

DCW-94T5 powered by:

6BT5.9-G1





DESIGN SPECIFICATIONS

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

 √High quality,reliable,long irre and comprehe power unit.

 √compact design.

 √Easy 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 functions

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		50	Hz
Service		Prime Power	Standby Power
Rated output	kVA	94	103
Active power output	kW	75	82
Rated Speed	r.p.m	15	00
Standard Voltage	V	400/	230
Voltage available	V	380/220 -	415/240

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

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

«Considering cos phi=0.8

Prime Mover Performance		1500 r.p.m	
SERVICE		Prime Power	Standby Power
Rated output	KW	86	92
Manufacturer		Cummins	
Model		6BT5.9-G1	
4 stroke Diesel Engine - Injection type		Direct	
Aspiration type		Turbochanger	
Cylinders,number and arrangement		4 -L	
Bore×Stroke	mm	102X120	
Total Displacement	L	5.9	
Cooling system		Water	
Lube oil specifications		SAE 15 W 40	
Compression ratio		17.3:1	
Specific fuel consumption(P.R.P)	L/h	21.7	
Specific oil consumption(at full load)	%	<0.1	
Total coolant capacity	L	22.4	
Speed governor	Туре	Mechanical	

①P.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		1500 r.p.m	
Manufacturer		Guericke	
Model		GRK75G4	
Rated output	KW	75	
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	$^{\circ}$	480	
	°F	896	
Exhaust gas flow	L/s	252	
Maximum allowed back pressure	Кра	10	
AIR REQUIREMENT			
Air requirement for combustion at 100% load/rated speed	L/s	100	
All requirement for combustion at 100% load/rated speed	ft3/min(CFM)	211.8	
ELECTRIC STARTING SYSTEM			
Starting motor output	kw	6	
Minimum Recommended Battery Capacity	CCA	400	
Auxiliary voltage	V	24	
LUBRICATION SYSTEM			
Lube oil system including sump, filters, etc.	L	16.4	

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:

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

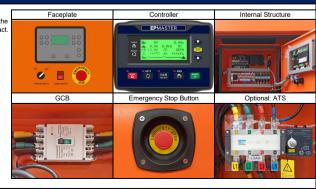
⑤ DC switch

Working Lamp switch

⑦ Distribution:Direct output of the circuit breaker

® EPM4&EPM4+(cloud monitoring communication 4G)control

and protection centre



EPmaster EPM4

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.

and memer conduct, user complete genser monitoring and protection.			
READINGS that can be made:	•Protection of the engine and alternator, with the ALARMS activated:	•Other characteristics:	
	Engine: Low oil pressure/high coolant temperature/low and high battery Volta ge./failure of the alternator to charge batteries/Low fuel level.	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.	
Alterator: voltages between phases and between phases and neutral/frequency/phase sequence	Alterator:/ow 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 neutr al (L1-N, L2-N,L3-N)/voltages between phases and (L1-L2, L2-L3, L1-L3)/phase sequence	Mains: over and under voltage 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 los control starting 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, re mote measuring and remote communication) according to MODBUS protocol.	
		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 ort.	

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	
Frains	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	
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	
Accessories	Water separator filter	Diverter valve kit for external fuel tank	
	Low fuel level alarm	Automatic fuel refilling kit	
	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

- $\sqrt{\text{The complete gen-set}}$ 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. $\sqrt{}$ 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

Over All Size

Length	mm	2130
Width	mm	880
Height	mm	1430
Shipping Volume	m3	2.68
Dry Weight	Kg	1170
Fuel Tank Capacity	Ĺ	187.5

Dimensions(Silent Type) With Standard Fuel Tank



 $\sqrt{\,\text{All}}$ 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.

√All canopy parts are designed with modular principles.	
- Addish and more lating a second line.	

Length	mm	2810
Width	mm	1180
Height	mm	1850
•		
Shipping Volume	m3	6.13
Dry Weight	Kg	1640
Fuel Tank Capacity	L	187.5



