MEGA POWER
شركة ميقا الطاقة

# MPR-K27

## 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:**
Kubota , 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 | | | |
| 24 kVA | 19.2 kW | 27 kVA | 21.6 kW |

Powered By: Kubota

### Engine Specifications

| | |
|---|---|
| Engine Make | Kubota |
| Engine Model | V2203-E2-BG |
| Number of cylinders | 4 Vertical In-line |
| Aspiration | Naturally Aspirated |
| Cooling Method | Water Cooled |
| Governing Type | Isochronous Electronic |
| Governing Class | G2 ISO 8528 |
| Compression Ratio | 22 |
| Displacement | 2.197 Liters |
| Bore/Stroke | 87 x 92.4 |
| Lube Oil Capacity | 7.6 Liters |

### Alternator Specifications

| | |
|---|---|
| Alternator Make | Leroy Somer |
| Alternator Model | TAL-042-A |
| 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 % |

LEROY SOMER

DSE

**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 @ | 66 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) | 1650 | 2000 |
| Width (mm) | 775 | 950 |
| Height (mm) | 1175 | 1495 |
| Fuel Tank ( L ) | 100 | 100 |
| Weight (KG) | 800 | 1300 |

* Closed Type enclosure dimensions may vary.



## Engine:

**Kubota heavy duty high performance industrial type diesel engine**



| COOLING SYSTEM | |
|---|---|
| Coolant Capacity (L) | 8.1 |
| Cooling fan Air Flow | 0.07 m3/min |
| Radiator Fan Load | 0.80 |

| EXHAUST SYSTEM | |
|---|---|
| Muffler Type | Industrial Grade |
| Max. Back Pressure | 7.1 |
| Exhaust Gas Flow (PRP/ESP) | 5.17 |
| Exhaust Gas Temperature | 500 |

| FUEL CONSUMPTION 1800 (60 HZ) | |
|---|---|
| Fuel Consumption @ 100% | 5.2 L/hr |
| Fuel Consumption @ 75% | 3.9 L/hr |
| Fuel Consumption @ 50% | 2.6 L/hr |
| Fuel Consumption @ 25% | 1.3 L/hr |

# 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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