



Standby & Prime: 50 Hz

| Output Ratings                       | Standby              | Prime                |
|--------------------------------------|----------------------|----------------------|
| 400-415 V, 3 ph.,<br>50 Hz, 1500 rpm | 450.0 kVA / 360.0 kW | 400.0 kVA / 320.0 kW |
| Ratings at 0.8 Power Factor          |                      |                      |



Image shown might not reflect actual Genset

### ENGINE SPECIFICATIONS

|                                          |                                           |
|------------------------------------------|-------------------------------------------|
| Engine Make & Model                      | Perkins ,2206A-E13TAG3                    |
| Gross Engine Prime Power, KWm (hp)       | 368.4 (494.0)                             |
| Gross Engine Standby Power, KWm (hp)     | 412.5 (553.2)                             |
| Number of Cylinders, Arrangement / Cycle | 6 Vertical in line / 4 stroke             |
| Aspiration                               | Turbocharged and air to air charge cooled |
| Displacement, L (cu. in)                 | 12.5 (762.8)                              |
| Bore / Stroke, mm (in)                   | 130.0 (5.11)/157.0 (6.18)                 |
| Governor Type                            | Electronic                                |
| Governor class                           | ISO 8528 - Class G2                       |
| Compression Ratio                        | 16.3 :1                                   |
| Cooling Method                           | Water                                     |
| Battery and Charger Alternator           | 24 VDC , 70 Amp                           |

### FUEL SYSTEM

|                                        |                                                                    |              |
|----------------------------------------|--------------------------------------------------------------------|--------------|
| Fuel filter                            | 'Ecoplus' fuel filter elements with primary filter/water separator |              |
| Recommended Fuel                       | Class A2 Diesel                                                    |              |
| Fuel Consumption                       | Prime                                                              | Standby      |
| Fuel Consumption 50% L/hr (US gal/hr)  | 42.0 (11.09)                                                       |              |
| Fuel Consumption 75% L/hr (US gal/hr)  | 62.0 (16.37)                                                       |              |
| Fuel Consumption 100% L/hr (US gal/hr) | 81.0 (21.39)                                                       | 90.0 (23.77) |

### EXHAUST SYSTEM

|                                            |       |         |
|--------------------------------------------|-------|---------|
|                                            | Prime | Standby |
| Exhaust gas flow at set rated load, m3/min | 64.6  | 72.5    |
| Exhaust gas temperature, °C                | 630   | 630     |
| Maximum exhaust back pressure, kPa         | 10.0  |         |

### AIR SYSTEM

|                             |             |         |
|-----------------------------|-------------|---------|
|                             | Prime       | Standby |
| Combustion Air Flow: m3/min | 24.3        | 26.4    |
| Air Filter Type             | Dry Element |         |

### ALTERNATOR SPECIFICATIONS

|                           |               |
|---------------------------|---------------|
| Make                      | Leroy Somer   |
| Model                     | TAL 0473A     |
| Number of Poles           | 4             |
| Type of Bearing           | Single        |
| Ingress Protection Rating | IP 23         |
| Excitation System         | Shunt Excited |
| Insulation Class          | H             |
| Winding Pitch             | 2/3           |
| AVR Model                 | R150          |

### ALTERNATOR OPERATING DATA

|                               |                                    |
|-------------------------------|------------------------------------|
| Overspeed                     | 2250 r.p.m                         |
| Voltage Regulation            | ± 0.8 %                            |
| Total Harmonic Distortion THD | No load < 2.5%,<br>Linear load <5% |
| Radio Interface               | EN 61000-6-2 &<br>EN 61000-6-4     |
| Cooling Air Flow, m³/sec      | 0.9                                |

### LUBRICATION SYSTEM

|                                |                                        |
|--------------------------------|----------------------------------------|
| Oil Filter Type                | Full-flow replaceable 'Ecoplus' filter |
| Total Oil Capacity, L (US gal) | 40.0 (10.5)                            |
| Oil Pan Capacity, L (US gal)   | 38.0 (10.0)                            |
| Oil Type                       | API CH4/CI4; SAE 15W-40                |

### COOLING SYSTEM

|                                              |              |
|----------------------------------------------|--------------|
| Coolant capacity (with radiator), L (US gal) | 51.4 (13.57) |
| Fan load, KWm                                | 14.0         |
| Cooling system air flow, m3/min              | 654.0        |

### CONTROL PANEL (STANDARD)

**Make:** Deep Sea

**Model:** DSE6120

The **DSE6120 MKII** is an Auto Mains (Utility) Failure Control Module suitable for a wide variety of single diesel or gas genset applications, the modules will display warnings, shutdown and engine status information on the back-lit LCD screen. This module can either be programmed using the front panel or by using the DSE configuration suite PC software.

#### Metering

- Generator frequency
- Generator volts (L-L, L-N)
- Generator/load power monitoring (kW, kVA, kVAr, pf)
- Generator current
- Engine oil pressure
- Engine coolant temperature
- Hours run counter
- Battery volts

#### Alarm indications and Communication

- Fail to start/stop
- Overspeed
- Low Oil Pressure
- High coolant temperature
- Low DC voltage
- Emergency stop
- Fuel level (Warning or shutdown) - Optional
- Analog Inputs.
- Digital Input/output
- CAN diagnostics and CAN fail/error
- Ingress Protection IP65.



### SOUND ATTENUATED AND WEATHER PROTECTIVE ENCLOSURE

#### CONSTRUCTION

- Modular type sound-proof canopy with Steel locks and Zinc alloy hinges.
- Body made from galvanized steel components (1.8mm) treated with polyester powder coating.
- Canopy installation executed with screw and nut, without welding process.

