





DESIGN SPECIFICATIONS

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

VHigh quality,reliable,long line and complete period dissipance design.
√Casy start and maintenance possibility.
√Every generating set is subject to a comprehensive test programme which includes full load testing and checking and proving of all control and safety shut down

Indications testing.
√Fully engineered with a wide range of options and accessories:Electrical,mechanical, soundproof canopy and mobile units

Diesel Genset Features P.F=0.8 3Phase		hase	
Generating Set Performance		60Hz	
Service		Prime Power	Standby Power
Rated output	kVA	875	963
Active power output **	kW	700	770
Rated Speed	r.p.m	180	0
Standard Voltage	V	380/2	220
Voltage available	V	480/277-460/265 - 440/254-416/	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 °C (77 °F) approx.4% per 10 °C (50 °F).

Prime Mover Performance		1800 r.p.m	
SERVICE		Prime Power	Standby Power
Rated output	KW	P.R.P	Standby
Manufacturer		634	701
Model		Cummins	
4 stroke Diesel Engine - Injection type		Direct	
Aspiration type		Turbocharged&Aftercooled	
Cylinders,number and arrangement		12 -V	
Bore×Stroke	mm	159X159	
Total Displacement	L	38	
Cooling system		Water	
Lube oil specifications		N.A	
Compression ratio		14.5:1	
Specific fuel consumption(P.R.P)	L/h	198	
Specific oil consumption(at full load)	%	<0.1	
Total coolant capacity	L	236.8	
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		GRK640G4(PMG)
Rated output	KW	640
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 (PMG MX341)
Steady voltage precision		within±1.0% from no load to full loading with cosΦ=0.8-1.0

Generationg Set Installation Data	
℃	479
°F	894.2
L/s	3141
Кра	10
L/s	1204
ft3/min(CFM)	2549.7
A	35
CCA	1800
V	24
<u>.</u>	
L	135.1
	L/s Kpa L/s ft3/min(CFM)

Standard Control Panel -EPmaster EPM7

Protection, distribution, and automatic control panel, which starts the generator set when it detects a mains failure and stops it when the nains is restored with the control unit EPM7. It also starts and stops the group manually via a pushbutton or remote start-up by contact.

It has the following:

1 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

① Distribution:Direct output of the circuit breaker

®EPM7& EPM7+(cloud monitoring communication 4G)control

and protection centre EPmaster EPM7



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 nd 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 charac	cteristics:	
Engine:cooling temperature/oil pressure/revolution speed (rpm)/fuel level/b attery voltage/battery alternator voltage/operating hours/number of start	(can be set as		log, real-time clock, scheduled start & stop generator be set as start genset once a day/week/month whether with load or not). num 99 event logs can be memorized.	
<u>Alterator</u> : voltages between phases and between phases and neutral/frequency/phase sequence	Alterator: / ow and high voltage/low and high frequency/overload /short-circuit/		e function. Types (date or running time) can be optional and actions or shutdown) can be set when maintenance time out.	
<u>Mains:</u> frequency/voltages between phases and between phases and neutr al (L1-N, L2-N,L3-N)/voltages between phases and (L1-L2, L2-L3, L1-L3)/phase sequence	<u>Mains:</u> over and under voltage and loss of phase	monitor frequent temperature, oil	ANBUS port and can communicate with J1939 enginet. Not only can ly-used data (such as water cressure, speed, fuel consumption and so on) of ECU machine, but ing up, shutdown, raising speed and speed droop via CANBUS port	
<u>Load:</u> Current(la,lb,lc)and each phase and total active power(kw)/reactive power(kvar)/apparent power(kva)/power factor/accumulated generator power(kwh,kvah,kvah)/output percentage with load (%)	-Control of the set:	RS485 communication interface enables "Three remote" functions (remote control, remote measuring and remote communication) according to MODBUS protocol.		
	STARTS and STOPS the set AUTOMATICALLY when mains failure is detect ed and when it is restored, respectively.It can also operate MANUALLY and A uto Transfer Switch control	y and cannot be	g: parameters can be modified and stored in internal FLASH memor lost even in case of power outage; most of them can be adjusted I of the controller and also can be modified using PC via USB or	
Standard Configuration & Option				
Item	Standard		Option	
	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	
	24V Electrical system		Engine water heater	
Engine	Radiator with bloweing fan		9	
	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	
Allemator			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	
	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





Н

Over All Size

Length	mm	4400
Width	mm	1700
Height	mm	2550

Shipping Volume	m3	19.08
Dry Weight	Kg	7250
Fuel Tank Capacity	1	1700

- √The complete gen-set is mounted on whole on a heavy-duty fabricated,steel base frame.
- $\sqrt{\mbox{ Antivibration pads are fixed between the engine/ alternator feet and the base frame ;}$ $\sqrt{\mbox{ Base}}$ 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);

Dimensions(Silent Type) With Standard Fuel Tank



- √All canopy parts are designed with modular principles.
- √ Without welding assembly √ All metal canopy parts are painted by electrostatic polyester powder paint.

- $\sqrt{\text{Thermally insulated engine exhaust system.}} \\ \sqrt{\text{Emergency stop push button outside of canopy.}} \\$
- √Easy maintenance and operation.

Over All Size

mm	5800
mm	2200
mm	2550
m3	32.54
Kg	8700
	1700
	mm mm



