

# RGP650

## Output Rating - 50 HZ

Voltage, Frequency	Prime	Standby
230/400V, 50HZ	650 KVA 520 KW	715 KVA 572 KW

## Output Rating - 60 HZ

Voltage, Frequency	Prime	Standby
230/400V, 60HZ	625 KVA 500 KW	687 KVA 550 KW

## Output Rating - 60 HZ

Voltage, Frequency	Prime	Standby
277/480V, 60HZ	625 KVA 500 KW	687 KVA 550 KW

Rating at 0.8 power factor



Image for illustration purposes only.

## Features

Engine	Perkins , 2806A-E18TAG2 , Made in UK, in accordance to ISO3046 ,ISO8528,DIN6271
Alternator	Stamford HC544F , Made in UK, complying to the norms: BS EN60034/ BS 5000/ VDE 0530/ NEMA MG 1-32/ IEC 34/ CSA C22.2-100/AS 1359
Control Panel	MRM 17-1 ,Made in ITALY,or DeepSea Made in UK, complying to the norms: comply to the norms BS EN 61000, BS EN 60950, BS EN 60068
Base Frame	Black steel with Anti-vibration pads, Built in fuel tank
Sound Proof Canopy	Modular SPC, Powder Coated, Extremely Durable, Designed to Reduce Sound Level with Maximum Service Accessibility and Minimum Foot Prints
Worldwide Support	RG Power Products are distributed through its RG Power International Network

## Rating Definitions and Conditions


Prime Rating	The power available for an unlimited hour usage with an average load factor of 80% of the published prime power over each 24 hours period. A 10 % overload is available for 1Hr every 12 hours.
Standby Rating	The power limited to 500 hours annual usage with an average load factor of 80% of the published standby power rating over each 24-hour period. Up to 300 hours of annual usage may be run continuously. No overload is permitted on standby power.

**Engine Perkins, 2806A-E18TAG1A, 4 Stroke Cycle, Diesel**

<b>Structure</b>	<b>Number of Cylinders</b>	6	
	<b>Engine Build</b>	In Line	
	<b>Bore</b>	145 mm	
	<b>Stroke</b>	183 mm	
	<b>Displacement</b>	18.1 L	
	<b>Compression Ratio</b>	14.5 /1	
	<b>Aspiration</b>	Turbocharged	
	<b>Cooling</b>	A /A	
<b>Fuel</b>		<b>1500 rpm</b>	<b>1800 rpm</b>
	<b>Fuel Tank</b>	Built in fuel tank 972 for 8h hours operation @ full load	Built in fuel tank 972 for 8h hours operation @ fullload
	<b>Fuel System</b>	Direct injection	
	<b>Fuel Recommended</b>	N°2 Diesel	
	<b>Fuel System Make (ECM)</b>	-	
		<b>1500 rpm</b>	<b>1800 rpm</b>
	<b>Delivery Flow Rate (l/hr)</b>	TBA	TBA
	<b>Fuel Consumption</b>		
	<b>100% Load (g/kWh-L/hr)</b>	202 (123)	202 (127)
	<b>75% Load (g/kWh-L/hr)</b>	198 (97)	201 (95)
	<b>50% Load (g/kWh-L/hr)</b>	201 (66)	203 (61)
	<b>Cooling system</b>	<b>Engine Coolant Capacity</b>	61L
<b>Air Flow-Radiator</b>		11700 L/s	14200 l/s
Radiator with 50 degree ambient			
Cooling Package & Air Cleaner Kit			
Thermostatically-controlled system			
<b>Air Inlet</b>	<b>Air Intake Engine (Clean Filter/Dirty)</b>	3.7 / 6.4 Kpa	
<b>Exhaust System</b>	<b>Exhaust Gas Temperature (Prime)</b>	568 °C	481 °C
	<b>Exhaust Gas Flow (Prime)</b>	1600 l/s	1816.6
	<b>Maximum Exhaust System Back Pressure</b>	6.9 kPa	6.9 kPa
	<b>Muffler</b>	residential (20→25 dB)	industrial(15→25 dB)
	Stainless Steel exhaust flex-fittings		
<b>DC System-Starting/Charging</b>	<b>Cranking Battery Voltage</b>	24 V	
	<b>Battery Charging Alternator</b>	70 A	
	Dc Voltage Monitoring via control		
<b>Heat Rejection (prime)</b>	<b>Radiated Heat to Ambient (Prime)</b>	41 kW	40 KW
	<b>Heat Rejection to Coolant (Prime)</b>	202 kW	166 KW
	<b>Heat Rejection to Exhaust (Prime)</b>	447 kW	441 KW
	<b>Heat Rejection to intercooler</b>	100 Kw	113 KW
<b>Lube System</b>	<b>Lubricating System Oil Capacity</b>	62 L	
<b>Governor</b>	Electronic		

