

CONTAINERISED GENERATING SETS SERIE PLUS



 **GUASCOR**®



MAIN FEATURES


Complete generating set mounted in a transportable 30-ft container, including cooling system, lubrication, fuel supply, power and control panel, machine room ventilation.

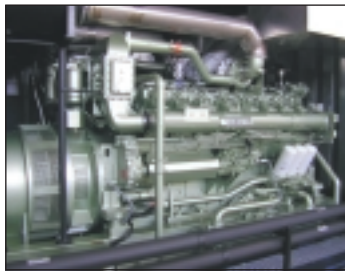
Sound pressure at 1m:
85 dB(A).

TECHNICAL DATA

MODEL		D500	D700	D1000	D1400
Standby Power	kW / kVA	400 / 500	533 / 666	806 / 1007	1077 / 1346
Prime Power	kW / kVA	369 / 461	493 / 616	748 / 935	996 / 1245
Continuous Power	kW / kVA	341 / 426	456 / 570	690 / 862	920 / 1150
Voltage	V	400 / 231			
Frequency	Hz	50			
Allowable power factor		0,8 inductive - 1			
ENGINE					
Model		SF180TA-LG	SF240TA-LG	SF360TA-LG	SF480TA-LG
Cylinder capacity	l	18	24	36	48
No. cylinders		6 in-line	8 in-line	12 V-type	16 V-type
Bore/Stroke	mm	152 / 165			
Speed	rpm	1.500			
Air supply		Turbo + Intercooler 2 turbos + 2 intercoolers			
Coolant		Water			
Starter		Electric			
Speed controller		Electronic			
Oil pan capacity	l	70	95	180	210
Fuel consumption (Continuous / Prime / SB)	g/kWh	199/201/204	206/207/211	200/202/205	210/213/217
Power (Continuous / Prime / SB)	kW	360/389/421	480/519/561	720/779/842	960/1038/1122
ALTERNATOR					
Apparent Power	kVA	505	670	1.010	1.350
Rated Voltage	V	400 / 231			
Frequency	Hz	50			
Excitation		Self-excitation			
Insulation Class		H			
Protection Standard		IP 23			
Number of Poles		4			
Winding Pitch		2/3			
Excitation Controller		Electronic			
Voltage Accuracy	%	+ - 1			
COMPLETE EQUIPMENT					
Installation		In transportable 30-ft container			
Length/width/height	mm	9125 x 2438 x 2896			
Weight with/without fluids	kg	-			
Motor cooling		Water-cooled aircooling			
Exhaust silencing	dB	30			
Tot. Sound Pres. 1m	dB(A)	85			
Cap. daily oil tank	l	300			
Cap. daily gasoil tank	l	430			
Venting fans		2 axiales			
Control panel		For island and automatic parallel operation with other plants and/or power mains			
Circuit breaker fit for synchronism	A	800	1000	1600	2000

DESCRIPTION

A containerised Diesel generating set comprises the following components and systems:



■ Diesel Engine



■ Synchronous generator



■ Container and auxiliary services for the genset



■ Control panel



■ Power panel

It serves for the on/off connection of the alternator to the mains or other sets. It houses a power switch, current transformers and the input tetrapolar busbars and output blades.

The automatic circuit breaker (Schneider's Masterpact) is quick-acting type, suitable for synchronizing operations.

OPERATING PRINCIPLE



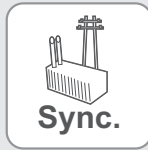
Fully automatic and assisted manual operation of the containerised set.



Automatic switching-on of the genset through timer or specific programming according to customer's needs, including remote start/stop functionality.



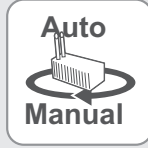
Constant protection of engine and alternator, stopping the set in the event of any fault.



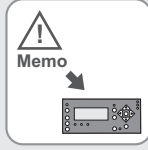
Automatic synchronisation of the genset with the electric power system (mains) or other units (in this latter case, in isochronous or adjustable droop mode).



When working parallel-connected to the mains, the genset's output power is controlled by PLC against user-defined power settings.



Manual and automatic actuation of the genset's auxiliary devices.



Display of generated alarms and recording of the last few ones shown on the operator's interface.

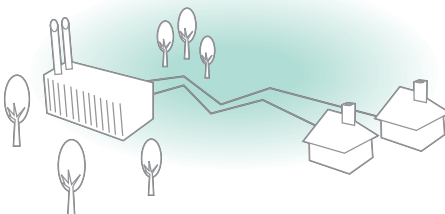


Display of the basic parameters of the engines and process, temperatures and pressures, directly on the operator's terminal.

POWER GENERATING PLANT PROTECTION AND MEASURING EQUIPMENT

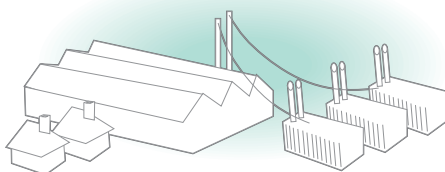
- Digital multimeter integrated into the genset's controller.
- Three-phase over / under voltage monitoring.
- Three-phase over / under frequency monitoring.
- Overload and short-circuit monitoring.
- Neutral-to-earth overcurrent monitoring.
- Power directional detection.
- Tachometer relay at two levels (to detect 'plant start-up' and overspeed).
- 1 engine-specific alarm module.
- 1 alarm module for the genset's auxiliary services.
- Double emergency stop (both at control panel and on the genset itself).
- 1 three-phase high and low voltage detector.
- 1 three-phase high and low frequency detector.
- 1 T-vector jump microcut relay.

APPLICATIONS



ISLAND OPERATION

- Generation of electric energy with 1 or several island load feeding modules.
- Generation of electric energy in isolated or mains-independent zones.



OPERATION IN PARALLEL WITH THE MAINS AND OTHER GENERATING SETS

- Continuous generation of electric energy for odd applications or in case of a mains failure.

LOW CONSUMPTION AND EMISSIONS HIGH PROFITABILITY

MAINTENANCE



In order to make maintenance and daily operation easier, the container has been fitted with the following items:



Ceiling-mounted internal supports for pulleys and bearings.



Fluorescent luminaires on either side of the engine.



Current outlets for power tools and measuring instruments.



Basic tool kit.

SPARE PARTS

Genuine spare parts
available in less than
48 hours

GUASCOR guarantees the delivery of genuine spare parts everywhere in the world in less than 48 hours.



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