

DME-45

LEROY SOMER

Perkins
Diesel Power

DSE

DME powers one of the biggest Commercial Infrastructures in the Middle-East

Ratings @ 0.8 PF

Voltage	Frequency	Prime Rating	Stand-by Rating
230/400 V	50 Hz	45 kVA	49.6 kVA
220/380 V	60 Hz	53.1 kVA	58.7 kVA

The above ratings represent the generating set capability guaranteed within $\pm 3\%$ at the reference conditions equivalent to those specified in ISO 8528/1 standard.

The applicable voltage range is 380V to 415V for 50Hz applications. For other voltages, please consult factory.



Genset Details

Controller	DSE702
Base Frame	Heavy-duty fabricated steel
Circuit Breaker	3 Pole MCCB LSIS Korea - 60 A
Engine Speed	1500 rpm - 1800 rpm
Fuel Tank Capacity	270 L
Air Inlet	Mounted Air filter
Fuel System	Rotary type pump
Fuel Filter	Ecoplus fuel filter
Lubrication System	Wet steel sump with filler and dipstick
Cooling System	Thermostatically-controlled system with gear driven circulation pump & pusher fan Mounted radiator, piping and guards
Electrical equipment	12 V starter, 12 V 15 A Alternator Glow plug cold start aid 12 V shut-off solenoid energised to run
Flywheel / Housing	SAE J620 Size (10/11 ^{1/2} in) Housing SAE 3
Mountings	Front engine mounting brackets

Prime These ratings are applicable for supplying continuous electrical power (at variable load).
There is no annual hours limitation and this genset can supply 10% overload for 1 hour in 12 hours

Standby These ratings are applicable for supplying continuous electrical power (at variable load) in the case of emergency power supply. No overload is permitted on these ratings.
The Alternator on this model is peak continuous rates (as defined in ISO 8528-3)

Exhaust System

Max. Back Pr. kPa	18.0
Exhaust Gas Flow m ³ /min (cfm)	Prime 15.2 (529.72) Standby 16.3 (575.63)
Exhaust Gas Temp. C (F)	Prime 514 (1031) Standby 543 (1076)

ISO 9001
-The complete Generating Set is type-tested according to ISO 8528-8 Standard

ISO 17025
-The control panel is certified by an ISO 17025 accredited laboratory to have IP55 according to IEC 60355 Quality 60355

Dimensions

Closed Type	
Length	227 cm
Width	105 cm
Height	133 cm
Weight	850 kg

Open Type	
Length	170 cm
Width	80 cm
Height	100 cm
Weight	765 kg

Engine Technical Data

Make & Model	Perkins 1103A-33TG1
Number of Cylinders	4 vertical in-line
Bore and Stroke	105 x 127 mm 4.1 x 5 in
Displacement	4.41 Liters 268.5 in 3
Aspiration	Turbocharged
Cycle	4 Stroke
Combustion System	Direct Injection
Compression Ratio	18.2:1
Rotation	Anti-clockwise, viewed on flywheel
Total Lubrication Capacity	8.0 Liters 2.11 gal
Cooling System	Water-cooled
Total Coolant Capacity	12.6 Liters 3.43 gal
Governor	Mechanical

Alternator Technical Data

Make & Model	Leroysoner TAL042 F
Frequency / Poles	50 Hz / 4
Ingress Protection	IP 23
Insulation Class	H
Terminals (optional)	6 / 12
Excitation system	Shunt
Winding pitch	2/3
AVR Model	R120
Overspeed	2250 RPM
Voltage regulation	$\pm 1\%$
Coolant Air Flow	0.06m ³ /s

Standard Reference Conditions Note:

Standard reference conditions 25°C (77°F) Air Inlet Temp, 100m (328 ft) A.S.L. 30% relative humidity. Fuel consumption data at full load with diesel fuel with specific gravity of 0.85 and conforming to BS2869: 1998, Class A

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