Alternator Stamford , HC544F			
<b>Structure</b>	<b>Insulation System</b>	Class H	
	<b>Winding Pitch</b>	2/3 to minimize harmonics effects	
	<b>Number of Poles</b>	4	
	<b>Number of Bearings</b>	Single bearing	
	<b>Winding Leads</b>	12	
	<b>Power Factor</b>	0.8	
	<b>Over Speed Capability (% of Rated)</b>	2250 Rpm (150%)	
	<b>Wave Form Distortion</b>	No load < 1.5% Non-Distorting balanced linear load < 5.0%	
	<b>Telephone Interference</b>	THF < 2%	
	<b>IP Rating (Protection)</b>	IP23	
	<b>AVR</b>	Self excited	
	Synchronous, 3 phase, Brushless & Self ventilated		
		<b>1500 rpm</b>	<b>1800 rpm</b>
<b>Power Switching</b>	3-P Circuit Breaker, MCCB	1000A	1000A
<b>Temperature</b>	<b>Temperature Rise</b>	125/40 °C	
<b>Control &amp; Voltage Regulator</b>	<b>Control System (Standard)</b>	Self excited	
	<b>Voltage Regulator (AVR)</b>	SX460 or AS440	
	<b>% Of Voltage Regulation</b>	± 1.0 % ( for SX460 & AS440)	
<b>Motor Starting Capacity@30% Voltage Dip</b>	if voltage 230/400V	TBA	
	if voltage 277/480V	TBA	

**Standard Controller, MRM17-1**

<p><b>Control</b></p>	<p>Fuel tank monitoring            Emergency Stop Pushbutton/ Alarm Acknowledge            Engine Cool Down Timer            Warm-up Timer            Load Switching Timer            Engine Cycle Crank</p>	
<p><b>Indications</b></p>	<p>Operating Hours            3 Phase Generator Voltage Sensing &amp; Monitoring            Current Protection &amp; Monitoring            Power Measurement (kW, kVA, kVAh, kWh, kVAh, kVAh, pf)            Frequency Monitoring (Hz)            Oil Pressure/Coolant Temperature/Fuel Level Monitoring            Battery Voltage Monitoring (DC)            Alarm Acknowledge</p>	
<p><b>Warning &amp; Shutdown Alarms</b></p>	<p>Generator Over/Under Voltage &amp; Frequency            Crank Disconnect (Failure to Start)            Under/Over Speed            Over Current            Low oil pressure            High Water Temperature            Low Fuel Level            Low Water Level</p>	
<p><b>Features</b></p>	<p>IP 65 (if ordered with gasket)            Basic Scheduler            8-35 VDC Supply            Digital Inputs(4)- Outputs(4 MPU/ 6 CAN)            Event Log (5 shutdowns)</p>	

