





DESIGN SPECIFICATIONS

√High quality,reliable,long life and complete power unit.

testing.

VFully engineered with a wide range of options and accessories:Electrical,mechanical, soundproof canopy and mobile units

Diesel Genset Features		P.F=0.8 3Phase	
Generating Set Performance		60H	lz
Service		Prime Power	Standby Power
Rated output	kVA	344	375
Active power output **	kW	275	300
Rated Speed	r.p.m	180	0
Standard Voltage	V	380/2	20
Voltage available	V	480/277-460/265 - 440/254-416/2	240-240/139-220/127-208/120

Perforemance data refer to Standard Reference Conditions of ISO 8528:+25°C,100m ALT,relative humidity 30%

Power reduction acc.to DIN ISO 3046 Standard values: Above 100m ALT approx.1% per 100m. Above 25%(77%) approx.4% per 10%(50%).

«Considering cos phi=0.8.

Prime Mover Performance		1800 r.p.m	
SERVICE		Prime Power	Standby Power
Rated output	KW	313	347
Manufacturer		Cummins	
Model		NTA855-G1B	
4 stroke Diesel Engine - Injection type		Direct	
Aspiration type		Turbocharged&Aftercooled	
Cylinders,number and arrangement		6 -L	
Bore×Stroke	mm	140X152	
Total Displacement	L	14	
Cooling system		W	/ater
Lube oil specifications		SAE 15 W 40	
Compression ratio		14:1	
Specific fuel consumption(P.R.P)	L/h	71.9	
Specific oil consumption(at full load)	%	<0.1	
Total coolant capacity	L	60.6	
Speed governor	Туре	Direct Injection Cummins PT(E)	

⁽i)P.R.P. Prime Power - ISO 8528:PRIME POWER is the maximum power available during a variable power sequence, which may be run for an unlimited number of hours per year, between stated maintenance intervals. The permissible average power output during a 24 hours period shall not exceed 80% of the prime power.10% overload available for governing purposes only.

@Max Standby power -ISO 3046 Fuel Stop power.Power available for use at variable loads for limited annual time (500h), within the following limits of maximum operating time: 100% load 25h per year ,90% load 200h per year. No overload available. Applicable in case of failure of the main in areas of reliable electrical network.

Synchronous Generator		1800 r.p.m
Manufacturer		Guericke
Model		GRK250G4
Rated output	KW	275
Poles	num	4
Winding Conections (standard)		Star-serie
Insulation	class	Н
Enclosure(according to IEC-34-5)		IP23
Phases		3+N
Votage Regulaors		A.V.R (SX460)
Steady voltage precision		within±1.5% from no load to full loading with cosΦ=0.8-1.0

^{**}Alternator used by GTL Gensets meet the requirements of following Standard:BS5000,VDE0530,NEMA MG1-32,IEC34,CA C22.2-100,AS1359

Generationg Set Installation Data		1500 r.p.m	
EXHAUST SYSTEM			
Exhaust Gas Temperature at full load	℃	553	
Exhaust Gas Temperature at full load	°F	1027.4	
Exhaust gas flow	L/s	986	
Maximum allowed back pressure	Kpa	10	
AIR REQUIREMENT			
Air requirement for combustion at 100% load/rated speed	L/s	375	
Air requirement for combustion at 100% load/rated speed	ft3/min(CFM)	794.1	
ELECTRIC STARTING SYSTEM			
Standard Battery Charging System	A	35	
Minimum Recommended Battery Capacity	CCA	900	
Auxiliary voltage	V	24	
LUBRICATION SYSTEM			
Lube oil system including sump,filters,etc.	L	38.6	

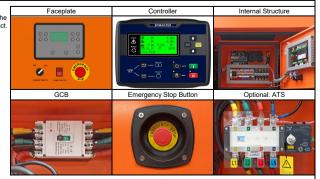
Standard Control Panel -EPmaster EPM4

Protection, distribution, and automatic control panel, which starts the generator set when it detects a mains failure and stops it when the mains is restored with the control unit EPM4. It also starts and stops the group manually via a pushbutton or remote start-up by contact.

