

| Genset Specification           |                   |
|--------------------------------|-------------------|
| Genset manufacturer            | Greaves Cotton    |
| Genset rating                  | Prime             |
| Genset output (kVA / kWe)      | 30 / 24           |
| Genset model                   | GPWII - PII - 30X |
| Gross engine power (kWm)       | 31.2              |
| Engine model                   | G30 - II          |
| Aspiration / Cooling           | TCAC              |
| No. of cylinders / arrangement | 3 / Inline        |
| Displacement (L)               | 2.14              |
| Bore x Stroke (mm)             | 91 x 110          |
| Compression ratio              | 17.5              |
| Rated RPM                      | 1500              |
| Overspeed trip (RPM)           | 1650              |
| Governor type / Class          | Mech / G2         |
| Frequency regulation           | Isochronous       |
| Air cleaner type / qty         | Dry / 01          |

| Exhaust System                   |          |
|----------------------------------|----------|
| Max allowable backpressure (kPa) | 5.5      |
| Exhaust temperature (Deg C)      | 550      |
| Silencer type                    | Critical |

| Engine Electrical System             |             |
|--------------------------------------|-------------|
| Charging alternator VDC / Amps       | 12V / 35 A  |
| Starter motor rated voltage (DC)     | 12          |
| Battery voltage (DC) / Capacity (AH) | 12V / 88 AH |

| Fuel System            |              |
|------------------------|--------------|
| Recommended fuel       | IS 1460, HSD |
| Fuel tank capacity (L) | 50           |

| Fuel consumption @ % load (LPH) |     |
|---------------------------------|-----|
| 100%                            | 7.4 |
| 75%                             | 5.9 |

| Lubricating Oil System          |                  |
|---------------------------------|------------------|
| Lube oil sump capacity (L)      | 6.5              |
| Lube oil change period (Hours)  | 500              |
| Lube oil consumption (% of SFC) | ≤0.1%            |
| Lube oil filter type / qty      | Spin on / 01     |
| Recommended lube oil grade      | 15W40, API CI4   |
| Recommended lube oil            | Greaves Maxtherm |

**PRIME POWER RATING:** Prime power ratings apply to installations where utility power is unavailable or unreliable. At varying load, the number of generator set operating hours is unlimited. A 10% overload capacity is available for one hour in twelve.

| Alternator Specification   |                    |
|----------------------------|--------------------|
| Voltage (1P / 3P)          | 230 / 415          |
| Frequency (Hz)             | 50                 |
| Current (1P / 3P) (Amps)   | 130.43 / 41.73     |
| Type                       | 2P, rotating field |
| Voltage regulator          | Solid state        |
| Voltage regulation (%)     | ±1%                |
| Insulation class           | H                  |
| Temperature rise (Deg C)   | 125                |
| Bearing (qty / type)       | 1, sealed          |
| Coupling                   | Flex disc          |
| One step load acceptance   | 100% of rating     |
| Unbalanced load capability | 25% of rated amps  |

| Cooling System                 |      |
|--------------------------------|------|
| Max ambient capability (Deg C) | 50   |
| Coolant capacity (Eng+Rad)(L)  | 12.5 |

| Standard Scope of Supply                                                                                                                                                                                                                                                                                                                                                |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Engine:</b> Direct injection, water cooled, three cylinder, 4 stroke, rated at 1500 RPM, conforming to ISO 3046 / BS 5514 with the following:<br>-Radiator cooling<br>-Mechanical governor<br>-Exhaust manifold with SS exhaust flexible<br>-Flywheel and flywheel housing<br>-Fuel and lube oil filters<br>-Dry type air cleaner<br>-Starter motor, battery charger |  |
| <b>Alternator:</b> NSM / Meccalte / Crompton Greaves / Stamford / Leroy Somer                                                                                                                                                                                                                                                                                           |  |
| <b>Acoustic Enclosure:</b> Powder coated weather proof canopy. Engine and alternator mounted on AV mounts, with silencer and SS exhaust bellow optimised to meet stringent MOEF / CPCB norms for sound and emission<br>-Baseraill with drawout type fuel tank, drain plug, inlet and outlet connections, airvent, level gauge                                           |  |
| <b>Control Panel:</b> Fabricated from CRCA sheet and powder coated with RAL 9003 with the following:<br>-MCB of suitable rating with short circuit protection<br>-Controller with multi feature display<br>-Load on and set running indication lamps<br>-Copper conductor cables between alternator and control panel                                                   |  |
| <b>Literature:</b><br>-Operation and spare parts manual in CD format<br>-Installation and general maintenance guidelines<br>-Foundation drawing<br>-Alternator and control panel wiring drawings<br>-Test certificate                                                                                                                                                   |  |

