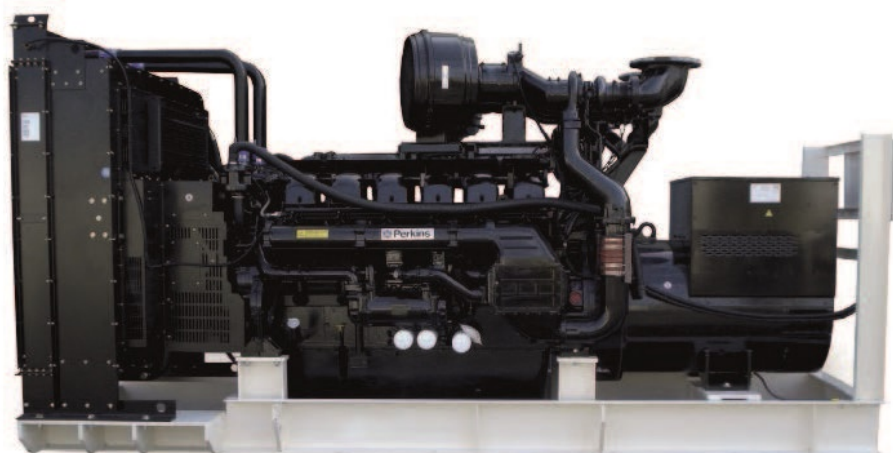




Generating Set pictured (open) may include optional accessories

## GENERATING SET MODEL (JP1500)

Ratings at 0.8 Power Factor

| Output Ratings                   | Prime    | Standby  |
|----------------------------------|----------|----------|
| 380-415 V, 3 ph, 50 Hz, 1500 rpm | 1500 kVA | 1650 kVA |
|                                  | 1200 kW  | 1320 kW  |

**Prime Power** These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. 10% overload power is available for 1 hour in 12 hours continuous operation.

**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 ratings.

### STANDARD REFERENCE CONDITIONS

Output ratings are presented at 25°C air inlet temperature, barometric pressure 100 kPa, relative humidity 30%. This generating set is designed to operate at high ambient temperatures (up to 55°C), humidity (up to 99%) and higher altitudes. De-rating may apply, please consult your dealer for specific site ratings.

Some of the specifications are not standard on all Genset models.

## ENGINE / TECHNICAL DATA

|                                               |                                           |              |
|-----------------------------------------------|-------------------------------------------|--------------|
| Engine Make & Model                           | Perkins 4012-46TAG2A                      |              |
| Governing Class                               | ISO 8528-5 G2                             |              |
| Number of Cylinders & Arrangement             | 12 - 60° Vee form                         |              |
| Bore and Stroke mm                            | 160 x 190                                 |              |
| Displacement / Cubic Capacity litres          | 45.842                                    |              |
| Induction System                              | Turbocharged and air to air charge cooled |              |
| Cycle                                         | 4 stroke                                  |              |
| Combustion System                             | Direct Injection                          |              |
| Compression Ratio                             | 13:1                                      |              |
| Rotation                                      | Anti-clockwise, viewed from flywheel end  |              |
| Cooling System                                | Water - cooled                            |              |
| Frequency and Engine Speed                    | 50Hz & 1500rpm                            |              |
|                                               | Prime                                     | Standby      |
| Gross Engine Power kW (hp)                    | 1331 (1785)                               | 1459 (1957)  |
| Fuel Consumption @ 50% load L/hr              | 162                                       | -            |
| @ 75% load L/hr                               | 237                                       | -            |
| @ 100% load L/hr                              | 301                                       | 335          |
| Total Lubrication System Capacity litres      | 177                                       | 177          |
| Total Coolant Capacity (inc. radiator) litres | 210                                       | 210          |
| Boost Pressure Ratio                          | 3.1                                       | 3.4          |
| Exhaust Temperature: °C                       | 455                                       | 455          |
| Radiator Cooling Air Flow (Min): m³/sec       | 32.4                                      | 32.4         |
| Combustion Air Flow: m³/min                   | 120                                       | 128          |
| Exhaust Gas Flow: m³/min                      | 320                                       | 320          |
| Fuel Tank Capacity: litres                    | NO FUEL TANK                              | NO FUEL TANK |

## DIMENSIONS AND WEIGHT ( OPEN TYPE )

| Length cm | Width cm | Height cm | Weight* kg (wet) |
|-----------|----------|-----------|------------------|
| 535       | 220      | 240       | 9910             |

wet weight = with lube oil and coolant

## STANDARD SPECIFICATIONS

### 1. ENGINE

Perkins four stroke heavy duty high performance industrial type diesel engine.

### 2. ENGINE FILTRATION SYSTEM

- Air filter
- Fuel filter
- Full flow lube oil filter

All filters have replaceable elements.

### 3. COOLING RADIATOR

Radiator and cooling fan, complete with safety guards, designed to cool the engine at high ambient temperatures (consult your dealer for de-rating factors)

### 4. EXHAUST SYSTEM

Heavy duty Industrial Exhaust Silencer

|                                 |           |
|---------------------------------|-----------|
| Silencer noise reduction level  | 10 (dB)   |
| Maximum allowable back pressure | 5.0 (kPa) |

### 5. CIRCUIT BREAKER TYPE

3 pole ACB ABB (supplied disconnected and without cables)\*

(contd.)

