



**Gensets**  
Small Range

**Perkins**  
THE HEART OF EVERY GREAT MACHINE

**LEROY SOMER**

**Ratings @ 0.8 PF**

**50 Hz  
1500 RPM**

VOLTAGE	PRIME RATING	STANDBY RATING
400/3 Ph	20 KVA	22 KVA

## NOTES

### Prime Power

Unlimited hours usage with an average load factor of 75% of the published Prime power over each 24 hours period.

A 10% overload is available for 1 hour in every 12 hour operation.

### Standby Power

Limited to 500 hours annual usage.

Available in 60HZ for all voltage ratings

### Standard Reference Conditions

Note: Standard reference conditions 40°C (104°F) Air inlet temp, 100m (328 ft.) A.S.L. 30% relative humidity.

## Standards Compliance



## Dimensions

	Open Type	Silent	Super Silent
<b>Length:</b>	1300mm	1980mm	2450mm
<b>Width:</b>	750mm	780mm	870mm
<b>Height:</b>	1150mm	1280mm	2450mm
<b>Weight:</b>	420kg	700kg	900kg

## Technical Data

### Diesel Generating Set



<b>GENSET Make / Model</b>	PERKINS 404A-22G1
<b>Alternator Make / Model</b>	Leroy Somer TAL 040F
<b>Control Panel</b>	DSE 4520
<b>Base Frame / Canopy</b>	Robust Structure / Corrosion Resistant
<b>Circuit Breaker Type</b>	3-Pole MCCB (4-Pole Available as option)
<b>Built-In Fuel Tank Capacity (Silent)</b>	50 L
<b>Battery</b>	50 A

### Engine Specifications

<b>Make &amp; Model</b>	PERKINS 404A-22G1
<b>Cylinder &amp; Arrangement</b>	4; Vertical in-line
<b>Cycle</b>	4 stroke
<b>Induction System / Aspiration</b>	Naturally Aspirated
<b>Cooling System</b>	Water cooled
<b>Governing</b>	Mechanical
<b>Governing Class</b>	G2 - ISO 8528 Part 1
<b>Compression Ratio</b>	23.3:1
<b>Displacement</b>	2.216
<b>Bore &amp; Stroke</b>	84 x 100 mm
<b>Dynamic Charging Alternator</b>	15 AMP, 12 V

### Lubrication System

<b>Oil Filter Type</b>	Spin-On Full Flow
<b>Total Oil Capacity</b>	10.6 L
<b>Oil Type</b>	API CI-4

### Cooling System

<b>Total Coolant Capacity</b>	7.0 L
<b>Cooling Fan Air Flow</b>	0.59 m <sup>3</sup> /s
<b>Max Water Temperature</b>	112°C
<b>Cooling System Design</b>	50°C
<b>Heat Radiation to Room</b>	4.4 kW

### Air System

<b>Air Filter Type</b>	Dry Element
<b>Max Air Filter Intake Restriction</b>	3kPA

### Exhaust System

<b>Muffler Type</b>	Industrial Grade
<b>Max Back Pressure</b>	10.2 kPa
<b>Exhaust Gas Flow</b>	3.94 m <sup>3</sup> / min
<b>Exhaust Gas Temperature</b>	≤505° C



**SACCAL INDUSTRIES**

**LEBANON BEIRUT**  
Rachid Karami st, Concorde Center  
Telephone: +9611 34 45 18  
E-mail: industries@saccal.com

**UAE SHARJAH**  
Business center, SPC, Publishing City  
Telephone: +971 56 714 0510  
E-mail: Saccaluae@saccal.com

**IRAQ ERBIL**  
Street 100 - 3/57, Warsh  
Telephone: +964 78 08416865 +964 75 02194846  
+964 77 09887972 E-mail: erbil@saccal.com

**BAGHDAD**  
Riyadh District Square - District 908 -  
Street 25 - House 28  
Telephone: +964 77 23813927  
E-mail: baghdad@saccal.com







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## Engine Fuel System

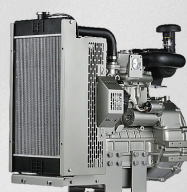
Recommended Fuel	Class A2 Diesel
Fuel Consumption Standby	6.1 L/hr
Fuel Consumption @100% PRP	5.3 L/hr
Fuel Consumption @75% PRP	4.0 L/hr
Fuel Consumption @50% PRP	2.9 L/hr

## Alternator Specifications

Alternator Make / Model	Leroy Somer TAL 040F
AVR Model	R120
Number of Poles	4
Number of Winding Leads	6
Type of Bearing	Single Bearing
Excitation System	Self Excited
Ingress Protection Rating	IP23
Cooling Airflow	0.06 m3 / Sec
Voltage Regulation	±1%
Harmonic Coefficient THF	< 2%
Tel. Influence TIF	< 50
Insulation Class	H



**Controller**



**Engine**



**Alternator**



**Saccal Enclosure / Canopy**

Controller Make / Model	Deep Sea 4520
Operation Mode	Auto-Start & AMF
Display	Graphic Backlit LCD (128x64px)
Ingress Protection Rating	IP65
Binary Inputs/Outputs	4/4
Analog Inputs	3
Measurements	Vac, A, Hz, KVA, KW, Vdc
Event Log	Alarms Log, Hrs Log
Communication	USB

Canopy Type	<b>SILENT</b>	<b>SUPER SILENT</b>
Enclosure Type	Acoustic & Weatherproof	
Drainage	Fuel and Water Drainage Provision	
Transportation	Tested Single Point Lifting Facility & Forklift Pockets	
Ingress Protection	IP23	
Lifting	ISO Standard Lifting	
Canopy RAL Color	RAL 9002 - Powder Coated	
Base Frame RAL Color	RAL 9005 - Powder Coated	
Noise Pressure Level db(A) @ 1m @75% Load	71	65

## SACCAL TOOL BOX

### Standard for every GenSet

- Heat Resistant Gloves
- Notebook
- Pen
- Tape Measure
- Baseball Cap
- Operation Manual
- Wiring Diagrams
- Sound Test (Upon Request)

## Why Saccal Generators ?

**Saccal Industries** is one of the leading diesel generator OEM firms in the **MENA** Region

With an impressive factory that spreads over an area of 30 thousand square meters in Bekaa & ISO certification, SACCAL has always been the leading name in the manufacturing and assembly of premium quality generating sets.

From planning and design, construction and production, to local and international sales, Saccal has more than 80 Years of experience.

Choose Right - Choose **Saccal**



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