It has the following:

- Emergency stop push button ② Protections:
- Circuit breaker (preheating resist.) 2P (16 A)
- Protection fuses for control module
- ③ Voltage&speed trimmers
- Battery charger ⑤ DC switch
- Working Lamp switch
- ⑦ Distribution:Direct output of the circuit breaker
- ® EPM6&EPM6+(cloud monitoring communication 4G)control

and protection centre



It has a digital LCD screen, which provides easy reading of the information regarding the Engine, Alterator, Mains and Charging. The controller meets all requirements for Auto Mains Failure (AMF) applications including remote communication and internet control,user configuration and complete genset monitoring and protection

READINGS that can be made:	•Protection of the engine and alternator, with the ALARMS activated:	•Other characteristics:
Engine:cooling temperature/oil pressure/revolution speed (rpm)/fuel level/battery voltage/battery alternator voltage/operating hours/number of start		Event log, real-time clock, scheduled start & stop generator (can be set as start genset once a day/week/month whether with load or not). Maximu m 99 event logs can be memorized.
<u>Alterator</u> : voltages between phasesand between phases and neutral/frequency/phase sequence	<u>Alterator:</u> :low and high voltage/low and high frequency/overload /short- circuit/	With maintenance function. Types (date or running time) can be optional and actions (never, warning, or shutdown) can be set when maintenance time out.
Mains: frequency/voltages between phases and between phases and neutral (L1-N, L2-N,L3-N)/voltages between phases and (L1-L2, L2-L3, L1-L3)/phase sequence Load: Current(la,lb,lc)and each phase and total active power(kw)/reactive	mans. Over and under votage and loss of phase	Equipped with CANBUS port and can communicate with J1939 enginet. Not only can monitor frequently-used data (such as water temperature, oil pressure, speed, fuel consumption and so on) of ECU machine, but a lso control starting up, shutdown, raising speed and speed droop via CANBUS port
power(kvar)/apparent power(kva)/power factor/accumulated generator power(kwh,kvah,kvah)/output percentage with load (%)		RS485 communication interface enables "Three remote" functions (remote control, re mote measuring and remote communication) according to MODBUS protocol.
	ed and when it is restored, respectively. It can also operate MANUALLY and A	Parameter setting: parameters can be modified and stored in internal FLASH memory and cannot be lost even in case of power outage; most of them can be adjusted usin g front panel of the controller and also can be modified using PC via USB or RS485 p

Standard Configuration & Option		
Item	Standard	Option
l l	Standard air filter	Heavy duty air filter
	Standard fuel filter	Air intake shutoff valve chalwin type
	Standard oil filter	Intake air heater
· ·	Low coolant level sensor	Oil temperature sensor
	Exhaust gases compensator	Diesel-powered heater
Fasina	24V Electrical system	Engine water heater
Engine	Radiator with bloweing fan	
	Electronic governor	
	Sender WT	
	Sender OP	
· · · · · · · · · · · · · · · · · · ·	Hot components and radiator guards	
	Mobile components guards	
	Self-excited and Self-regulated	Air inlet filter
· · · · · · · · · · · · · · · · · · ·	IP23 protection degree	IP44/IP54/IP55
Alternator	Insulation H class	Space heater/anti-condensation heater
Alternator		Environment protection
· ·		Temperature detectors
		Parallel operation
	Battery isolator switch	Distribution board with sockets kit and power busbar
	3 poles circuit breaker	4 poles circuit breaker
Electrical system	Door opening alarm	Adjustable ELCB (Earth Fault)
	Battery charger 220-240V	Grouding rod
		ATS
	Water separator filter	Diverter valve kit for external fuel tank
	Low fuel level alarm	Automatic fuel refilling kit
Accessories	Oil extraction pump	Trailer
	Tool kit for maintenance	Residential silencer
<u> </u>	Voltage/Speed potentiometer	Electric engine fuel heater
	No Expansion tank	Expansion tank for coolant water

Generating Set transport data

Dimensions(Open Skid Type) With Standard Fuel Tank





- $\sqrt{\text{The}}$ complete gen-set is mounted on whole on a heavy-duty fabricated,steel base frame. $\sqrt{\text{Antivibration}}$ pads are fixed between the engine/ alternator feet and the base frame ;
- $\sqrt{}$ Base frame design incorporates an integral fuel tank.
- √The generating set can be lifted or carefully pushed / pulled by the base frame;
- √Dial type fuel gauge and drain plug on the fuel tank;
- √ Forklift pockets within base frame (up to 500kVA);

Over All Size

Length	mm	3100
Width	mm	1130
Height	mm	1890
Shipping Volume	m3	6.62
Dry Weight	Kg	3100
Fuel Tank Capacity	L	687.5

Dimensions(Silent Type) With Standard Fuel Tank





- √All canopy parts are designed with modular principles.
- √ Without welding assembly
- $\sqrt{\,\text{All}}$ metal canopy parts are painted by electrostatic polyester powder paint. $\sqrt{\text{Doors}}$ on each side

- √Thermally insulated engine exhaust system.
 √Emergency stop push button outside of canopy.
 √Easy maintenance and operation.



OVCI All OIZC		
Length	mm	3700
Width	mm	1380
Height	mm	2250
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Shipping Volume	m3	11.49
Dry Weight	Kg	3930
Fuel Tank Capacity	L	687.5



