## GFE POWER PRODUCTS

# **GFE17PLC**

(Canopied)



Available as an open set: GFE17PLO

Engine Perkins	Alternator Leroy Somer	Model GFE17PLC			
403A-15G2	TAL040D	(Canopied)			
			Power factor	Emi	issions
50Hz	1500rpm	3-Phase	Factor $\Phi = 0.8$	ı	N/A
Ratings	Prime	Power	Standby Power	Rated current	Fuel consumption
	(DB		(ESD)		0.4000/

Ratings	Prime	Power	Standby	y Power	Rated current	Fuel consumption
Voltage	(PRP)		(ESP)		Amps	@100% load
(V)	kWe	kVA	kWe	kVA	(A)	L/h
400	12	15	13.2	16.5	21.6	4.3

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	This rating is applicable for supplying continuous electrical power at variable load.
output	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**Perkins 403A-15G2

Cooling system Water cooled			Units		
Number of cylinders / arrangement   3 cyl / vertical in-line	General	Frequency	Hz	50	
Displacement	performance	Engine speed	r/min	1500	
Aspiration   Naturally aspirated   Combustion system   Indirect Injection   Governor type   Mechanical   Bore / stroke   mm 84 x 90   Compression ratio   22.5:1   Engine power (net)   kWm Prime: 14   Standby   Cooling system   Water cooled   Rotation   Anti-clockwise viewed on   Fuel consumption at 110% Prime Power   Litres/hour   Fuel consumption at 100% Prime Power   Litres/hour   Fuel consumption at 50% Prime Power   Litres/hour   Fuel consumption at 50% Prime Power   Litres/hour   Fuel consumption at 50% Prime Power   Litres/hour   3.1   Fuel consumption at 50% Prime Power   Litres/hour   2.2   Standard fuel tank capacity   Litres   SOL   Air   Air inlet   Mounted air filter   System   Air filter type   Dry   Fuel and   Mechanically governed   YES   Fuel system   YES   Split element fuel filter   YES    Oil   Total oil system capacity   Litres   10.6   Maximum sump capacity   Litres   N/A   YES   Spin-on full-flow lube oil filter   YES    Cooling   Total system capacity   Litres   7   - With radiator   Litres   N/A   Thermostat operation range   °C   Up to 40°C   Maximum top tank temperature   °C   N/A   Electric   Sastem   Sastem   Sastem   Sastem   Sastem   Electrical system oltage   V   12   Sastem   Sastem   Sastem   Sastem   Sastem   Sastem   Connecting cables   Sastem   Sast		Number of cylinders / arrangement		3 cyl / vertical in-line	
Combustion system Governor type Bore / stroke Governor type Bore / stroke Compression ratio Engine power (net) Cooling system Rotation Rotation Fuel consumption at 110% Prime Power Fuel consumption at 100% Prime Power Fuel consumption at 75% Prime Power Fuel consumption at 75% Prime Power Fuel consumption at 50% Prime Power Fuel stroke Fuel consumption at 50% Prime Power Fuel stroke Air filter type Fuel and Mechanically governed Fuel system Cassette type fuel injection pump Fuel system Split element fuel filter  Oil Fortal oil system capacity Fuel summ sump capacity Fuel summ sump capacity Fuel summ sump capacity Fuel summ sump capacity Fuel summ summ capacity Fuel summ summ capacity Fuel Spin-on full-flow lube oil filter Fuel Spin-on full-flow fuel flow fuel flow fuel flow f		Displacement	Litres	1.496	
Governor type		Aspiration		Naturally aspirated	
Bore / stroke		Combustion system		Indirect Injection	
Compression ratio   Engine power (net)   kWm   Prime: 14   Standby		Governor type		Mechanical	
Engine power (net)   kWm   Prime: 14   Standby   Cooling system   Water cooled		Bore / stroke	mm	84 × 90	
Cooling system   Water cooled   Rotation   Anti-clockwise viewed on		Compression ratio		22.5:1	
Rotation Anti-clockwise viewed on Anti-clockwise viewed on Fuel Fuel consumption at 110% Prime Power Litres/hour Fuel consumption at 100% Prime Power Litres/hour 3.1 Fuel consumption at 75% Prime Power Litres/hour 3.1 Fuel consumption at 50% Prime Power Litres/hour 2.2 Standard fuel tank capacity Litres 50L  Air Air inlet Mounted air filter System Air filter type Dry  Fuel and Mechanically governed YES Split element fuel filter YES  Oil Total oil system capacity Litres 10.6 Maximum sump capacity Litres N/A Wet sump with filler and dipstick YES Spin-on full-flow lube oil filter YES  Cooling Total system capacity Litres N/A  Wet sump with filler and dipstick YES  Cooling Total system capacity Litres N/A  Thermostat operation range °C up to 40°C Maximum top tank temperature °C N/A  Electric Electrical system voltage V 12 System Battery Connecting cables Available Battery charger		Engine power (net)	kWm	Prime: 14 Standby: 15.4	