**Note: Specific fuel consumption is based on HSD complying to IS 1460 and tolerances with respect to ISO 3046**

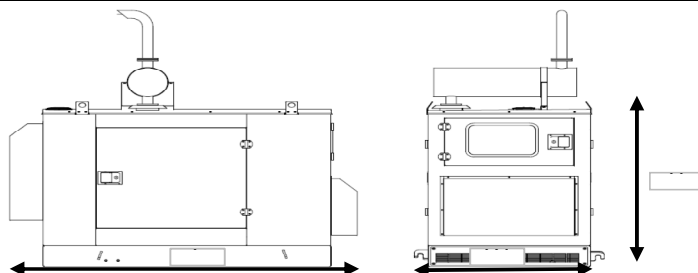
### Genset Controller

| Controller                                                                                                                       | Features                                                                | Display Parameters                                  | Audio Visual Warning     | Shutdown with Audio Visual Annunciation |
|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|-----------------------------------------------------|--------------------------|-----------------------------------------|
| <b>DSE 4522</b><br><b>Genset Controller</b><br> | Compact and micro processor based fully configurable control unit       | Engine oil pressure                                 | Low oil pressure         | Low oil pressure                        |
|                                                                                                                                  | Graphic Display                                                         | Coolant temperature                                 | High coolant temperature | High coolant temperature                |
|                                                                                                                                  | Unique integrated DG set controller                                     | Fuel level indicator (%)                            | Low battery voltage      | Engine overspeed                        |
|                                                                                                                                  | Incorporates both, engine and alternator parameters in a single console | Battery voltage                                     | Low fuel level           | Engine underspeed                       |
|                                                                                                                                  | Fully configurable digital output                                       | Engine rpm                                          |                          | Low fuel level                          |
|                                                                                                                                  | Controller with inbuilt RS 485 port                                     | DG set running hours                                |                          | Overload                                |
|                                                                                                                                  | Remote start                                                            | Generator volts - Phase to neutral & Phase to phase |                          | Over voltage                            |
|                                                                                                                                  |                                                                         | Generator current (amps)                            |                          | Under voltage                           |
|                                                                                                                                  |                                                                         | Power factor                                        |                          | Over frequency                          |
|                                                                                                                                  |                                                                         | KWHR                                                |                          | Under frequency                         |
|                                                                                                                                  |                                                                         | KW                                                  |                          |                                         |

### Optional Items

|                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Cooling system:</b><br>Cold start kit for -20 Deg C operations<br><b>Electrical systems:</b><br>Alternator Space Heater / Higher Rating Battery / Copper Bus Bar / Sealable kWh / Earth Fault Relay / Remote Annunciator / Remote monitoring / RTD / BTDT / Temperature Scanner<br><b>AMF &amp; Synchronizing System:</b><br>AMF panel / AMF with Auto-synch (Deep Sea / Woodward) | <b>Open unit (for export):</b><br>Exhaust silencer-Hospital / Residential Grade, Stainless Steel flexible pipe<br><b>Fuel system:</b><br>Flexible Fuel Lines / SS fuel lines / Fuel Pressure Gauge / fuel flow meter<br><b>Miscellaneous:</b><br>Air Cleaner (Heavy Duty) / Air Cleaner Restriction Indicator<br>Digital / Closed crankcase ventilation |
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### Typical Genset Dimensions and Weight



| Model                                                                                            | Rating (kVA) | Length (with duct)(mm) | Width (mm) | Height (mm) | Dry Weight (kg) |
|--------------------------------------------------------------------------------------------------|--------------|------------------------|------------|-------------|-----------------|
| GPWII-P11-30X                                                                                    | 30           | 1650 (1990)            | 930        | 1242        | 945             |
| Note: Due to the process of continuous improvement, product specifications are subject to change |              |                        |            |             | 30X/03012020    |