

<b>Genset Specification</b>	
Genset manufacturer	Greaves Cotton
Genset rating	Prime
Genset output (kVA / kWe)	20 / 16
Genset model	GPWII - PII - 20X
Gross engine power (kWm)	18.5
Engine model	G20 - II
Aspiration / Cooling	NA / Water cooled
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

<b>Exhaust System</b>	
Max allowable backpressure (kPa)	4
Exhaust temperature (Deg C)	550
Silencer type	Critical

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

<b>Fuel System</b>	
Recommended fuel	IS 1460, HSD
Fuel tank capacity (L)	50

<b>Fuel consumption @ % load (LPH)</b>	
100%	5
75%	3.8

<b>Lubricating Oil System</b>	
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

<b>Alternator Specification</b>	
Voltage (1P / 3P)	230 / 415
Frequency (Hz)	50
Current (1P / 3P) (Amps)	86.95 / 27.82
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


<b>Cooling System</b>	
Max ambient capability (Deg C)	50
Coolant capacity (Eng+Rad)(L)	11.5

<b>Standard Scope of Supply</b>
<p><b>Engine:</b> Direct injection, water cooled, three cylinder, 4 stroke, rated at 1500 RPM, conforming to ISO 3046 / BS 5514 with the following:</p> <ul style="list-style-type: none"> <li>-Radiator cooling</li> <li>-Mechanical governor</li> <li>-Exhaust manifold with SS exhaust flexible</li> <li>-Flywheel and flywheel housing</li> <li>-Fuel and lube oil filters</li> <li>-Dry type air cleaner</li> <li>-Starter motor, battery charger</li> </ul>
<p><b>Alternator:</b> NSM / Meccalte / Crompton Greaves / Stamford / Leroy Somer</p>
<p><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</p> <ul style="list-style-type: none"> <li>-Baseraill with drawout type fuel tank, drain plug, inlet and outlet connections, airvent, level gauge</li> </ul>
<p><b>Control Panel:</b> Fabricated from CRCA sheet and powder coated with RAL 9003 with the following:</p> <ul style="list-style-type: none"> <li>-MCB of suitable rating with short circuit protection</li> <li>-Controller with multi feature display</li> <li>-Load on and set running indication lamps</li> <li>-Copper conductor cables between alternator and control panel</li> </ul>
<p><b>Literature:</b></p> <ul style="list-style-type: none"> <li>-Operation and spare parts manual in CD format</li> <li>-Installation and general maintenance guidelines</li> <li>-Foundation drawing</li> <li>-Alternator and control panel wiring drawings</li> <li>-Test certificate</li> </ul>

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

**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.

**Genset Controller**

Controller	Features	Display Parameters	Audio Visual Warning	Shutdown with Audio Visual Annunciation
<p><b>DSE 4522 Genset Controller</b></p> 	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**

**Cooling system:**

Cold start kit for -20 Deg C operations

**Electrical systems:**

Alternator Space Heater / Higher Rating Battery / Copper Bus Bar / Sealable kWh / Earth Fault Relay / Remote Annunciator / Remote monitoring / RTD / BTD / Temperature Scanner

**AMF & Synchronizing System:**

AMF panel / AMF with Auto-synch (Deep Sea / Woodward)

**Open unit (for export):**

Exhaust silencer-Hospital / Residential Grade, Stainless Steel flexible pipe

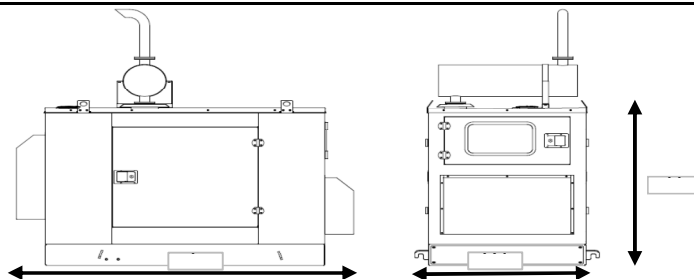
**Fuel system:**

Flexible Fuel Lines / SS fuel lines / Fuel Pressure Gauge / fuel flow meter

**Miscellaneous:**

Air Cleaner (Heavy Duty) / Air Cleaner Restriction Indicator  
Digital / Closed crankcase ventilation

**Typical Genset Dimensions and Weight**



Model	Rating (kVA)	Length (with duct)(mm)	Width (mm)	Height (mm)	Dry Weight (kg)
GPWII-P11-20X	20	1650 (1990)	930	1242	810
Note: Due to the process of continuous improvement, product specifications are subject to change					20X/03012020