



DCW-94T5 powered by:

6BT5.9-G1



DESIGN SPECIFICATIONS

- √High quality, reliable, long life and complete 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 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**

Generating Set Performance		50Hz	
Service		Prime Power	Standby Power
Rated output	kVA	94	103
Active power output**	kW	75	82
Rated Speed	r.p.m	1500	
Standard Voltage	V	400/230	
Voltage available	V	380/220 - 415/240	

Performance 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).
 **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		Turbocharger	
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	Type	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.
 ②Max 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 Connections (standard)		Star-serie
Insulation	class	H
Enclosure(according to IEC-34-5)		IP23
Phases		3+N
Voltage 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 MG-1-32, IEC34, CA C22-2-100, AS1359

Generating Set Installation Data **1500 r.p.m**

EXHAUST SYSTEM			
Exhaust Gas Temperature at full load	°C		480
	°F		896
Exhaust gas flow	L/s		252
Maximum allowed back pressure	Kpa		10
AIR REQUIREMENT			
Air requirement for combustion at 100% load/rated speed	L/s		100
	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
- ④ Battery charger
- ⑤ DC switch
- ⑥ Working Lamp switch
- ⑦ Distribution: Direct output of the circuit breaker
- ⑧ EPM4 & EPM4+ (cloud monitoring communication 4G) control and protection centre



