



Engine	Alternator	Model	Power factor	Emissions
Doosan P086TI	Leroy Somer TAL-044-M	GFE180DLC (Canopied)	Factor $\Phi = 0.8$	N/A
50Hz	1500rpm	3-Phase		

Ratings	Prime Power		Standby Power		Rated current	Fuel consumption
Voltage (V)	(PRP)		(ESP)		Amps (A)	@100% load L/h
400/230	kWe	kVA	kWe	kVA		
	144	165	145	180		43.1

Ratings All three phase generator sets are rated at 0.8 power factor.
All single-phase generator sets are rated at unity or 1.0 power factor.

Prime output This rating is applicable for supplying continuous electrical power at variable load. There is no limitation to the annual hours of operation and this model can supply 10% overload power for 1 hour in 12 hours.

Standby output This rating is applicable for supplying electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings.

The above ratings are in accordance with ISO8528-1 and ISO3046-1. Standard reference conditions: 25°C, 100m A.S.L., 30% relative humidity.

Engine

P086TI

		Units	
General performance	Frequency	Hz	50
	Type		4-Stroke, Diesel Fuel
	Engine speed	r/min	1500
	Number of cylinders / arrangement		6 cyl / In-line
	Displacement	Litres	8.1
	Aspiration		Turbocharge-intercooler
	Combustion system		Direct injection
	Governor type		Electronic
	Bore / stroke	mm	111 x 139
	Compression ratio		16.4:1
	Engine power (gross)	kW	Standby: 199
	Cooling system		Water cooled
Rotation		Anti-clockwise viewed on flywheel	
Fuel system	Fuel consumption at 110% Prime Power	Litres/Hour	48.4
	Fuel consumption at 100% Prime Power	Litres/Hour	43.1
	Fuel consumption at 75% Prime Power	Litres/Hour	31.7
	Fuel consumption at 50% Prime Power	Litres/Hour	21.1
	Standard fuel tank capacity	Litres	400
Air system	Air inlet		Mounted air filter
	Air filter type		Dry
Fuel and fuel system	Rotary type pump		YES
	Ecoplus fuel filter		YES
Oil system	Total oil system capacity	Litres	15.5L
	Maximum sump capacity	Litres	N/A
	Wet sump with filler and dipstick		YES
	Full-flow spin-on oil filters		YES
Cooling system	Total system capacity		
	- With radiator	Litres	48.5L
	- Without radiator	Litres	N/A
	Thermostat operation range	°C	up to 50°C
	Maximum top tank temperature	°C	N/A
Electric system	Electrical system voltage	VDC	24
	Battery		Maintenance free
Available options	Battery charger		<i>Optional</i>
	Engine water heater		<i>Optional</i>
	Battery isolator switch		<i>Optional</i>

Alternator

Leroy Somer TAL-044-M

		Units	
General data	Manufacturer / brand		Leroy Somer
	Model		TAL-044-M
	Coupling / number of bearings		Flexible Disc / Single Bearing
	Phase / Poles		3-Phase / 4-Pole
	Power factor		Cos Φ = 0.8
	AVR Regulation		Yes
	Voltage Regulation		± 1 %
	Insulation class		H-F
	Drip proof		IP21-23
	Excitation		AVR, Brushless
	Altitude	m	≤ 1000
	Overspeed	min -1	2250

GFE Controller Summary

Controller model / LCD Display Type	Optional: DSE4520	Optional: DSE6110	Standard: DSE7320	Optional: DSE8620
Standard supply	○	○	●	○
Viewable parameters				
Phase voltage	×	3	3	3
Current	Instrumentation	●	●	●
Frequency	●	●	●	●
Active power	○	●	●	●
Reactive power	○	●	●	●
Apparent power	×	●	●	●
Power factor	○	●	●	●
Generator protection				
Abnormal voltage	●	●	●	●
Overcurrent warning	○	●	●	●
Overcurrent protection	●	●	●	●
Over frequency protection	●	●	●	●
Engine figure				
Oil pressure	●	●	●	●
Coolant temperature	●	●	●	●
Fuel meter / fuel sensor	●/○	●/○	●/○	●/○
Speed	●	●	●	●
Battery voltage	●	●	●	●
Elapsed time	●	●	●	●
Engine protection				
Low oil pressure warning	×	●	●	●
Low oil pressure protection	●	●	●	●
High temperature warning	○	●	●	●
High temperature protection	●	●	●	●
Overspeed warning	×	●	●	●
Overspeed protection	○	●	●	●
Alternator charger	●	●	●	●
Functions				
Remote start	●	●	●	●
AMF (Auto Main Failure)	●	●	●	●
Programmable input	●	●	●	●
Programmable output	●	●	●	●