Fuel system  Fuel consumption at 110% Prime Power  Fuel consumption at 100% Prime Power  Fuel consumption at 75% Prime Power  Fuel consumption at 55% Prime Power  Fuel consumption at 55% Prime Power  Fuel consumption at 55% Prime Power  Standard fuel tank capacity  Air inlet  Air inlet  Mounted air filter  System  Air filter type  Dry  Fuel and  Mechanically governed  Cassette type fuel injection pump  Split element fuel filter  Oil  System  Maximum sump capacity  Wet sump with filler and dipstick  Spin-on full-flow lube oil filter  Cooling  System  Total system capacity  - With radiator  - With adiator  - Without radiator  Thermostat operation range  Maximum top tank temperature  Electric  System  Battery  Connecting cables  Available  Battery charger  Litres/hour  Litres/hour  Litres/hour  Litres/hour  Litres/hour  Litres 50L  Mounted air filter  PvES  Dry  Fuel and  Mounted air filter  Mounted air filter  PvES  Tes  Sol  Mounted air filter  PvES  Tes  VES  VES  VES  VES  VES  VES  Coll  Avilable Battery charger  Litres N/A  Litres N/A  Litres N/A  V 12  Maintenance-free  Available as option		Cooling system		Water cooled	
Fuel consumption at 100% Prime Power Litres/hour 3.1 Fuel consumption at 75% Prime Power Litres/hour 3.1 Fuel consumption at 50% Prime Power Litres/hour 2.2 Standard fuel tank capacity Litres 50L  Air Air inlet Mounted air filter Dry Fuel and Mechanically governed YES Cassette type fuel injection pump YES Split element fuel filter YES  Oil Total oil system capacity Litres N/A Wet sump with filler and dipstick YES Spin-on full-flow lube oil filter  Cooling system Total system capacity Litres 7 - With radiator Litres 7 - With radiator Litres N/A Thermostat operation range °C up to 40°C Maximum top tank temperature °C N/A  Electric system Battery Connecting cables Available Battery charger		Rotation		Anti-clockwise viewed on flywhee	
Fuel consumption at 75% Prime Power Fuel consumption at 50% Prime Power Standard fuel tank capacity  Litres  Air inlet System Air filter type Air filter type  Cassette type fuel injection pump Split element fuel filter  Maximum sump capacity Litres  Cooling System  Total oil system capacity  Wet sump with filler and dipstick Spin-on full-flow lube oil filter  Cooling System  Air filter type  Cooling System  Electric System  Fuel and Mechanically governed Fuel and Mechanically governed YES  Air filter type  Dry  Mechanically governed YES  Litres  N/A  YES  N/A  YES  Litres  N/A  YES  Cooling System  Available  Electric System  Battery Connecting cables  Available  Battery charger  Litres  Litres / N/A  Available soption	Fuel	Fuel consumption at 110% Prime Power	Litres/hour		
Fuel consumption at 50% Prime Power Standard fuel tank capacity  Air inlet System Air filter type Air filter type  Mechanically governed Fuel and Fuel system  Mechanically governed Fuel system  Mechanically governed Fuel system  Mechanically governed Fuel and Fuel system  Mechanically governed Fuel system  Split element fuel filter  YES  Split element fuel filter  YES  Oil  Total oil system capacity  Maximum sump capacity  Wet sump with filler and dipstick  Spin-on full-flow lube oil filter  YES  Cooling System  Total system capacity  - With radiator  - With radiator  - With radiator  Litres  N/A  Thermostat operation range  °C  Maximum top tank temperature  PC  Maximum top tank temperature  PC  Maximum top tank temperature  PC  Maximanice-free  Available  Available  Battery Connecting cables  Available  Battery charger	system	Fuel consumption at 100% Prime Power	Litres/hour	4.3	
