MEGA POWER
شركة ميقا الطاقة

MPR-P12.4

Generating Set
(Technical Data Sheet)



Standard Specifications

01 **Prime Rating:**
Unlimited hours usage, with an average load factor of 80% over each 24-hour period. 10% overload is available for 24-hour in every 12 hours operation. 0 overload is permitted on standby power.

02 **Standby Rating:**
Limited to 500 hours annual usage, with an average load factor of 80% of the published standby power rating over 24-hour period. Up to 300 hours of annual usage may be run continuously. No overload is permitted on standby power.

03 **Engine:**
Perkins, including air filters, fuel filters, oil filter, starting motor and charging alternator etc.

04 **Alternator:**
Brushless AC Alternator.

05 **Radiator:**
50 °C Mounted Radiator, piping and guards.

Output Rating

PRIME:		STANDBY:	
60 Hz—1800 Rpm 480V, 3ph			
11.2 kVA	9 kW	12.4 kVA	10 kW

Powered By:

Perkins
Diesel Generator

LEROY SOMER

DSE

Engine Specifications

Engine Make	Perkins
Engine Model	403A-11G1
Number of cylinders	3 Vertical In-line
Aspiration	Naturally Aspirated
Cooling Method	Water Cooled
Governing Type	Mechanical
Governing Class	G2 ISO 8528
Compression Ratio	23:1
Displacement	1.131 Liters
Bore/Stroke	77 x 81 mm
Charging Alternator	12 Volts, 15 Amperes
Fuel Filter	Split element fuel filter
Lube Oil Filter	Spin on full flow filter
Lube Oil Capacity	4.9 Liters

Alternator Specifications

Alternator Make	Leroy Somer
Alternator Model	TAL-A40-B
Number of Poles	4
Number of Winding Leads	6 wires
Type of Bearing	Single Bearing
Insulation Class - Temp Rise	Cont. H – 125 K
Ingress Protection Rating	IP 23
Excitation System	Self Excited
AVR Model	R120

Alternator Operating data

Over Speed	2250 rpm
Voltage Regulation	± 1%
Total Harmonic Distortion THD	< 3.5 %

Complying with Standards
ISO 3046, BS 5514, DIN 6217, NEMA_MGI, DIN EN, BS 5000, IEC 60034, IEC 60947-2

Standard Specifications:

06 **Fuel Tank:**
Built in Tank with the Capacity of 8-10 hours running on full load.
Standard for all Gensets below 800 KVA.

07 **Circuit Breaker:**
3 Poles, Molded Case Circuit Breaker

08 **Control system alarms:**
Over and Under Speed
Low and High Battery Volt.
Start and Stop Failure
Over Current
Under / Over Generator Voltage
Low Oil Pressure
Emergency stop
High engine temperature

09 **Warranty policy:**
Mega Power products has a warranty for 12 Months or 1000 Hours whichever occurs first against any manufacturing defects Non-Genuine parts, incorrect operation, maintenance failures are excluded from the warranty policy

Closed Type Enclosure Specs:

Enclosure Type	Acoustic & Weather Proof
Drainage Provision	Fuel and Water Drainage
Transportation	Tested Single Point Lifting Facility & Forklift Pockets
Ingress Protection Rating	IP 23
Lifting	ISO Standard Lifting
Canopy RAL Color	TAL 9010
Base frame RAL Color	RAL 9011
Noise Pressure level	67 dB(A) @ 7 meter

Control System:

Large back-lit text display	Generator/load current monitoring and protection (kW)
Multiple display languages	Breaker contol via fascia buttons
DSENET expansion compatible	Fuel and start outputs, configurable using can
Data logging facility	4 configurable DC outputs
Fully configurable via PC using USB communication	4 configurable analogue/digital inputs
Front panel configuration	Automatically transfers between mains (utility) and generator
Efficient power save mode	Increased input and output expansion capability via dsenet
3 phase generator sensing	IP65 rating (with optional gasket) offers increased resistance to water ingress
Accumulated power monitoring (kWh, kVA h,kVAr h)	Digital inputs; Analogue Inputs

DSE 4520 MKIII
Auto start
AMF
CONTROL



Dimensions:

Type	Open	Closed
Length (mm)	1635	2152
Width (mm)	750	1004
Height (mm)	1260	1342
Fuel Tank (L)	92	169
Weight (KG)	495	730

* Closed Type enclosure dimensions may vary.



COOLPAC PERFORMANCE DATA

Cooling System Design	Water-Cooled, Thermostatically Controlled
Coolant Ratio	50% ethylene gylcol; 50% water
Coolant Capacity (L)	5.2
Limiting Ambient Temp	50 Degree Celsius
Cooling Fan Air Flow	10.2 m3/min
Air Cleaner Type	Dry-type Air Cleaner

FUEL CONSUMPTION 1800 (60 HZ)

Fuel Consumption @ standby	3.6 L/hr
Fuel Consumption @ 100%	3.0 L/hr
Fuel Consumption @ 75%	2.3 L/hr
Fuel Consumption @ 50%	1.7 L/hr

Engine:

Perkins heavy duty high performance industrial type diesel engine



Optional configurations:

Engine accessories:

- Heavy-duty air filter.
- Water Jacket Heater.
- Lubricant / Fuel Heater,
- Racor Filter
- Oil Drain Pump.

Alternator And Accessories:

- 12 Wires Alternator.
- Space Heater,
- Permanent Magnet PMG.
- Double bearing Alternator.
- Medium Voltage Alternator,
- RTDs for Bearing and winding

Control System:

- DSE 4520, 6020, 6120, 7320
- DSE 8610.
- DSE Gateway 890.
- Extended inputs / Outputs.
- Remote Annunciators
- Comap, Woodward, Deif

Start Battery:

- Nickel-cadmium battery.
- Disconnector Switch,
- Battery charger.
- Charging current meter.

Circuit Breaker:

- 4 Poles MCCB.
- Motorized MCCB.
- ACB / Motorized.

External Fuel Tank:

- MS Steel Fuel Tanks (500-10000 L).
- Fuel Transfer pump.
- Double Wall / UL Special Tanks.

Exhaust Muffler:

- Residential Silencer.
- Critical Silencer.
- Spark Arrestors.

Cooling System:

- 55 -degree Radiator.
- Remote Radiator.

Automatic Transfer Switch (ATS):

Contactor Type, Motorized MCCB Type, Motorized ACB Type, Motorized changeover type ATS.

Available for voltages :

400/230V, 480/277V, 380/220V, 440/254V, 416/240V,220/127V, 208/120V & 4 KV up to 13.8 KV

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الـرياض - المملكة العربية السعودية الـسـلي مخرج ١٧، ٦٧٦٥ شارع الخضيرة الرياض ٣٠٣٨