

## Output Ratings

| Genset Model   | Prime <sup>1</sup> | Standby <sup>2</sup> |
|----------------|--------------------|----------------------|
| 380-415V, 50Hz | 30.0kVA / 24.0kW   | 33kVA / 26.4kW       |
| 480V, 60Hz     | TBA                | TBA                  |

Ratings are given at 0,8 power factor

## Dimension & Weight

| Length [mm] | Width [mm] | Height [mm] | Dry [kg] | Wet [kg] |
|-------------|------------|-------------|----------|----------|
| 1750/2190   | 1000/1000  | 1130/1450   | 724/1080 | 724/1050 |

Dry: With Lube Oil

Wet: With Lube Oil & Coolant

Without canopy/ with canopy

## Engine Technical Data

|                         |                     |
|-------------------------|---------------------|
| Engine Model :          | Perkins 1103A-33G   |
| Number of Cylinders:    | 3 / Inline          |
| Cycle :                 | 4 Stroke            |
| Bore / Stroke [mm] :    | 105.0 / 127.0       |
| Induction :             | Naturally Aspirated |
| Cooling Method :        | Water               |
| Governor Type :         | Mechanical          |
| Compression Ratio :     | 19.25:1             |
| Displacement [lt] :     | 3.3                 |
| Electrical Sys. Voltage | 12 / Negative       |
| Battery Charger Amps.   | 65                  |

## Lubrication System

|                           |                    |
|---------------------------|--------------------|
| Total Oil Capacity [lt] : | 8.3                |
| Oil Type :                | API CG4/CH4 15W-40 |
| Oil Cooling Method :      | Water              |

## Fuel System

|                         |                     |      |      |      |
|-------------------------|---------------------|------|------|------|
| Fuel Filter Type :      | Replaceable Element |      |      |      |
| Recommended Fuel :      | Class A2 Diesel     |      |      |      |
| Fuel Consumption [lt] : |                     |      |      |      |
|                         | 110%                | 100% | 75%  | 50%  |
| Prime                   | Load                | Load | Load | Load |
| 50Hz                    | 7.7                 | 7.0  | 5.2  | 3.8  |
| 60Hz                    | 9.0                 | 8.1  | 6.2  | 4.7  |

|         |      |      |      |      |
|---------|------|------|------|------|
|         | 110% | 100% | 75%  | 50%  |
| Standby | Load | Load | Load | Load |
| 50Hz    |      | 7.7  | 5.7  | 4.1  |
| 60Hz    |      | 9.0  | 6.8  | 5.0  |

(Based on diesel fuel with a spec. gravity of 0,84 and complied with BS2869, Class A2)

## Alternator Data

|                                     |               |      |
|-------------------------------------|---------------|------|
| Manufacturer :                      | Linz Electric |      |
| Model :                             | PRO18S C/4    |      |
| No. of Bearings :                   | Single        |      |
| Insulation Class:                   | H             |      |
| Winding Pitch :                     | 2/3           |      |
| Number of Wire :                    | 12            |      |
| Protection Class :                  | IP23          |      |
| Efficiency:                         | 87.1%         |      |
| Voltage Regulation (Steady State) : | 1.0%          |      |
| Total Harmonic Content:             | 4.0%          |      |
| Appearent power [kVA]:              | 34            |      |
| Radiant Heat [Kw]:                  |               |      |
|                                     | 50Hz          | 3.16 |
|                                     | 60Hz          | TBA  |

1-Prime Rating: These ratings are applicable for supplying continuous electrical power (at variable load) of commercially purchased power. There is no limitation to the annual hours of operation, this model can supply 10% overload power 1 hour in each 12 hours.

2-Standby Rating: These ratings are applicable for supplying continuous electrical power (at variable load) in the event of an utility power failure.No overload is permitted on these ratings. The alternator on this model is peak continuous rated (as defined in ISO 8528)

Standard Reference Conditions: Standart reference conditions 25°C Air Inlet Temp. 100m, 30% relative humidity.

## Cooling System

|   |      |      |
|---|------|------|
| Cooling System Capacity [lt] :          | 10.2 | 10.2 |
| Heat rejected to Water & Lube Oil [kW]: |      |      |
| Prime                                   | 16.0 | 18.0 |
| Standby                                 | 18.0 | 22.0 |
| Heat Radiation to Room [kW] :           |      |      |
| Prime                                   | 7.9  | 8.2  |
| Standby                                 | 9.3  | 9.7  |
| Radiator Fan Load [kW] :                | 0.3  | 0.5  |
| Radiator Cooling Air Flow [m³/min] :    | 62.6 | 84.8 |
| External Restrictions to :              |      |      |
| Cooling Airflow [Pa] :                  | 125  | 125  |

## Exhaust System

|  |  |     |      |
|--|--|-----|------|
| Max. Allowable Back Pressure [kPa] :     |  | 8.0 | 10.0 |
| Exhaust Gas Flow [m <sup>3</sup> /min] : |  |     |      |
| Prime                                    |  | 5.7 | 6.4  |
| Standby                                  |  | 5.8 | 6.6  |
| Exhaust Gas Temp. [°C] :                 |  |     |      |
| Prime                                    |  | 500 | 520  |
| Standby                                  |  | 520 | 530  |

## Performance

|                           |      |      |
|---------------------------|------|------|
| Engine Speed [rpm] :      | 1500 | 1800 |
| Gross Engine Power [kW] : |      |      |
| Prime                     | 28.2 | 33.1 |
| Standby                   | 31.0 | 36.5 |

## Air Systems

| Air Filter Type :                           |         | Replaceable Element |     |
|---|---------|---------------------|-----|
| Combustion Air Flow [m <sup>3</sup> /min] : |         |                     |     |
|   | Prime   | 2.2                 | 2.6 |
|   | Standby | 2.2                 | 2.6 |
| Max. Combustion Air Intake                  |         |                     |     |
| Restriction [kPa] :                         |         | 6.5                 | 6.5 |

## Available Options

Diamond offers a range of optional features to tailor our gensets to meet your power requirements.

Options:

\* A wide range of Sound Attenuated Enclosures

\* A variety of generating set control and synchronising panels

\* Additional alarms and shutdowns

\* A selection of exhaust silencer noise levels

For further information on all of the standard and optional

features for this product, please contact DIAMOND or

visit [www.diamondcable.com.tr](http://www.diamondcable.com.tr)