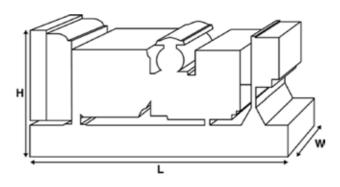


| <b>Output Ratings</b> |       |         |
|-----------------------|-------|---------|
| Voltage, Frequency    | Prime | Standby |
| kVA                   | 180   | 200     |
| kW                    | 144   | 160     |
| kVA                   |       |         |
| kW                    |       |         |



### Ratings at 0.8 power factor.

Please refer to the output ratings technical data section for specific generator set outputs per voltage.



| Dimension    | ns and Weights |             |
|--------------|----------------|-------------|
| Length       | mm             | 2510 (98.8) |
| Width        | mm             | 1010 (39.8) |
| Height       | mm             | 1640 (64.6) |
| Weight (Dry) | kg             | 1572 (3466) |
| Weight (Wet) | kg             | 1593 (3512) |

Ratings in accordance with ISO 8528, ISO 3046, IEC 60034,
BS5000 and NEMA MG-1.22.

Generator set pictured may include optional accessories.

# Prime Rating

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

### Standby Rating

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. The alternator on this model is peak continuous rated (as defined in ISO 8528-3).

### **Standard Reference Conditions**

Note: Standard reference conditions 25°C (77°F) Air Inlet Temp, 100m (328 ft) A.S.L. 30% relative humidity. Fuel consumption data at full load with diesel fuel with specific gravity of 0.85 and conforming to BS2869: 1998, Class A2.

PEGC Power Solutions offer a range of optional features to allow you to tailor our generator sets to meet your power needs. Options available include:

- Upgrade to CE Certification
- A wide range of Sound Attenuated Enclosures
- A variety of generator 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 accompanying this product please contact your local Dealer or visit:

www.pegcpowersolutions.com



| Ratings and Perform        | ance Data          |                             |             |
|----------------------------|--------------------|-----------------------------|-------------|
| Engine Make                |                    | Perkins                     |             |
| Engine Model:              |                    | 1106D-E70TAG4               |             |
| Alternator Make            |                    |                             |             |
| Alternator Model:          |                    | 30120                       |             |
| Control Panel:             |                    | 100                         |             |
| Base Frame:                |                    | Heavy Duty Fabricated Steel |             |
| Circuit Breaker Type:      |                    | 3 Pole MCCB                 |             |
| Frequency:                 |                    | 50 HZ                       | 60 HZ       |
| Engine Speed: RPM          | rpm                | 1500                        |             |
| Fuel Tank Capacity:        | litres (US gal)    | 394 (104.08)                |             |
| Fuel Consumption Prime     | litres (US gal)/hr | 41.3 (10.9)                 |             |
| Fuel Consumption Standby   | litres (US gal)/hr | 45.2 (11.9)                 |             |
| Engine Technical Dat       | <br>ta             |                             |             |
| No. of Cylinders           |                    | 6                           |             |
| Alignment                  |                    | IN LINE                     |             |
| Cycle                      |                    | 4 STROKE                    |             |
| Bore mi                    | m (in)             | 105 (4.1)                   |             |
| Stroke mi                  | m (in)             | 135 (5.3)                   |             |
| Induction                  |                    | TURBOCHARGED AIR TO AIR CHA | ARGE COOLED |
| Cooling Method             |                    | WATER                       |             |
| Governing Type             |                    | ELECTRONIC                  |             |
| Governing Class            |                    | ISO 8528 G2                 |             |
| Compression Ratio          |                    | 16.8:1                      |             |
| Displacement L (           | cu. in)            | 7 (427.8)                   |             |
| Moment of Inertia: kg      | m² (lb/in²)        | 1.53 (5228)                 |             |
| Voltage                    | · ,                | 12                          |             |
| Ground                     |                    | Negative                    |             |
| Battery Charger Amps       |                    | 65                          |             |
| Engine Weight Dry kg       | (lb)               | 788 (1737)                  |             |
|                            | (lb)               | 822 (1812)                  |             |
| Engine Performance         | Data               | 50 Hz                       | 60 Hz       |
| Engine Speed               | rpm                | 1500                        |             |
| Gross Engine Power Prime   | kW (hp)            | 171.5 (230)                 |             |
| Gross Engine Power Standby | kW (hp)            | 188.7 (253)                 |             |
| BMEP Prime                 | kPa (psi)          | 1956 (283.7)                |             |
| BMEP Standby               | kPa (psi)          | 2153 (312.2)                |             |



