



## DIESEL GENERATOR SETS

### R-P Series

Powered by Perkins Engines

## R-P20D5/S

50<sub>Hz</sub>

### Output Ratings

| Three-Phase, 50Hz, 1500RPM |                |                |              |
|----------------------------|----------------|----------------|--------------|
| Output                     | Prime Power    | Standby Power  |              |
|                            | 20 kVA / 16 kW | 22 kVA / 18 kW |              |
| Voltage (V)                | Frequency (Hz) | Current(A)     | Power Factor |
| 380/220                    | 50             | 30             | 0.8          |
| 400/230                    | 50             | 29             | 0.8          |
| 415/240                    | 50             | 28             | 0.8          |

- 1) Ambient reference conditions: 1,000 mbar, 25°C, 60% relative humidity
- 2) Standby Power Standby duty, operation under variable load, without Over load;
- 3) Prime Power-Continuous duty operation, under variable load 24/24h -10% over load permissible 1 hour/12 hours

### Features

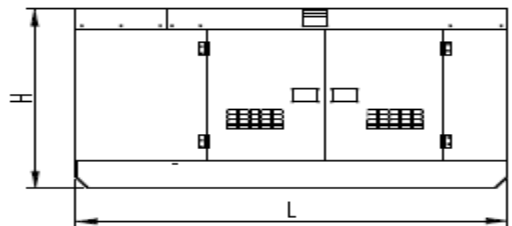
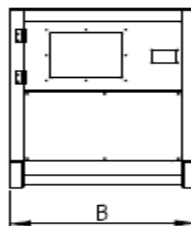
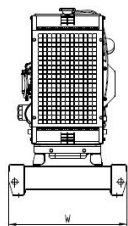
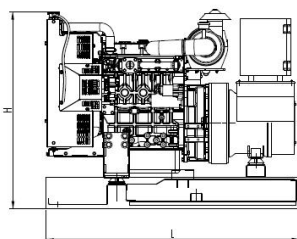
- Strong power, high torque, easy to maintain, easy to start;
- Low noise, low emissions;
- Cabinet made of high quality sheet metal, corrosion-resistant, scratch-resistant;
- Canopy sealing performance, high waterproof, dust-proof, rain, dust and other difficult to access;
- Omni-directional control, easy connection and simple;
- Cranes, fork, pull, drag, easy transportation;
- ≥8-hour fuel tanks;
- Open type with 40°C radiator, Soundproof type with 50°C radiator

### Performance Data

|                                 |                         |     |  |
|---------------------------------|-------------------------|-----|--|
| Engine Brand & Model            | Perkins & 404D-22G      |     |  |
| Alternator Brand & Model        | Leroy Somer & TAL-A40-F |     |  |
| Control System                  | DSE4620/ DSE8610        |     |  |
| Circuit Breaker Type (Standard) | 3 Pole MCCB             |     |  |
| Fuel Consumption (l/hr)         | 100% Load               | 6.1 |  |
|                                 | 75% Load                | 5.3 |  |
|                                 | 50% Load                | 4.0 |  |
|                                 | 25% Load                | 2.9 |  |

### Dimensions and Weights

| Content          |   | Open Sets | Soundproof Sets |
|------------------|---|-----------|-----------------|
| Dimensions: (mm) | L | 1300      | 2030            |
|                  | W | 780       | 750             |
|                  | H | 1180      | 1105            |
| Weight (kg)      |   | 840       | 1160            |



## Engine Brand / Model & Perkins / 404D-22G

|                              |                |                      |         |            |
|------------------------------|----------------|----------------------|---------|------------|
| No. of Cylinders / Alignment | 4 / In Line    | Gross Engine         | Prime   | 18.7       |
| Cycle                        | 4 Stroke       | Power (kW)           | Standby | 20.6       |
| Bore / Stroke                | 84 mm / 100 mm | Compression Ratio    |         | 23.3:1     |
| Induction                    | NA             | Displacement (L)     |         | 2.216      |
| Cooling Method               | Water          | Governing Type       |         | Mechanical |
| Lubricant Oil                | 15W40-CF4      | Net weight (kg)      |         | 242        |
| Lubricant Oil Capacity (L)   | 10.6           | Coolant Capacity (L) |         | 7          |