Standard fuel tank capacity  Air  Air inlet Air filter type Air filter type Dry  Fuel and fuel system  Cassette type fuel injection pump Split element fuel filter  Total oil system capacity Wet sump with filler and dipstick Spin-on full-flow lube oil filter  Cooling System  Total system capacity  Ves  Cooling Total system capacity  Ves Spin-on full-flow lube oil filter  Cooling System  Total system capacity  Ves Spin-on full-flow lube oil filter  Cooling System  Fuel and dipstick Spin-on full-flow lube oil filter  Cooling System  Fuel and dipstick Spin-on full-flow lube oil filter  Cooling System  Fuel and dipstick Spin-on full-flow lube oil filter  Cooling System  Fuel and dipstick Spin-on full-flow lube oil filter  Yes  Cooling System  Fuel and dipstick Spin-on full-flow lube oil filter  Yes  Cooling System  Fuel and System capacity  Litres N/A  Litres T  - Without radiator Litres N/A  Thermostat operation range C up to 40°C N/A  Electric System Battery  Battery Connecting cables  Available Battery charger  Yes		Fuel consumption at 75% Prime Power	Litres/hour	3.1	
Air inlet system Air filter type Air filter type Air filter type Dry  Fuel and fuel system  Mechanically governed Cassette type fuel injection pump Split element fuel filter YES  Oil System Maximum sump capacity Litres Mo.6  Maximum sump capacity Litres N/A Wet sump with filler and dipstick Spin-on full-flow lube oil filter YES  Cooling System  Total system capacity  - With radiator - Without radiator Litres N/A  Thermostat operation range Maximum top tank temperature  Electric System Battery Connecting cables  Battery charger  Mounted air filter Mounted air filter Dry  Meounted air filter Dry  Meounted air filter Dry  YES  Cooling YES  10.6  N/A  Litres N/A  Litres N/A  Litres N/A  O'C up to 40°C N/A  Litres N/A  Thermostat operation range O'C N/A  Maintenance-free Available Available Battery charger		Fuel consumption at 50% Prime Power	Litres/hour	2.2	
Air filter type  Fuel and Mechanically governed  Gassette type fuel injection pump  YES  Split element fuel filter  Total oil system apacity  Maximum sump capacity  Wet sump with filler and dipstick  Spin-on full-flow lube oil filter  Cooling system  YES  Cooling Total system capacity  Wet sump with filler and dipstick  Spin-on full-flow lube oil filter  Total system capacity  With radiator  With radiator  Without radiator  Thermostat operation range  Maximum top tank temperature  Connecting cables  Available  Battery  Battery Connecting cables  Battery charger  Yes		Standard fuel tank capacity	Litres	50L	
Fuel and fuel system  Cassette type fuel injection pump  Split element fuel filter  Oil Total oil system capacity  Maximum sump capacity  Wet sump with filler and dipstick  Spin-on full-flow lube oil filter  Cooling system  YES  Cooling Total system capacity  Vet sump with filler and dipstick  Spin-on full-flow lube oil filter  Total system capacity  - With radiator  - Without radiator  - Without radiator  Thermostat operation range  Maximum top tank temperature  Conlectic Electrical system voltage  Battery  Connecting cables  Available  Battery charger  Yes	Air	Air inlet		Mounted air filter	
Cassette type fuel injection pump   YES	system	Air filter type		Dry	
Cassette type fuel injection pump   YES	Fuel and	Mechanically governed		YES	
Split element fuel filter  Oil Total oil system capacity  Maximum sump capacity  Vet sump with filler and dipstick Spin-on full-flow lube oil filter  Cooling system  Total system capacity  - With radiator - Without radiator - Without radiator Thermostat operation range Maximum top tank temperature  Electric Electrical system voltage  Battery Connecting cables  PYES  10.6  N/A  YES  N/A  YES  Litres 7 - Uitres 7 - Without radiator Litres N/A  **O**  **O**  **O**  **O**  **O**  **N/A  **O**  **O**  **N/A  **D**  **O**  **O**  **N/A  **O**  **O**  **N/A  **D**  **D**  **O**  **N/A  **D**  **D**  **O**  **O**  **N/A  **D**  **O**  **D**  **N/A  **D**  **O**  **D**  **O**  **N/A  **D**  **O**  **O**  **N/A  **D**  **O**  **O**  **N/A  **D**  **O**  **O**  **N/A  **D**  **O**  **D**  **O**  **N/A  **D**  **O**  **D**  **O**  **N/A  **D**  **O**  **O**  **N/A  **D**  **O**  **D**  **O**  **N/A  **D**  **O**  **O**  **O**  **N/A  **D**  **O**  **O*	fuel system	Cassette type fuel injection pump		YES	