| Fuel System  |  |                        |                  | Replaceable El | ement                            |            |
|--|--|------------------------|------------------|----------------|----------------------------------|------------|
| Fuel Filter Type: Recommended Fuel:  |  |                        |                  | Class A2 Diese |                                  |            |
|  |  |                        | 110 % Load       | 100 % Load     | 75 % Load                        | 50 % Load  |
| Fuel Consumption at  | 1 /hm /HC mal  | /h                     |                  | 41.3 (10.9)    | 32.6 (8.6)                       |            |
| 50 Hz Prime:   | l/hr (US gal   |                        | 45.2 (11.9)      | ` ′            | ` '                              | 23.7 (6.3) |
| 50 Hz Standby  | l/hr (US gal   | *                      | •                | 45.2 (11.9)    | 35.5 (9.4)                       | 25.7 (6.8) |
| 60 Hz Prime  | l/hr (US gal   | ,                      | _                |                |                                  |            |
| 60 Hz Standby  | l/hr (US gal   | <u> </u>               |                  | 2 51500        |                                  |            |
| (Based on diesel fuel with a   | specific gravity of                                      | of 0.83 and conforming | to BS2869 classA | 2,EN590        |                                  |            |
| Air System   |  |                        | 5                | 60 Hz          | 60 Hz                            |            |
| Air Filter Type:   |  |                        |                  |                | Replaceable Elemen               | t          |
| Combustion Air Flow Prin   | ne   | m³/min (cfm)           | 12               | 2.8 (452)      |                                  |            |
| Combustion Air Flow Star   | ndby   | m³/min (cfm)           | 1.               | 3.2 (466)      |                                  |            |
| Max. Combustion Air Intal  | ke Restriction   | kPa                    | 8                | (32.1)         |                                  |            |
| Cooling System   |  |                        | 5                | 60 Hz          | 60 Hz                            |            |
| Cooling System Capacity  |  | l (US gal)             |                  | 7 (7.1)        | 00 112                           |            |
| Water Pump Type:   |  | τ (03 gaτ)             |                  | , (, ,         | Centrifugal                      |            |
| Heat Rejected to Water &   | Lube Oil: Prime  | e kW (Btu/min)         | 7:               | 2.7 (4134)     |                                  |            |
| Heat Rejected to Water &   |  |                        |                  | 0.8 (4595)     |                                  |            |
| Heat Radiation to Room*:   |  | kW (Btu/min)           |                  | 8.9 (2212)     |                                  |            |
| Heat Radiation to Room*:   |  | kW (Btu/min)           |                  | 2 (2388)       |                                  |            |
| Radiator Fan Load:   | . Starraby   | kW (hp)                |                  | .3 (8.5)       |                                  |            |
| Radiator Cooling Airflow:  |  | m³/min (cfm)           |                  | 28 (11583)     |                                  |            |
| External Restriction to Co   |  | Pa (in H2O)            |                  | 25 (0.5)       |                                  |            |
| *: Heat radiated from engine<br>Designed to operate in ambie<br>Contact your local PEGC Pow<br>conditions. | and alternator<br>ent conditions up<br>er Solutions Deal | to 50°C (122°F).       |                  |                |                                  |            |
| <b>Lubrication Syste</b>   | m  |                        |                  |                | Coin On Eull Flour               |            |
| Oil Filter Type:   | 1 (IIC gal)  |                        |                  |                | Spin-On, Full Flow<br>17.5 (4.6) |            |
| Total Oil Capacity:  | l (US gal)   |                        |                  |                | 15.5 (4.1)                       |            |
| Oil Pan Capacity: Oil Type:  | l (US gal)   |                        |                  |                | API CH4 / CI4 15W-               | -40        |
|  |  |                        |                  |                | WATER                            | 70         |
| Oil Cooling Method:  |  |                        |                  |                | WAILK                            |            |
| <b>Exhaust System</b>  |  |                        | 5                | 0 Hz           | 60 Hz                            |            |
| Maximum Allowable Back   | Pressure:  | кРа (in Hg)            | 1!               | 5 (4.4)        |                                  |            |
| Exhaust Gas Flow: Prime  | 1  | m³/min (cfm)           |                  | 0.2 (1067)     |                                  |            |
| Exhaust Gas Flow: Standb   | у  | m³/min (cfm)           | 3                | 1.7 (1119)     |                                  |            |
| Exhaust Gas Temperature:   | Prime  | °C (°F)                | 5.               | 30 (986)       |                                  |            |
|  |  |                        | _                | 20 (004)       |                                  |            |

530 (986)

°C (°F)

