50Hz

13.0

46.0

51.0

19.0

20.8

1.0

121.2

120

50Hz

10.0

60Hz

13.0

53.0

57.0

20.9

23.0

1.7

140.4

120

60Hz

15.0



| Output Ratings |                    |                      |  |
|----------------|--------------------|----------------------|--|
| Genset Model   | Prime <sup>1</sup> | Standby <sup>2</sup> |  |
| 380-415V, 50Hz | 81.0kVA / 64.8kW   | 89kVA / 71.2kW       |  |
| 480V, 60Hz     |                    |                      |  |

Ratings are given at 0,8 power factor

| Dimension & Weight |                              |             |           |          |  |
|--------------------|------------------------------|-------------|-----------|----------|--|
| Length [mm]        | Width [mm]                   | Height [mm] | Dry [kg]  | Wet [kg] |  |
| 2150/2880          | 1100/1100                    | 1210/1720   | 1000/1310 |          |  |
| Dry: With Lube Oil | Wet: With Lube Oil & Coolant |             |           |          |  |

Cooling System

Cooling System Capacity [lt]:

Heat Radiation to Room [kW]:

Radiator Cooling Air Flow  $[m^3/min]$ :

Max. Allowable Back Pressure [kPa] :

Radiator Fan Load [kW]:

External Restrictions to:
Cooling Airflow [Pa]:

Exhaust System

Heat rejected to Water & Lube Oil [kW]:

Without canopy/ with canopy

| Engine Technical Data   |                     |
|-------------------------|---------------------|
| Engine Model :          | Perkins 1104A-44TG2 |
| Number of Cylinders:    | 4 / Inline          |
| Cycle :                 | 4 Stroke            |
| Bore / Stroke [mm] :    | 105.0 / 127.0       |
| Induction:              | Turbocharged CAC    |
| Cooling Method :        | Water               |
| Governor Type :         | Mechanical          |
| Compression Ratio :     | 17.25:1             |
| Displacement [It]:      | 4.4                 |
| Electrical Sys. Voltage | 12 / Negative       |
| Battery Charger Amps.   | 65                  |

| Lubrication System       |                    |
|--------------------------|--------------------|
| Total Oil Capacity [lt]: | 8.0                |
| 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 [It]: |                     |

|       | 110% | 100% | 75%  | 50%  |
|-------|------|------|------|------|
| Prime | Load | Load | Load | Load |
| 50Hz  | 20.5 | 18.7 | 14   | 9.7  |
| 60Hz  | 23.6 | 21.2 | 16.2 | 11.5 |

| Exhaust Gas Flow [m³/min]:        |         |      |      |
|-----------------------------------|---------|------|------|
|                                   | Prime   | 12.5 | 15.0 |
|                                   | Standby | 13.3 | 15.9 |
| Exhaust Gas Temp. $[^{\circ}C]$ : |         |      |      |
|                                   | Prime   | 555  | 535  |
|                                   | Standby | 580  | 560  |
|                                   |         |      |      |
| Performance                       |         | 50Hz | 60Hz |
| Engine Speed [rpm]:               |         | 1500 | 1800 |
|                                   |         |      |      |

Standby

Prime

Standby

| Performance              |         | 50Hz | 60Hz |
|--------------------------|---------|------|------|
| Engine Speed [rpm]:      |         | 1500 | 1800 |
| Gross Engine Power [kW]: |         |      |      |
|                          | Prime   | 73.4 | 84.2 |
|                          | Standby | 80.7 | 92.6 |

| Air Systems                   |         | 50Hz       | 60Hz      |
|-------------------------------|---------|------------|-----------|
| Air Filter Type :             |         | Replaceabl | e Element |
| Combustion Air Flow [m³/min]: |         |            |           |
|                               | Prime   | 4.8        | 6.2       |
|                               | Standby | 5.1        | 6.5       |
| Max. Combustion Air Intake    |         |            |           |
| Restriction [kPa]:            |         | 8.0        | 8.0       |

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

| Alternator Data                     |      |               |
|-------------------------------------|------|---------------|
| Manufacturer :                      |      | Linz Electric |
| Model:                              |      | PRO22S C/4    |
| No. of Bearings :                   |      | Single        |
| Insulation Class:                   |      | н             |
| Winding Pitch :                     |      | 2/3           |
| Number of Wire :                    |      | 12            |
| Protection Class :                  |      | IP23          |
| Efficiency:                         |      | 90.3%         |
| Voltage Regulation (Steady State) : |      | 1.0%          |
| Total Harmonic Content:             |      | 4.0%          |
| Appearent power [kVA]:              |      | 96            |
| Radiant Heat [Kw]:                  |      |               |
|                                     | 50Hz | 6.2           |
|                                     | 60Hz | TBA           |

## 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

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)