

Model	<u>GD630-W</u>		<u>GD685@6-2-W</u>			
Frequency/Speed - Voltage	50HZ/1500 RPM- 230/400V		60HZ/1800 RPM- 277/480V		60HZ/1800 RPM- 230/400V	
Prime Power	630 KVA	504 KW	685 KVA	548 KW	670 KVA	536 KW
Standby Power	693 KVA	554.4 KW	753.5 KVA	602.8 KW	737 KVA	589 KW



Image for illustration purposes only.

Features

Engine	Doosan, DP180LB, Made in Korea, complying to the norms: ISO 3046, ISO 8528 BS 5514 and DIN 6271
Alternator	WEG, GTA312AIDI, Made in Brazil, complying to the norms IEC 60034 - NBR 5117 - NEMA MG1 - VDE530 - ISO8528 - CSA
Control Panel	Deep sea, M-DCM-317B, Made in UK, complying 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	Mets Energy Products are distributed through its PowerMets International Network For more information kindly check our website www.metsenergy.com

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.
KVA Rating @ 0.8 P.F	


Engine Doosan, DP180LB, 4 Stroke Cycle, Diesel

Structure	Number of Cylinders	12		
	Engine Build	V-type		
	Bore	128		
	Stroke	142		
	Displacement	18.273		
	Compression Ratio	15 /1		
	Aspiration	turbocharged		
	Cooling	A/A		
		1500 rpm	1800 rpm	
	Fuel Tank	TBA	TBA	
Fuel	Fuel System	Direct injection		
	Fuel Recommended	N°2 Diesel		
	Fuel System Make (ECM)	-		
		1500 rpm	1800 rpm	
	Delivery Flow Rate (l/hr)	630	630	
	Fuel Consumption			
	100% Load (g/kWh-L/hr)	TBA(136.4)	TBA(150.7)	
	75% Load (g/kWh-L/hr)	TBA(103.8)	TBA(114.2)	
50% Load (g/kWh-L/hr)	TBA(71.2)	TBA(77.7)		
Cooling system	Engine Coolant Capacity		112L	
	Air Flow-Radiator	TBA	TBA	
	radiator with 50 degree ambient Cooling Package & Air Cleaner Kit			
	Thermostatically-controlled system			
Air Inlet	Air Intake Engine(Clean Filter/Dirty)	2.16/6.23 kPa		
Exhaust System	Exhaust Gas Temperature (Prime)	598 °C	548 °C	
	Exhaust Gas Flow (Prime)	1783.3 l/s	2116.6 l/s	
	Maximum Exhaust System Back Pressure	5.9 kPa	5.9 kPa	
	Muffler	residential (20→25 dB)	industrial(15→25 dB)	
	Stainless Steel exhaust flex-fittings			
DC System-Starting/Charging	Cranking Battery Voltage	24 V		
	Battery Charging Alternator	45 A		
	Dc Voltage Monitoring via control panel			
Heat Rejection(prime)	Radiated Heat to Ambient (Prime)	52 kW	57 kW	
	Heat Rejection to Coolant (Prime)	245 kW	270 kW	
	Heat Rejection to Exhaust (Prime)	512 kW	565 kW	
	Heat Rejection to intercooler (prime)	125 kW	138 kW	
Lube System	Lubricating System Oil Capacity	34 L		
Governor	Electronic			

Alternator Weg, GTA312AIDI

Structure	Insulation System	Class H	
	Winding Pitch	2/3 to minimize harmonics effects	
	Number of Poles	4	
	Number of Bearings	Single bearing	
	Winding Leads	12	
	Power Factor	0.8	
	Over Speed Capability (% of	2250 Rpm (125%)	
	Wave Form Distortion	THD(Total Harmonic Distortion)@ No load < 5.0%	
	Telephone Interference	TIF < 3%	
	IP Rating (Protection)	IP23	
	AVR	Excitation with auxiliary coil	
	Synchronous, 3 phase, Brushless & Self ventilated		
		1500 rpm	1800 rpm
Power Switching	3-P Circuit Breaker, MCCB	1000A	1000A
Temperature	Temperature Rise	125/40 °C	
Control & Voltage Regulator	Control System (Standard)	Excitation with auxiliary coil	
	Voltage Regulator (AVR)	GRT7-TH4E(5A E9)	
	% Of Voltage Regulation	± 0.5 %	
Motor Starting Capacity@30%	if voltage 230/400V	TBA	
Voltage Dip	if voltage 277/480V	TBA	