Exhaust Gas Temperature: Standby



| Alternator Physical Data           |              |           |           |            |     |
|------------------------------------|--------------|-----------|-----------|------------|-----|
| No. of Bearings:                   |              |           |           | 1          |     |
| Insulation Class:                  |              |           |           | Н          |     |
| Winding Pitch:                     |              |           |           | 2/3        |     |
| Winding Code                       |              |           |           | 6P/6S      |     |
| Wires:                             |              |           |           | 4          |     |
| Ingress Protection Rating:         |              |           |           | IP23       |     |
| Excitation System:                 |              |           |           | SHUNT      |     |
| AVR Model:                         |              |           |           | R120       |     |
| dependant on voltage code selected |              |           |           |            |     |
| <b>Alternator Operating Data</b>   | 3            |           |           |            |     |
| Overspeed: rpm                     |              |           |           | 2250       |     |
| Voltage Regulation: (Steady state) | %            |           |           | +/- 0.5    |     |
| Wave Form NEMA = TIF:              |              |           |           | 50         |     |
| Wave Form IEC = THF:               | %            |           |           | 2          |     |
| Total Harmonic content LL/LN:      | %            |           |           | 2          |     |
| Radio Interference:                |              |           |           | EN61000-6  |     |
| Radiant Heat: 50 Hz                | kW (Btu/min) |           |           | 12.2 (694) |     |
| Radiant Heat: 60 Hz                | kW (Btu/min) |           |           |            |     |
| <b>Alternator Performance D</b>    | ata 50 Hz:   |           |           |            |     |
|                                    |              | 415/240 V | 400/230 V | 380/220 V  |     |
| Voltage Code                       |              |           |           |            |     |
| Motor Starting Capability* kVA     |              | 328       | 307       | 280        |     |
| Short Circuit Capacity** %         |              | 270       | 270       | 270        | 270 |
| Reactances Xd                      |              | 3.19      | 3.44      | 3.809      |     |
| X'd                                |              | 0.158     | 0.17      | 0.188      |     |
| X"d                                |              | 0.102     | 0.102     | 0.113      |     |
| 41                                 |              |           |           |            |     |
| Alternator Performance D           | ata 60 HZ    |           |           |            |     |

270

270

270

270

Reactances shown are applicable to prime ratings.

Motor Starting Capability\*

Short Circuit Capacity\*\*

Reactances

kVA

%

Xd X'd X"d 270

<sup>\*</sup>Based on 30% voltage dip at 0.6 power factor.

<sup>\*\*</sup> With optional independant excitation system (PMG / AUX winding)

220/110



|  | 50 Hz |       |     |         |  |
|--|-------|-------|-----|---------|--|
|  |       | Prime |     | Standby |  |
| Voltage Code   | kVA   | kW    | kVA | kW      |  |
| 415/240V   | 180   | 144   | 200 | 160     |  |
| 400/230V   | 180   | 144   | 200 | 160     |  |
| 380/220V   | 180   | 144   | 200 | 160     |  |
| 230/115V   |       |       |     |         |  |
| 220/127V   |       |       |     |         |  |
| 220/110V   |       |       |     |         |  |
| 200/115V   |       |       |     |         |  |
| 240V   |       |       |     |         |  |
| 230V   |       |       |     |         |  |
| 220V   |       |       |     |         |  |
|  |       | Prime |     | Standby |  |
| Voltage Code   | kVA   | kW    | kVA | kW      |  |
| 480/277V   |       |       |     |         |  |
| 440/254V   |       |       |     |         |  |
|  |       |       |     |         |  |
| 416/240V   |       |       |     |         |  |
| 416/240V<br>400/230V                                     |       |       |     |         |  |
|  |       |       |     |         |  |
| 400/230V   |       |       |     |         |  |
| 400/230V<br>380/220V<br>240/139V                         |       |       |     |         |  |
| 400/230V<br>380/220V                                     |       |       |     |         |  |
| 400/230V<br>380/220V<br>240/139V<br>240/120V<br>230/115V |       |       |     |         |  |
| 400/230V<br>380/220V<br>240/139V<br>240/120V             |       |       |     |         |  |



#



P200-6\_50Hz

# Dealer Contact Details

# **Documentation**

Operation and maintenance manual including circuit wiring diagrams.

## **Generator Set Standards**

The equipment meets the following standards: BS5000, ISO 8528, ISO 3046, IEC 60034, NEMA MG-1.22.

# **Warranty**

6.8 - 750 kVA electric power generation products in prime applications the warranty period is 12 months from date of start-up, unlimited hours (8760). For standby applications the warranty period is 24 months from date of start-up, limited to 500 hours per year.

730 - 2500 kVA electric power generation products in prime applications the warranty period is 12 months from date of start-up, unlimited hours (8760 hours) or 24 months from date of start-up, limited to 6000 hours. For standby applications the warranty period is 36 months from date of start-up, limited to 500 hours per year.

## PEGC Power Solutions manufactures product in the following locations:

Lahore Karachi Islamabad Multan

With headquarters in Lahore, PEGC Power Solutions operates through a Global Dealer Network. To contact your local Sales Office please visit the PEGC Power Solutions website at <a href="https://www.pegcpowersolutions.com">www.pegcpowersolutions.com</a>.

PEGC Power Solutions is a trading name of Public Electric Generator Concern (PEGC Power Solutions & Engineering Services (Pvt) Ltd.).