System         Maximum sump capacity         Litres         N/A           Wet sump with filler and dipstick         YES           Spin-on full-flow lube oil filter         YES           Cooling         Total system capacity         Litres           - With radiator         Litres         7           - Without radiator         Litres         N/A           Thermostat operation range         °C         up to 40°C           Maximum top tank temperature         °C         N/A           Electric         Electrical system voltage         V         12           System         Battery         Maintenance-free           Connecting cables         Available as option           Available         Battery charger         Yes	•	Split element fuel filter		YES	
Wet sump with filler and dipstick   YES	Oil	Total oil system capacity	Litres	10.6	
Wet sump with filler and dipstick         YES           Spin-on full-flow lube oil filter         YES           Cooling system         Total system capacity         Litres         7           - With radiator         Litres         N/A           - Without radiator         Litres         N/A           Thermostat operation range         °C         up to 40°C           Maximum top tank temperature         °C         N/A           Electric system         Battery         Maintenance-free           Connecting cables         Available as option           Available         Battery charger         Yes	system	Maximum sump capacity	Litres	N/A	
Spin-on full-flow lube oil filter   YES	-	Wet sump with filler and dipstick		YES	
system         - With radiator         Litres         7           - Without radiator         Litres         N/A           Thermostat operation range         °C         up to 40°C           Maximum top tank temperature         °C         N/A           Electric         Electrical system voltage         V         12           system         Battery         Maintenance-free           Connecting cables         Available as option           Available         Battery charger         Yes				YES	
system         - With radiator         Litres         7           - Without radiator         Litres         N/A           Thermostat operation range         °C         up to 40°C           Maximum top tank temperature         °C         N/A           Electric         Electrical system voltage         V         12           system         Battery         Maintenance-free           Connecting cables         Available as option           Available         Battery charger         Yes	Cooling	Total system capacity			
- Without radiator         Litres         N/A           Thermostat operation range         °C         up to 40°C           Maximum top tank temperature         °C         N/A           Electric         Electrical system voltage         V         12           Battery         Maintenance-free           Connecting cables         Available as option           Available         Battery charger         Yes	_		Litres	7	
Maximum top tank temperature  °C N/A  Electric Electrical system voltage  System Battery Connecting cables  Available Battery charger  Yes	-,	- Without radiator	Litres	N/A	
Maximum top tank temperature  C N/A  Electric Electrical system voltage  System Battery Connecting cables  Available Battery charger  PC N/A  12  Maintenance-free Available as option		Thermostat operation range	°C	up to 40°C	
Electric Electrical system voltage V 12  System Battery Maintenance-free Available as option  Available Battery charger Yes			°C	<u>'</u>	
Battery Maintenance-free Connecting cables Available as option  Available Battery charger Yes	Flectric		V	12	
Connecting cables Available as option  Available Battery charger Yes			<u>'</u>	·-	
Available Battery charger Yes	7300111				
, , , , , , , ,	Aveilable	-			
options Eligine water neater 168					
Battery isolator switch	options		Yes		