## Alternator Brand / Model & Leroy Somer / TAL-A40-F

|                               |                    |   |                        |
|-------------------------------|--------------------|---|------------------------|
| Rated Capacity (kVA)          | 20                 | A.V.R. Model                            | R120                   |
| Rated Power (kW)              | 16                 | Voltage Regulation (no load- full load) | ± 1.0%                 |
| THF(BS EN60034 – 1)           | <2%                | Underspeed Protection                   | Standard               |
| Bearing Number                | Single             | Protection                              | IP23                   |
| Windings                      | 100% Copper        | Phase Sequence                          | A(U), B(V), C(W)       |
| Silicon Steel Core Processing | One Piece Punching | TIF(NEMA MG 1-22)                       | <50                    |
| Insulation Class              | H                  | Excitation System                       | Self-excited,<br>SHUNT |
| Winding Pitch                 | 2 / 3              | Ambient Temp.                           | 50 °C                  |
| Amortisseur Winding           | Full               | Stator Rated Temp.                      | 125 °C                 |

## Control System:



DSE4620

- Monitoring engine speed, oil pressure, coolant temperature, frequency, voltage, current, power and fuel level, the modules will give comprehensive engine and alternator protection. This will be indicated on the largest back-lit LCD icon display in its class via an array of warning, electrical trip and shutdown alarms.
- Alternator sensing, engine support for diesel, gas and petrol engines all in one variant. With a number of flexible inputs, outputs and protections, the modules can be easily adapted to suit a wide range of applications including lighting towers with the added option for staged loading outputs.
- Through USB Communication both modules can be easily configured using the DSE Configuration Suite PC Software or can be fully configured through the module's front panel editor.



DSE8610

- The DSE8610 is an easy to use multi-generator loadshare system, designed to synchronise up to 32 generators including electronic and non-electronic engines.
- The DSE8610 monitors the generator and indicates operational status and fault conditions, automatically starting or stopping the engine on load demand or fault condition.
- System alarms are annunciated on the LCD screen (multiple language options available), illuminated LED and audible sounder.
- The event log will record 250 events to facilitate easy maintenance. An extensive number of fixed and flexible monitoring, metering and protection features are included as well as comprehensive communication and system expansion options.

## Documents

|   |  |
|---|--|
| <ul style="list-style-type: none"> <li>● Engine parts manual and original data</li> <li>● Alternator original data</li> <li>● Controller system original data</li> <li>● Generator set factory test report</li> </ul> | <ul style="list-style-type: none"> <li>● Generator set maintenance record manual</li> <li>● Generator set instruction manual</li> <li>● Generator combination certificate</li> </ul> |
|---|--|

## Optional

| Engine  | Controller System  |
|---|--|
| <ul style="list-style-type: none"> <li>● Water heater</li> <li>● Fuel heater</li> <li>● Oil heater</li> <li>● Secondary silencer</li> <li>● Water separator</li> </ul>  | <ul style="list-style-type: none"> <li>● Compartment operation remote control system</li> <li>● With three remote control screen</li> <li>● Auto Transfer Switch</li> <li>● Multiple units are automatically connected in synchronize</li> <li>● Centralized monitoring</li> </ul>                             |
| Alternator  | Others   |
| <ul style="list-style-type: none"> <li>● Anti condensation heater</li> <li>● Permanent magnet generator (PMG)</li> <li>● Drop CT( Paralleling)</li> <li>● Other alternator temperature rise level</li> <li>● Stator winding temperature sensor RTD</li> <li>● Bearing temperature sensor RTD</li> <li>● Air filter</li> </ul> | <ul style="list-style-type: none"> <li>● Separate fuel Tank</li> <li>● Buried storage tank</li> <li>● Fully automatic oil supply system</li> <li>● Remote water tank</li> <li>● Waterproof Type genset</li> <li>● Trailer Type genset</li> <li>● Soundproof Type genset</li> <li>● Open Type genset</li> </ul> |

## Service Commitment

- The products provided are all new products. each gensets undergoes strict factory inspection.
- Products are provided with “three guarantees” service, the period is 12 months after the unit is adjusted and the accumulated running time is 1000 hours, whichever comes first.
- The services and accessories of products can be obtained from the after-sales service department (86-510-83781999-1009).



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We reserve the right to make changes in model, technical specification, color, configuration and accessories without prior notice. Please contact the us before ordering.