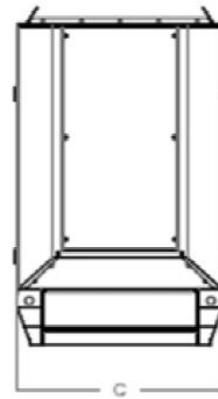
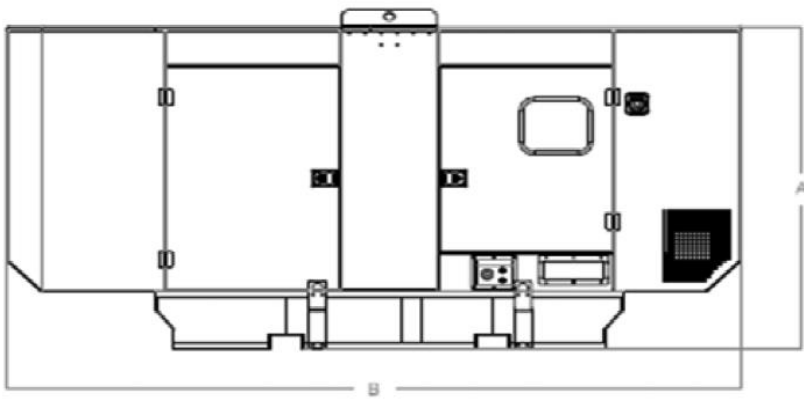
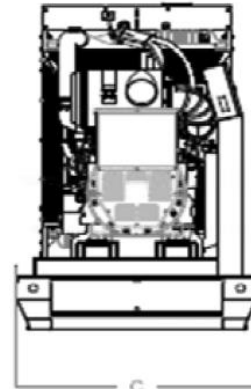
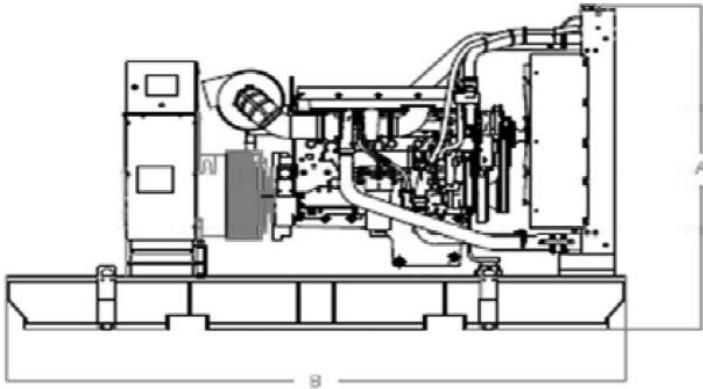
**Optional Accessories**

<p><b>Alternator</b></p>	<p>AVR (3 phase Sensing)            Reactive Droop            Winding Temperature Detectors            Anti- Condensation Heaters            Excitation with auxiliary exciter</p>
<p><b>Warning &amp; Shutdown Alarms</b></p>	<p>4-P Circuit Breaker            Special Brands (ABB- MG- Siemens...)            Motorized Operation            Shunt Trip            Under Voltage Trip UVT            Residual Current Protection            Ground Fault Protection            Earthing Kit            Surge Arrestor</p>

Optional Accessories (continues)	
<b>Engine</b>	<b>Fuel</b> Micro-Diesel Filter for Micro-Particles Filtration Automatic Fuel Refilling System Fuel Water Separator <b>(2000/40)</b> Mechanical Fuel Level Kit Oversize Fuel Tank Upon Custom Requirements Fuel Tanks-Pipes Heater Optional Built in fuel tank 180 L operation full load (Height will be increased by 100 mm and weight by 20 kg)
	<b>Air Inlet</b> Sy-klone Air Cleaner Installed @ Air Intake System
	<b>Exhaust</b> Muffler: Critical (25→30 dB) Hospital (35→40 dB) Elbow, Flanges, Expanders & Y Adaptors
	<b>Cooling / Heating</b> Radiator with 35 °C or 60 °C Ambient Capability Jacket Water Heater
	<b>Lube</b> Manual Sump Drain Pump Semi-Rotator Hand Pump
	<b>DC System - Starting/Charging</b> Mains Battery Charger 24 V DC-5A Battery Charger 10A-20A on Request Automatic Battery Charger on Request Battery Disconnect Switch DC/AC Current Monitoring (Ammeter) Oversize Battery
<b>Control Panel</b>	7320/7410/7420-More Inputs & Outputs-Advanced Communications Features; DSE 8610/8710/8810- Load Share Module; Digital & Analogues Inputs Module DSE 2130 (for 7000 Series & Above); Analogue Inputs advanced Module DSE 2131-2133(for 7410 &Above); Digital relay Outputs Module DSE 2157 (for 7000 Series &Above); Analogue Outputs Module DSE 2152 (for 7410 & Above); Local & Remote enunciator Module DSE 2548 (for 7000 Series & Above); Display Modules DSE 2510/2520 (with 7310-7320); Remote Monitoring via: Web Interface (All Series), GSM (for 7000 Series & Above), RS485 (for 7000 Series) Dry Contacts Alarm Indication for Customer Use Audible Alarm (Option for 6010/20; Standard for 7000 Series & Above); Voltage Adjust Potentiometer; Speed Adjust Potentiometer;

Dimensions & Weights

	Length (mm)	Width (mm)	Height (mm)	Weight Dry (Kg)
Open set	3310	1550	2098	4787
SPC Type	5800	2000	2350	6883



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In line with our policy of continuous product development, we reserve the right to change specification without notice.