%	262	144	10	1200x800x1800	1200
125	125-15/45	+15% -45%	329	181	10	1200x800x1800	1250
160	160-15/45	+15% -45%	420	231	10	1200x800x1800	1400
200	200-15/45	+15% -45%	525	289	10	1200x800x1800	1900
250	250-15/45	+15% -45%	656	361	10	1200x800x1800	2000
320	320-15/45	+15% -45%	840	462	10	2400x1000x2000	2300
400	400-15/45	+15% -45%	1051	578	12	2400x1000x2000	3200
500	500-15/45	+15% -45%	1315	723	12	3000x1000x2000	3400
630	630-15/45	+15% -45%	1655	910	12	3600x1000x2100	4200
800	800-15/45	+15% -45%	2102	1156	12	3600x1000x2100	4900
1000	1000-15/45	+15% -45%	2627	1445	12	4800x1000x2100	5300
1250	1250-15/45	+15% -45%	3284	1806	15	4800x1400x2200	87 00
1600	1600-15/45	+15% -45%	4204	2312	15	4800x1400x2200	10100
2000	2000-15/45	+15% -45%	5254	2890	18	6000x2000x2400	15000