

DATASHEET



- Robustness and reliability
- High MTBF
- Redundant DC and AC systems
- Maintenance-free battery banks
- DC and AC service switchboard

CE-400T5-230M5-2X17-01

General description

Safe Supply Systems are used in all those processes where a reliable and available supply is required at all times, where it is essential to protect equipment and data critical to your business. Our safe supply systems which incorporate Rectifiers, Inverters, Chargers and Battery Banks are used in different areas of

- Industry
- Naval sector
- Airports

- Railways
- Power plants
- Isolated power supply installations

The Safe Power Systems is a set of electrical switchgear that forms part of an installation together with other devices such as rectifiers, inverters, converters, chargers and batteries that constitute a robust, reliable and redundant power supply.

Usually, the Safe Power System supplies DC and AC services at the same time. In case of main source failure, load supply is maintained with energy stored in batteries or from the alternative path. The redundancy between the different parts of the installation allows to maintain and assure the supply of the loads reaching an MTBF high degree

Safe Food Systems developed by SUPSONIK, S.L. are characterized by the following characteristics:

- High MTBF level
- Safe, automatic or manual redundancy manoeuvre
- High reliability battery sets
- Protection against excessive battery discharge
- Control and management of installation parameters
- Voltage and current protection devices
- Control of local and remote manoeuvre
- BUS-DC current leakage monitoring
- Custom installation with custom switchboards

*Supsonik S.L. Offer customized development with special features and adapted to your needs.
For further information please contact the manufacturer.*

TS-110/300 AL Rectifier [redundant x2]

Rated power	33 kW [x2 units]
Nominal input voltage AC	400 V ~3N 50 Hz ± 10%
Rated DC output voltage	110 V
DC Floating Voltage	122 V
DC system minimum voltage	93.5 V
Total Output DC Current	300 A
Galvanic isolation	Yes
Voltage static voltage (load variation 10 ÷ 90%)	± 1%
Voltage dynamic stability (load variation 10 ÷ 90%)	<10% (recovery time 200ms)

LOM-110 / 230-017C Inverter [redundant x2]

Rated power	17 kVA [x2 units]
DC rated input voltage AC	110 V
AC output current voltage	230 V ~1N ± 1%
AC Output Frequency	50 Hz ± 0.05%
Waveform	Sine-wave
Peak factor	3:1
Voltage static voltage (load variation 10 ÷ 90%)	± 1%
Voltage dynamic stability (load variation 10 ÷ 90%)	± 2% (re-establishment time 20ms)
Galvanic isolation	Yes
Overload	120% / 70 s
	150% / 10 s

Static By-Pass [redundant x2]

Rated power	20 kVA [x2 units]
Input / Output Voltage	400 V ~2 / 230 V ~1N
Input / Output Frequency	45 ÷ 55 Hz
Overload	1,5 x Inom / 30 min
	10 x Inom / 0,1 s
Transfer time	0 s for overload
	1m s for internal breakdown
By-Pass Manual	Yes

Batteries [x2 redundant]

Type	AGM technology hermetic Pb
Manufacturer	Enersys
Model	6SBS130
Capacity	132 Ah
No. of elements	18
Rated voltage per element	6 V
Total rated voltage	108 V

Switchboard

Services of continuous 110 V	
Bar # 1 dc	2P (quantity and calibre according to service specifications)
Bar # 2 dc	2P (quantity and calibre according to service specifications)
Services of alternating 230 V 50 Hz	
Bar # 1 ac	2P (quantity and calibre according to service specifications)
Bar # 2 ac	2P (quantity and calibre according to service specifications)

ENVIRONMENTAL CHARACTERISTICS

Protection degree	IP21 (optional up to IP54)
Working temperature	-10°C to 45°C
Storage temperature	-25°C to 65°C
Relative humidity	15% to 95% with no condensation
Altitude	1500 m

DIMENSIONS AND WEIGHT

Rectifier	[x 2 units]
Dimensions (Width x Depth x Height)	800 x 800 x 2150 mm
Weight	550 Kg
Inverter	[x 2 units]
Dimensions (Width x Depth x Height)	800 x 800 x 2150 mm
Weight	550 Kg
Battery	[x 2 units]
Dimensions (Width x Depth x Height)	800 x 800 x 1200 mm
Weight	650 Kg
Switchboard	
Dimensions (Width x Depth x Height)	1200 x 800 x 2150 mm
Weight	250 Kg
Colour	RAL 7035

USER INTERFACE

• Local Signalling:	• Measures of input, output and battery voltages and currents.
• Remote signalling of equipment status and manoeuvrability	• Local and remote control of Start, Stop, and bar switching