Standard Controller, M-DCM-317

Control	<ul style="list-style-type: none"> Auto/Start/Stop Control Emergency Stop Pushbutton/ Alarm Acknowledge Engine Cool Down Timer Warm-up Timer Load Switching Timer Engine Cycle Crank 	
Indications	<ul style="list-style-type: none"> Operating Hours 3 Phase Generator Voltage Sensing & Monitoring Current Protection & Monitoring Power Measurement (kW, kVA, kVAr, kWh, kVAh, kVArh, pf) Frequency Monitoring (Hz) Oil Pressure/Coolant Temperature/Fuel Level Battery Voltage Monitoring (DC) Alarm Acknowledge 	
Warning & Shutdown Alarms	<ul style="list-style-type: none"> Generator Over/Under Voltage & Frequency Crank Disconnect (Failure to Start) Under/Over Speed Over Current Low oil pressure High Water Temperature Low Fuel Level Low Water Level 	
Features	<ul style="list-style-type: none"> IP 65 (if ordered with gasket) Basic Scheduler 8-35 VDC Supply Digital Inputs(4)- Outputs(4 MPU/ 6 CAN) Event Log (5 shutdowns) 	

Optional Accessories

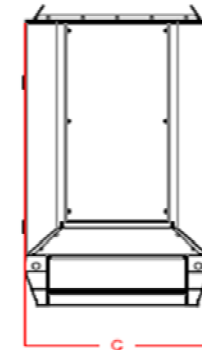
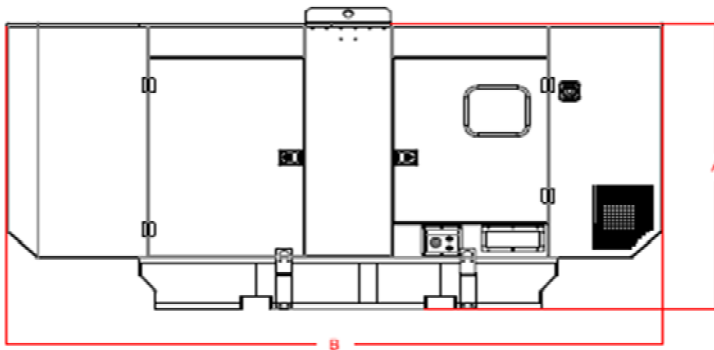
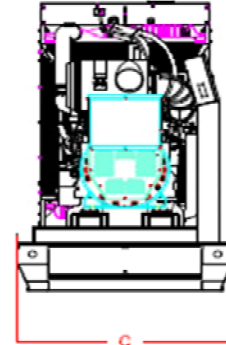
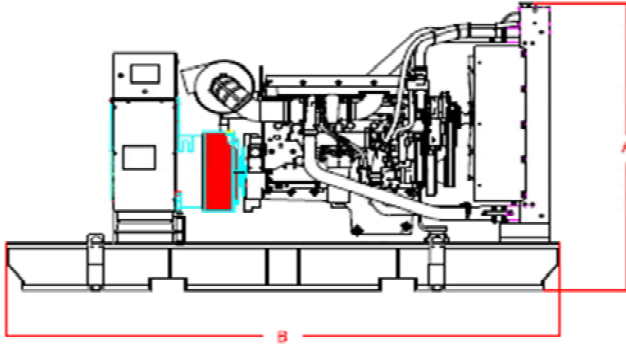
Alternator	<ul style="list-style-type: none"> AVR (3 phase Sensing) Reactive Droop Winding Temperature Detectors Anti- Condensation Heaters Excitation with auxiliary exciter (PMG)
Power Switching	<ul style="list-style-type: none"> 4-P Circuit Breaker Special Brands (ABB- MG- Siemens...) Motorized Operation Shunt Trip Under Voltage Trip UVT Residual Current Protection Ground Fault Protection Earthing Kit Surge Arrestor

Optional Accessories^(continues)

Engine	Fuel	Micro-Diesel Filter for Micro-Particles Filtration Automatic Fuel Refilling System Fuel Water Separat (2000/40) Mechanical Fuel Level Kit Oversize Fuel Tank Upon Custom Requirements Fuel Tanks-Pipes Heater
	Air Inlet	Sy-klone Air Cleaner Installed @ Air Intake System
	Exhaust	Muffler: Critical (25→30 dB) Hospital (35→40 dB) Elbow, Flanges, Expanders & Y Adaptors
	Cooling / Heating	Radiator with 35 °C or 60 °C Ambient Capability Jacket Water Heater
	Lube	Manual Sump Drain Pump Semi-Rotator Hand Pump
	DC System - Starting/Changing	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
	Control Panel	DSE 7310/7320/7410/7420-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 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) "A"	Weight Dry
Open set (NB)	TBA	TBA	TBA	TBA
SPC Type S	TBA	TBA	TBA	TBA



Drawings for illustration purposes only.

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