



# **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

 $\sqrt{\text{Fully}}$  engineered with a wide range of options and accessories:Electrical,mechanical,soundproof canopy and mobile units

# XCW-206T6 powered by: **CA6DL1-27D**

Diesel Genset Features		P.F=0.8 3Phase	
Generating Set Performance		(	60Hz
Service		P.R.P	Standby
Rated output	kVA	206.0	227.0
Active power output **	kW	165	181.5
Rated Speed	r.p.m		1800
Standard Voltage	V	380/220	
Voltage available	V	480/277-460/265 - 440/254-416/240-240/139-220/127-208/120	

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

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

Prime Mover Performance		1800 r.p.m	1800 r.p.m	
SERVICE		P.R.P	Standby	
Rated output	KW	195	215	
Manufacturer		FAW		
Model		CA6DL1-27D		
1 stroke Diesel Engine - Injection type		Direct		
Aspiration type		Turbocharged & Intercooled		
Cylinders,number and arrangement		6	-L	
Bore×Stroke	mm	1100	K135	
Total Displacement	L	7	.7	
Cooling system		Water-	cooled	
_ube oil specifications		SAE 1	5 W 40	
Compression ratio		17.	5:1	
Specific fuel consumption(P.R.P)	L/h	47.8		
Specific oil consumption(at full load)	%	≤0.10		
Total coolant capacity	L	10		
Speed governor	Type	Electronical		

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.

Nax 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 verload available. Applicable in case of failure of the main in areas of reliable electrical network.

Synchronous Generator		
Manufacturer		Guericke
Model		GRK 165G4
Rated output		165
Poles	num	4
Winding Conections (standard)		Star-serie
Insulation	class	H
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		1800 r.p.m
EXHAUST SYSTEM		·
Exhaust Gas Temperature at full load	°C	450
Exhaust Gus Temperature at full load	°F	842
Exhaust gas flow	L/s	578.3
Maximum allowed back pressure	Kpa	6.7
AIR REQUIREMENT		
Air requirement for combustion at 100% load/rated speed	L/s	248.3
	ft3/min(CFM)	525.8
ELECTRIC STARTING SYSTEM		
Starting motor output	kw	6
Minimum Recommended Battery Capacity-Cold Soak @ 32°F (to 0°C)	CCA	
Standard Battery Charging System	A	75
Auxiliary voltage	V	24
LUBRICATION SYSTEM		
Lube oil system including sump,filters,etc.	L	28

# 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
 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.

#### Protection of the engine and alternator, with READINGS that can be made: Other characteristics: the ALARMS activated: Engine:cooling temperature/oil pressure/revolution speed (rpm)/fuel level/battery voltage/battery alternator voltage/opera Engine: low oil pressure/high coolant temperature/low and high battery Voltage./failure of the alternator to charge batteries 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 ng hours/number of start ow fuel level. n 99 event logs can be memorized. With maintenance function. Types (date or running time) can be optional and actions ( Alterator: voltages between phases and between phases and Alterator: /ow and high voltage/low and high frequency/overl ever, warning, or shutdown) can be set when maintenance time out. eutral/frequency/phase sequence ad /short-circuit/ 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 Equipped with CANBUS port and can communicate with J1939 enginet. Not only can Mains: over and under voltage and loss of phase monitor frequently-used data (such as water

Control of the set:

STARTS and STOPS the set AUTOMATICALLY when main failure is detected and when it is restored, respectively. It can also operate MANUALLY and Auto Transfer Switch control

emperature, oil pressure, speed, fuel consumption and so on) of ECU machine, but all so control starting up, shutdown, raising speed and speed droop via CANBUS port

RS485 communication interface enables "Three remote" functions (remote control, remote measuring and remote communication) according to MODBU S 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 using

	also operate MANUALLY and Auto Transfer Switch control	ront panel of the c	ontroller and also can be modified using PC via USB or RS485 port.
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
Engine	24V Electrical system		Engine water heater
Lingine	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
	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



- The complete gen-set is mounted on whole on a heavy-duty fabricated, steel base frame.
- Antivibration pads are fixed between the engine/ alternator feet and the base frame 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)

Ove	r All	Size

Length	mm	2380
Height	mm	1040
Width	mm	1630
Shipping Volume	m3	4.03
Dry Weight	Kg	1400
Fuel Tank Capacity	L	165

# Dimensions(Silent Type) With Standard Fuel Tank





2350\*1040\*1730

Over All Size			
Length	mm	2350	
Height	mm	1040	
Width	mm	1730	
Shipping Volume	m3	4.23	
Dry Weight	Kg	1420	
Fuel Tank Capacity	L	165	

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

Doors on each side

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



