

3 PHASE OUTPUTS			
GENERATOR SET MODEL	RATING	50HZ	
		380-415 V, 1500 rpm	
		KVA	KW
PM-750	PRIME	750	600
	STANDBY	825	660



ALTERNATOR DATA	
Make	Leroy Somer
Model	TAL 049C
No. of bearings	1
Insulation Class	H
Total Harmonic Content	<3.5 %
Wires	6
Ingress Protection	IP23
Excitation System	SHUNT
Winding Pitch	2/3 (n° 6)
AVR Model	R150
Overspeed	2250 mn <sup>-1</sup>
Voltage Regulation	±1%

POWERED BY: Perkins LEROY SOMER

\* Ratings at 0.8 pf - Generator designed to operate in ambient temperatures up to 55 °C  
\* Generating Set photo is for reference only.

CONTROL PANEL	
Make	Deepsea
Model	DSE7320
DSE7320 is an Auto Mains (Utility) Failure Control Module. It is operated via the START, STOP, AUTO, and MANUAL soft touch membrane buttons on the front panel. DSE7320 can be controlled remotely using either GDM Modem, Ethernet via DSE860/865 or via RS485.	
PROTECTION:	
-Fail to start	
-Low oil pressure	
-High engine temperature	
-U/O Voltage shutdown	
-U/O Frequency shutdown	
-Underspeed, Overspeed	
-Loss of speed engine detection	
-High/Low battery voltage	
-kW overload	
-Unbalanced load	
-Low fuel alarm (if fitted)	
-Battery charger failure (if fitted)	

ENGINE / TECHNICAL DATA		
Engine Make	Perkins	
Engine Model	4006-23TAG2A	
Governing Type	Electronic	
Cylinder Arrangement	Vertical in line	
Number of Cylinders	6	
Bore and Stroke	160 x 190	
Displacement/Cubic Capacity liters	22.921	
Induction System	Turbocharged and air to air charge cooled	
Cycle	4 stroke	
Combustion System	Direct Injection	
Compression Ratio	13.6:1	
Rotation	Anti-clockwise (viewed from flywheel)	
Cooling System	Water-cooled	
Frequency and Engine Speed	50Hz & 1500rpm	
	Prime	Standby
Gross Engine Power kW (hp)	658 (882)	721 (967)
FUEL CONSUMPTION (L/hr)		
	50%	83
	75%	121
	100%	157
Total Lubrication System Capacity [liters]	113.4	113.4
Total Coolant Capacity (inc. radiator) [ltrs]	105	105
Boost Pressure Ratio	3.4	3.6
Exhaust Temperature °C	430	430
Radiator Cooling Air Flow (Min): m <sup>3</sup> /sec	14.5	14.5
Combustion Air Flow: m <sup>3</sup> /sec	64	71
Exhaust Gas Flow: m <sup>3</sup> /sec	180	180
Fuel Tank Capacity	N/A	N/A

Dimension and Weight		
DIMENSION	OPEN	SILENT
Length (L)	4490 mm	6000 mm
Width (W)	1710 mm	2320 mm
Height (H)	2160 mm	2600 mm
Net Weight	6360 kg	2400 kg*
	*container without genset (20' ISO)	

### RATING DEFINITIONS:

**Prime Power** - These ratings are applicable for supplying continuous power (at variable load) in lieu of commercially purchased power. 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 Power** - These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these rating. When used at standby Rating the alternator will be peak continuous rated (according to ISO3046)

### STANDARD SPECIFICATIONS

#### 1. ENGINE

Perkins heavy duty diesel engine.

##### 1.1 GOVERNOR

Electronic, compliance with ISO8528, Class G2.

#### 2. COOLING RADIATOR

Radiator and cooling fan complete with protection guards, designed to cool the engine in ambient temperatures up to 55° C. The radiator is mounted on the base frame to avoid vibrations coming from the engine.

#### 3. FILTRATION SYSTEM

Cartridge type air filter with security element. Cartridge fuel filter and full lube oil filter. All filters have replaceable elements.

#### 4. EXHAUST SYSTEM

Heavy-duty industrial silencer.

#### 5. ELECTRICAL SYSTEM

24 Volt system with battery charging alternator, Starter motor, High capacity maintenance free lead acid battery, battery rack mounted on the generating set base frame, and heavy duty interconnecting cables with terminations.

#### 6. ALTERNATOR

Screen protected and drip-proof, self-exciting, self-regulating brush-less alternator. Four poles, STAR winding connection, suitable for tropical, humid and saline climates. H class insulation.

#### 7. AUTOMATIC VOLTAGE REGULATOR (AVR)

Static electronic design voltage regulator. Steady voltage precision within + 1 % from no load to full load including cold and hot variations, at any Power factor between 0.8 and unity.

#### 8. MOTOR STARTING

An overload capacity equivalent to between 160% to 300% (depending on alternator frame size) of full load impedance at zero power factor can be sustained for 10 seconds.

#### 9. MOUNTING ARRANGEMENT

##### 9.1 BASE FRAME

The complete generating set is mounted on heavy duty steel fabricated base frame which is anti rust coated.

##### 9.2 COUPLING

Engine and alternator are directly coupled by means of SAE flange. The engine fly wheel is flexibly coupled to the alternator rotor.

##### 9.3 ANTI VIBRATION MOUNTING PADS

Anti vibration pads are fitted between engine-alternator base frame ensuring complete vibration isolation of rotating assemblies.

#### 10. FUEL SYSTEM

On Generating Sets up to 700 KVA, the baseframe design is incorporated with an integral fuel tank with a capacity of approx. 8 hours running at Full Load. The tank is supplied complete with fill cap breather, fuel feed and return lines to the Engine and drain plug.

#### 11. DOCUMENTATION

A full set of operation and maintenance manual are provided.

#### 12. FACTORY TESTS

Generating set is subject to a strict load test before delivery. A test certificate can be provided as optional.

#### 13. QUALITY STANDARDS

Generating set meets the following standards ISO 8528, IEC 34.1, CEI 2.3, VDE 0530, BS 4999-5000, NF51-100. Perkins is fully accredited ISO 9001 company.

#### 14. WARRANTY

Generating set is guaranteed for a period of 12 months from date of commissioning or 18 months from date of shipment whichever ever occurs earlier. (check warranty statement for more details, as it may vary for different countries)

In line with our policy of continuous product development, we reserve right to change specification without notice

### AVAILABLE OPTIONS & ACCESSORIES

We offer a range of optional features and accessories to tailor our generating sets to meet your needs.

#### OPTIONS

- Generator Set control and synchronizing panels
- Additional Protection alarms and shutdowns
- Water fuel separator
- Water jacket heater
- Battery charger

#### ACCESSORIES

- Genuine spare parts
- Fuel Tanks
- Manual and Automatic Transfer Switches

Distributed and Serviced by:



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