#### CONVENIENT ACCESS FOR MAINTENANCE

- Two Separate Lockable doors on each side
- Radiator fill access plastic cap
- Vertical hinged side door 180° opening rotation
- Removable rear panel, which allows access when needed (radiator side)

#### TRANSPORTABILITY

- Tested and certified lifting points facility depending on genset size.

#### SECURITY AND SAFETY

- Transparent Control panel viewing window in a lockable access door.
- Emergency stop push-button (red) fixed externally for quick access.
- Cooling fan and battery charging alternator fully guarded.
- Fuel fill and battery can only be reached via lockable access doors.
- Exhaust silencing system totally enclosed for operator safety.
- Insulation with Non-flammable acoustic foam.

#### SOUND PRESSURE LEVEL

- Noise Pressure level tested ~ 75 - 85 dBA@ 7m
- IP Rating up to IP45

### STANDARD FEATURES

#### FILTRATION SYSTEM

- Air filter
  - Fuel filter
  - Full flow lube oil filter
- All filters have replaceable elements

#### GENSET MOUNTED RADIATOR

Radiator and cooling fan, complete with safety guards, designed to cool the engine at high ambient temperatures.

#### BASE FRAME

Heavy Duty Base frame with built-in tank & forklift pockets.

#### EXHAUST SYSTEM

Heavy duty Silencer.

#### ANTI-VIBRATION MOUNTING PADS

Anti-Vibration pads are affixed between the Engine / Alternator feet and the Base frame thus ensuring complete vibration isolation of the rotating assembly.

#### SAFETY GUARDS

The Fan & Fan Drive along with the Battery Charging Alternator are Safety Guard protected for personnel protection.

#### CIRCUIT BREAKER TYPE

ABB/equivalent 3 pole MCCB.

#### STARTING BATTERIES

Set of Lead Acid Starting Battery, Tray and Leads.

#### STANDARD FACTORY TESTS

Generators are load tested and inspected before dispatched.

#### DOCUMENTATIONS

Operation & Maintenance manual, wiring diagrams.

#### WARRANTY

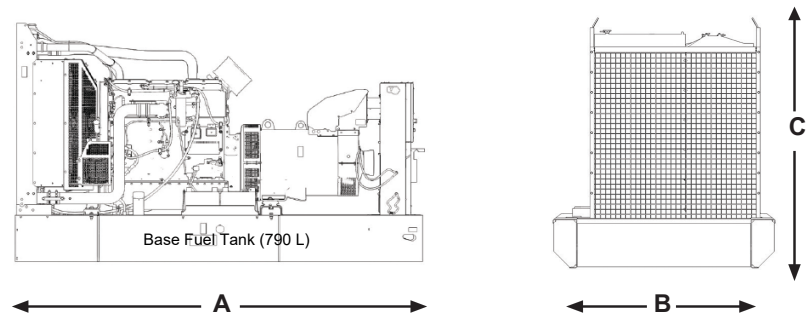
All of the Generating Sets are covered under a warranty policy:

**PRIME:** One Year or 3000 hours whichever occur first.

**STANDBY:** Two Years limited to 500 hours annual operation.  
(check warranty statement for more details)

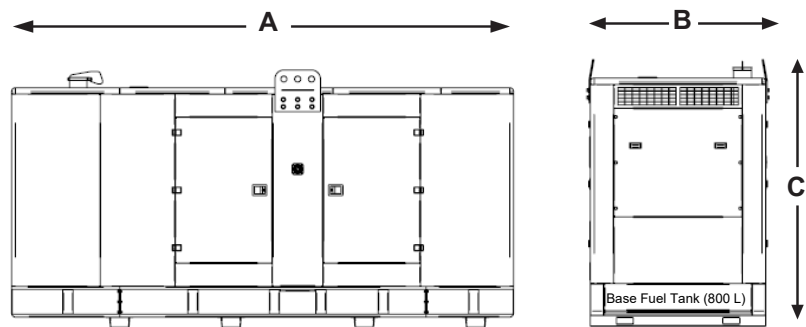


WEIGHTS & DIMENSIONS



Note: General configuration not to be used for installation. See general dimension drawings for detail.

| GENSET TYPE | Dim "A" mm (in) | Dim "B" mm (in) | Dim "C" mm (in) | Dry Weight kg (lb) | Wet Weight kg (lb) |
|-------------|-----------------|-----------------|-----------------|--------------------|--------------------|
| OPEN        | 3300 (129.9)    | 1100 (43.3)     | 2070 (81.4)     | 3200 (7054)        | 3275 (7220)        |
| CLOSE       | 5200 (204.7)    | 1630 (64.17)    | 2500 (98.42)    | 4520 (9964)        | 4595 (10130)       |



**APPLICABLE MANUFACTURERS COMPONENTS STANDARDS:** CSA C22.2 n°100-14 and UL 1446., IEC60034-1, ISO3046, ISO8528, NEMA MG1.32-33 , IEC 61000-6-2, IEC 61000-6-3, IEC 61000-6-4, VDE 0875G, VDE 0875N and EN 55011

Note: Please refer to technical data sheets for more applicable standards.

**STANDBY (ESP):** Output available with varying load in the event of a utility power failure (Emergency). Typical operation is 200 hours per year, No overload is permitted on these ratings.

**PRIME (PRP):** Output available with varying load for an unlimited time. Typical peak demand is 100% of prime rated kW with 10% overload capability for emergency use for a maximum of 1 hour in 12 hours.Overload operation cannot exceed 25 hours per year as per ISO8528.

**RATINGS:** Ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO3046 standard conditions.