## ALTERNATOR DATA

|                             |                       |
|-----------------------------|-----------------------|
| Make                        | Leroy Somer           |
| Model                       | LSA50.2L8             |
| No. of bearings             | 1                     |
| Insulation class            | H                     |
| Total Harmonic Content      | <3.5%                 |
| Ingress Protection          | IP23                  |
| Excitation System           | AREP                  |
| Winding Pitch               | 2/3                   |
| AVR Model                   | R450                  |
| Overspeed                   | 2250 mn <sup>-1</sup> |
| Voltage Regulation (steady) | ± 0.5%                |
| Short Circuit Capacity      | 300% (3 In): 10s      |

PMG Excitation System Available as Optional.

## CONTROL PANEL (STANDARD)

|       |          |
|-------|----------|
| Make  | Deep Sea |
| 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 a GSM 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 engine speed detection
- High/Low battery voltage
- kW overload
- Unbalanced load
- Low fuel alarm (if fitted)
- Battery charger failure (if fitted)

(Please refer to DSE7320 brochure for more details)





Generating Set pictured (closed) may include optional accessories

## SOUND ATTENUATED AND WEATHER PROTECTIVE CONTAINERS - 40' ISO HIGH CUBE CTR

### SALIENT FEATURES:

- Lockable external fuel filling point
- Internal /External fuel connection
- External oil drainage
- External coolant drainage
- Air inlet /outlet louvers
- Sound splitters at radiator side (only for 1000 KVA and above) (For 725-880 KVA vertical air discharge)
- Common earth connection
- 2 layers white color paint
- Cooling fan and battery charging alternator fully guarded
- Engine, radiator, fuel fill and battery can only be reached via lockable access doors

### CONVENIENT ACCESS FOR MAINTENANCE:

- Original CTR main door as access for operation
- Two doors - one large door on each side (725-880 kVA)
- Two doors in one side and one door in the other side (1000-2500 kVA)
- Lockable doors with emergency opening pusher from inside
- Internal 3-4 lights
- Emergency light on top of the door

### TRANSPORTABILITY:

- Lifting points on the top and bottom corners of the containers
- Standard forklift pockets (725-880 kVA)

### SOUND PRESSURE LEVEL:

- 80 - 85 dBA at 3 meters (standard)

Customized enclosures with reduced Sound Pressure Levels available on demand

## DIMENSIONS AND WEIGHT ( CLOSED TYPE )

| Length cm | Width cm | Height* cm | Weight kg (wet) | Fuel Tank liter |
|-----------|----------|------------|-----------------|-----------------|
| 1200      | 244      | 290        | 20510           | NO FUEL TANK    |

\*Excluding 120cm for the silencer on top

## AVAILABLE OPTIONS & ACCESSORIES

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

### OPTIONS

- A variety of generating set control and synchronizing panels
- Additional protection alarms and shutdowns
- Water fuel separator
- Water jacket heater
- Battery charger

### ACCESSORIES

- Genuine spare parts
- Load banks
- Auxiliary fuel tanks
- Manual & automatic transfer switches

For further information on all of the standard and optional features accompanying this product please contact your local dealer or visit [www.cigalepower.com](http://www.cigalepower.com)

All information in this document is substantially correct at time of printing and may be altered subsequently.

## STANDARD SPECIFICATIONS

### 6. 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.

### 7. ALTERNATOR

#### 7.1 INSULATION SYSTEM

- The insulation system is Class H.
- All windings are impregnated in either a triple dip thermosetting liquid, oil and acid resisting polyester varnish or vacuum pressure impregnated with a special polyester resin.
- Heavy coat of antitracking varnish additional protection against moisture or condensation.

#### 7.2 AUTOMATIC VOLTAGE REGULATOR (AVR)

The fully sealed Automatic Voltage Regulator maintains the Voltage Regulation at  $\pm 1\%$ . Nominal adjustment by means of a trim pot incorporated on the AVR.

#### 7.3 MOTOR STARTING

An overload capacity equivalent to 300% of the Full Load impedance at zero Power Factor can be sustained for 10 seconds, when PMG option is fitted.

### 8. MOUNTING ARRANGEMENT

#### 8.1 BASE FRAME

The complete Generating Set is mounted as a whole on a heavy duty fabricated steel Baseframe.

#### 8.2 COUPLING

The Engine and Alternator are directly coupled by means of an SAE flange. The Engine flywheel is flexibly coupled to the Alternator rotor.

#### 8.3 ANTI-VIBRATION MOUNTING PADS

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

#### 8.4 SAFETY GUARDS

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

### 9. FACTORY TESTS

- The Generating set is load tested before dispatch
- All protective devices control functions and site load conditions are simulated. The generator and it's systems are checked before dispatch.

### 10. EQUIPMENT FINISHING

All mild steel components are fully degreased and painted with powder coated paint to ensure maximum scuff resistance and durability.

### 11. DOCUMENTATIONS

Operation & Maintenance manual, Circuit wiring diagrams and Commissioning / Fault Finding instruction leaflets are accompanied with the Generator.

### 12. QUALITY STANDARDS

The equipment meets the following standards: BS4999, BS5000, BS5514 IEC 60034, VDE0530, NEMA MG 1.22 and ISO 8528.

### 13. WARRANTY

All of the Generating Sets are covered under a warranty policy for a period of 12 months. Warranty of the equipment is in line with manufacturers warranty terms & conditions.

(check warranty statement for more details, as it may vary for different countries)

In line with continuous product development, we reserve the right to change specifications without notice.