Remark: ● Standard supply ○ Available as optional × Not available

GFE Enclosure / Canopy

“Ensure a quieter life with our sound attenuation system.”

Sound-attenuated or open option

Features

Extremely rugged and highly corrosion resistant construction

Compatible with 2000/14/EC directives, certified noise emission level

2 or 4 points for transport according to cabin size

Hidden exhaust inside the canopy

Emergency stop button located on the canopy

Improved air suction channel to ensure homogenous cooling in the canopy

Lid on cab for radiator and antifreeze top up

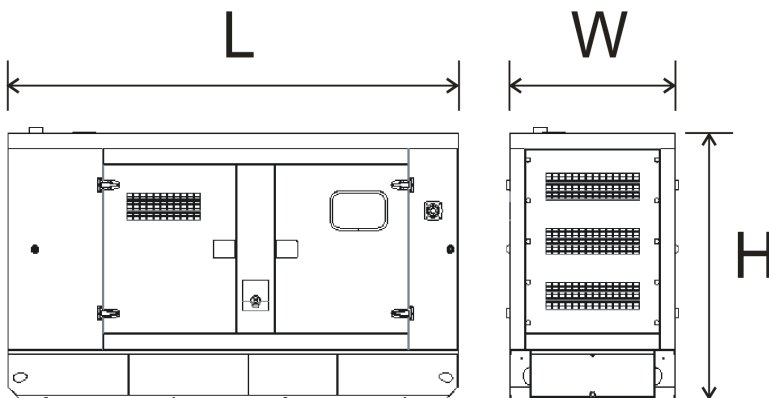
Paint system protecting against corrosion and rust

Improved sound insulation performance

Demounted parts for easier transportation and maintenance

Overall dimensions, weight and noise

Frame type	Dimensions (W x L x H) mm	Weight kg	Base tank @100% load		Noise level dB(A) at 7m at 75% Load
Canopied	1234x3872x1946	2350	Hours	Litres	70
Open	1200x2700x1750	1810	TBC	400	N/A



GFE Automatic Transfer Switch

A.T.S - 4 Poles

GFE Power Products offer as an optional accessory, not only a changeover switch but also an integrated mains detection and switch system for your 24 hour power protection. The system enables automatic start-up and operation of the generating set in the event of a mains power failure, overvoltage or loss of a mains automatic retransfer once it comes back.

System advantages

Automatically transfer and re-transfer load from main power to gen-power without operator intervention (both automatic and manual)

ATS Controller (AMF function), seamless integration with all GFE ATSS

Available from 32 - 4000A

Available in standard, bypass isolation and service-entrance configurations

Configurable in open, closed and programmed transition operating modes

Designed to interface seamlessly with GFE generators and switchgear

Drip proof IP42 enclosure

Easy installation: wall-mounted and floor standing



*image for illustration purposes only, actual product may differ

Warranty

GFE distributors, dealers or authorized representatives have warranty providing the operator performs a start-up within 6 months of the date of shipment from the factory, warranty coverage will begin on the start-up date (registering the start-up date to GFE within 6 months is essential and can be enforced). This warranty does not apply to malfunction caused by damages, unreasonable use, misuse, repair or service by unauthorized persons, or normal wear and tear. Warranty is supplied strictly in accordance with GFE's terms and conditions of sale and as per the warranty manual available on request.

Warranty coverage

Generators used with commercial utility source: From One (1) to Two (2) years. Please see GFE Warranty Terms and Conditions of sale.

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