## **Alternator**

Leroy Somer TAL040D

		Units	
General	Manufacturer / brand		Leroy Somer
data	Model		TAL040D
	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		Н
	Drip proof		IP23
	Excitation		Shunt
	Altitude	m	≤1000
	Overspeed	min -1	2250

## **DSE Controller Summary**

		. Conta		iiiiiiiai y
Controller model / Deepsea DSE	Optional: DSE4520	Standard:	Optional: DSE7310/20	Optional: DSE8610/20
	D3E4320	DSE6110	D3E/310/20	D3E8610/20
				- Desiration Ann.
Controller photos	10 10 10 10 10 10 10 10 10 10 10 10 10 1	·	***	**
		₩₩ ⊗ <b>※ ※ ※ ※ ※</b>		0 0 0 0 0
Standard supply	0	•	0	0
Viewable parameters				
Phase voltage	×	3	3	3
Current	Instrumentation	•	•	•
Frequency	•	•	•	•
Active power	0	•	•	•
Reactive power	0	•	•	•
Apparent power	×	•	•	•
Power factor	0	•	•	•
Electric energy metering	×	•	•	•
Generator protection				
Abnormal voltage	•	•	•	•
Overcurrent warning	0	•	•	•
Overcurrent protection	•	•	•	•
Over frequency protection	•	•	•	•
Short circuit protection	MCCB / ●	MCCB / ●	MCCB / ●	MCCB / ●
Engine figure				
Engine figure Oil pressure	•	•	•	•
<u> </u>	•	•	•	•
Water temperature			- 1-	
Fuel meter / fuel sensor	•/0	•/∘	•/0	•/0
Speed -	•	•	•	•
Battery voltage	•	•	•	•
Elapsed time	•	•	•	•
Engine protection				
Low oil pressure warning	×	•	•	•
Low oil pressure protection	•	•	•	•
High temperature warning	0	•	•	•
High temperature protection	•	•	•	•
Overspeed warning	×	•	•	•
Overspeed protection	0	•	•	•
Alternator charger	•	•	•	•
Functions				
Remote start	•	•	•	•
AMF (Auto Main Failure)	•	•	•	•
Programmable input	•	•	•	•
Programmable output	•	•	•	•
Expand module	×	0	0	0
Communication function	×	×	RS232 / 484	RS232 / 485
Communication port	USB	USB	RS232 / 484	RS232 / 485
CAN	•	0	•	•
Service indicate	0	0	•	•
Fault history	•	•	•	•
Gen-gen synchronising	×	×	×	•
Gen-mains synchronising (20)	×	×	×	•

 $\textbf{Remark:} \quad \bullet \text{ Standard supply} \quad \circ \text{ Available as optional} \quad \times \text{ Not available}$ 

## **Enclosure / Canopy**

"Ensure a quieter life with our sound attenuation system."

Sound-attenuated or open option

#### **Features**

#### Extremely rugged and highly corrosion resistant construction

Unique appearance with high sound absorbing and thermal properties

8-12 hours built-in fuel tank integrated into the skid-mount base

Excellent design and craftmanship

Full weatherproof enclosure, suitable for operations in harsh condictions

Thermo-acoustic installation which can withstand fire, high temperature and severe conditions

Residential exhaust muffler manufactured from galvanised steel

High quality polyester powder paint

Designed on modular principles with interchangable components permitting on-site repairs

#### Easy commissioning and maintenance

Control panel viewing window with lockable access door for quick, safe and easy monitoring

Side doors allowing 180° opening for easy accessibility

Lifting point for easy mobility

Lube oil drain and radiator drain

Internally mounted exhaust silencers constructed to withstand rough conditions

#### Security and safety

Earth leakage protection

Secure and lockable access doors for fuel fill and battery

Fully guarded cooling fan and battery charging alternator

Emergency stop push button mounted on the enclosure exterior for urgent and safe shutdown

Efficient management of cooling air to avoid high water temperature

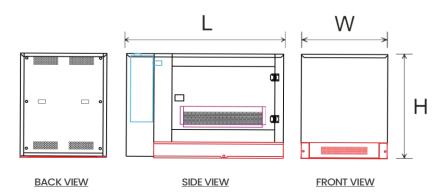
#### **Transportability**

Top access lifting points for crane lifting

Baseframe feet to allow access for easy moveability

### Overall dimensions, weight and noise

Frame type	Dimensions	Weight	Base tank @100% load		Noise level
	$(L \times W \times H)$ mm	kg	Hours	Litres	dB(A) at 7m
Canopied	1850×960×1200	765	20	85	65
Open	1270×520×1430	475	11	50	TBC



### **Automatic Transfer Switch**

A.T.S - 4 Poles

GFE offers 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: One (1) year or 1000 hours (whichever occurs first) from date of shipment from the factory or registered start-up date.

#### **GFE Power Products Limited**

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