

DIESEL GENERATOR Powered by Cummins Model:PGD143C



I . GENERAL DATA

Prime Power	kW/kVA	104	130	
Standby Power	kW/kVA	114 143		
Frequency	Hz/rpm	60	1800	
Voltage	V	440	254	
Current	Α	171		
Connection	/	3P 4W/Y		
Rated Power Factor	/	0.8		
Open Type(L×W×H)	mm	2200×940×1480		
Open Type(Weight)	kg	1180		
Silent Type(L×W×H)	mm	2800×1100×1470		
Silent Type(Weight)	kg	1630		



- Available for voltages 400/230V, 480/277V, 380/220V, 440/254V, 416/240V,220/127V, 208/120V
- All datas based on ISO 3046, altitude 100m (328ft), barometric pressure 100kPa (29.53inHg), air temperature 25 $^{\circ}$ C (77°F), relative humidity 30%.
- Please contact with engineer for correct generator capacity selection when the load application can't meet with the standard reference.
- diesel generators comply with standards: ISO8528,ISO 14000,ISO3046,GB755,BS5000,VDE0530,IEC34-1



II. STANDARD CONFIGURATION

Engine Cummins, including air filters, fuel filters, oil filter, starting motor and charging alternator etc.

Alternator brushless AC alternator

Radiator 50°C, fan protective shroud

≤550KW: base mounted fuel tank, anti-vibration pads, battery holder

Base Frame

>550KW: channel steel base frame, anti-vibration pads, battery holder

Circuit Breaker ≤1250A: Molded case circuit breaker(MCCB)

Control System DEEP SEA 6020

Start Battery Dry charged battery, available for 6 times starts under standard condition; connection cables.

Installation Accessories Bellow, Elbow and flange, Exhaust silencer, etc.

Tool standard

Documents Electric drawing, operation & maintenance manual, certification etc.

Ⅲ. OPTIONAL CONFIGURATION

Engine Accessories ♦ Heavy-duty air filter ♦ Coolant heater ♦ Lub oil heater ♦ Fuel and Water Separator

♦ Stamford ♦ Leroy Somer ♦ Marathon ♦ Anti condensation heater ♦ PMG Alternator And

Accessories

♦ High voltage ____kV

♦50°C radiator ♦ Heat exchanger + water cooling tower + External water circulation pumping

system **Cooling System**

◇Remote horizontal water tank system

 \Diamond AMF \Diamond Parallel \Diamond Practical type in low temperature environment \Diamond Control Screen Heater

Control System

♦ Other (Comap, DEIF)

Circuit Breaker ♦3/4 poles ♦ Fixed/handcart type ♦ Electric mechanism

Automatic Transfer

External Fuel Tank

Start Battery

Swtich

♦ ATS cabinet

♦ Nickel-cadmium battery ♦ Maintenance-free battery ♦ Power charger and selector

♦500L ♦1000L ♦1500L ♦2000L \$2500L \$3000L \$4000L \$5000L



IV. ENGINE DATA	4				
Engine Model	6BTA5.9-G2		Engine Power	132	kW
Aspiration	Turbochanger& Aftercooled		Displacement	5.9	L
Туре	In-line		Bore×Stroke	102×120	mm
No. of Cylinders	6		Compression Ratio	17.3:1	
Governor Type	Electronic Governor		Rated Speed	1800	RPM
■ Fuel System Prime Power Fuel Consumption Fuel #	31 ASTM D975 I BS2869 1998		Standby Power Fuel Consumption Injection System	34 BYC PB	L/h
■ Lubrication Systen	n				
Lub Oil Capacity	16.4	L			
Lub#	API CF-4 15W40		Max.Temperature	121	$^{\circ}$ C
■ Coolant System					
Coolant Capacity	25.9	L	Max. Top Tank Temp.	104	${}^{\circ}\!$
Std. Thermostat (Modulating) Range	82 - 95	$^{\circ}$ C	Fan Drive Method	Shaft drive	
Cooling Fan Air Flow	288 kW	m3/min		3.6	
■ <i>Air Intake System</i> Combustion Air Flow	8.4/8.52	m3/min	Maximum Air Intake Restriction	3.7	kPa
■ Exhaust System					
Exhaust Gas Flow	22.86/24.36	m3/min	Max.Back Pressure	10	kPa
Exhaust Gas Temp	≤580	$^{\circ}\!\mathbb{C}$	Exhaust Pipe Size	ф76	mm
4					



■ Starting System

Start Mode DC24V Electric start Battery 2×120 Ah

Alternator Model	SLG274D	Rate Power	110/138	kW/kVA
PF.	0.8	Voltage	440/254	V
Phase	3	Frequency	60	Hz
Connection	3P 4W/Y	Bearing	1	
Winding Pitch	2/3	Proteccion Class	IP21	
Insulation Class	Н	Efficiency	90.8%	
Tel. Influence	TIF: <50	Voltage Regulation	±1.0%	
Harmonic Coefficient	THF: <2%	AVR	AS440	
Voltage Adjust Scope	≥±5%	Excitation System	Self Excited	

VI. CONTROL SYSTEM DATA

MODEL DSE6020

■ Main feature

Electronic J1939 (CAN) and nonelectronic MPU and alternator sensing engine support for diesel, gas and petrol engines all in one variant.

With a number of flexible inputs, outputs and protections, the modules can be easily adapted to suit a wide range of applications.



■ Key Function

▲Utility voltage sensing ▲ Generator/load power monitoring ▲ CAN, MPU and alternator ▲ Alternative configuration (kW, kV A, kV Ar, pf) speed sensing in one variant ▲ Alarm including common alarm, common ▲Generator overload protection (kW) electric and common shutdown ▲3 engine maintenance alarms ▲ Efficient power save mode ▲ Engine speed protection ▲LCD and LED alarm indication ▲ Mains and generator closed via ▲ Engine pre-heat ▲Configurable event log (50) front panel ▲ Multiple date and time scheduler ▲ Heated display option available ▲4 configurable DC outputs ▲ Engine idle control for starting $\not \simeq$ For more information, please visit the ▲4 configurable analog./digital inputs official website & stopping



▲6 configurable digital inputs

▲ Fuel pump control

▲Support for 0-10 V & 4-20 mA oil

▲ Battery voltage monitoring

pressure sensors

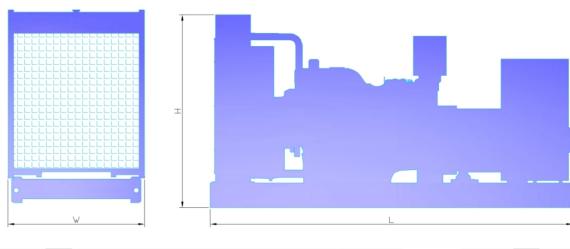
▲Start on low battery voltage

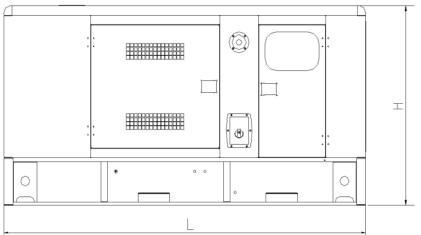
VII. WARRANTY POLICY

1.Guarantee for one year or 1000 hours (accord to whichever reach first)from ex-factory date. Refer to 《 Diesel Generator Warranty Manual》 for more details.

2. Wearing parts (filters), incorrect man-made operation, maintenance failures are excluded from the warranty policy

VIII. DRAWING (for illustration purposes only)









Cumple con UL STD 2200 Certificado para CSA STD C22.2 # 100 Certificado para CSA STD C22.2 # 14

