

XCW-31T6 powered by:

4DW92-42D

DESIGN SPECIFICATIONS

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

- vocmpact design.

 Veasy start and maintenance possibility.

 Very 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 3F	Phase
Generating Set Performance		601	Hz
Service		Prime Power	Standby Power
Rated output	kVA	31	34
Active power output **	kW	25	27
Rated Speed	r.p.m	180	00
Standard Voltage	V	380/	220
Voltage available	V	480/277-460/265 - 440/254-416	/240-240/139-220/127-208/120

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		1800 r.p.m	
SERVICE		Prime Power	Standby Power
Rated output	KW	33	36
Manufacturer		F	AW
Model		4DW92-42D	
4 stroke Diesel Engine - Injection type		Direct	
Aspiration type		Turbocharged	
Cylinders,number and arrangement		4	4 -L
Bore×Stroke	mm	90X100	
Total Displacement	L	2	2.54
Cooling system		W	/ater
ube oil specifications		SAE	47.5"
Compression ratio		17:1	
Specific fuel consumption(P.R.P)	L/h	7.43	
Specific oil consumption(at full load)	%	<0.04	
Total coolant capacity	L		6
Speed governor	Туре	Electronic governor	

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		1800 r.p.m
Manufacturer		Guericke
Model		GRK25G4
Rated output	KW	25
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	iong Set Installation Data 1800 r.p.m	
EXHAUST SYSTEM		
Exhaust Gas Temperature at full load	$^{\circ}$	326
	Ŧ	618.8
Exhaust gas flow	L/s	78.5
Maximum allowed back pressure	Кра	10
AIR REQUIREMENT		
Air requirement for combustion at 100% load/rated speed	L/s	43
	ft3/min(CFM)	91.1
ELECTRIC STARTING SYSTEM		
Starting motor output	kw	3.5
Start preheater	KW	0.8
Alternaotr	A	50
Auxiliary voltage	V	12
LUBRICATION SYSTEM		
Lube oil system including sump,filters,etc.	L	8

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 EPM6. 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

② Distribution:Direct output of the circuit breaker

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

and protection centre



EPmaster EPM4

t 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:

Engine: cooling temperature/oil pressure/revolution speed (rpm)/fuel level/ pattery voltage/battery alternator voltage/operating hours/number of start

Alterator: voltages between phasesand between phases and eutral/frequency/phase sequence

Mains: frequency/voltages between phases and between phases and neutral (L1-N, L2-N,L3-N)/voltages between phases and (L1-L2, L2-L3, L1-3)/phase sequence

Load: Current((a,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 (%)

Protection of the engine and alternator, with the ALARMS activated:

ingine: low oil pressure/high coolant temperature/low and high battery Voltage./failure of the alternator to charge batteries/Low fuel level.

Alterator: :low and high voltage/low and high frequency/overload /short-

Mains: over and under voltage and loss of phase

Control of the set:

STARTS and STOPS the set AUTOMATICALLY when mains failure is detec ed and when it is restored, respectively. It can also operate MANUALLY and A to Transfer Switch control

Other characteristics:

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 n 99 event logs can be memorized.

With maintenance function. Types (date or running time) can be optional and actions (never, warning, or shutdown) can be set when maintenance time out.

Equipped with CANBUS port and can communicate with J1939 enginet. Not only can monitor frequently-used data (such as water nominon requerity-used data (such as water emperature, oil pressure, speed, fuel consumption and so on) of ECU machine, but a so control starting up, shutdown, raising speed and speed droop via CANBUS port

RS485 communication interface enables "Three remote" functions (remote control, re note 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

Standard Configuration & Op	otion	
tem	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
	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
lta-manta-m	Insulation H class	Space heater/anti-condensation heater
Iternator		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
ccessories	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

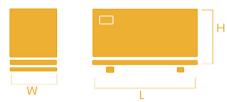


- √The complete gen-set is mounted on whole on a heavy-duty fabricated steel base frame.
- $\sqrt{}$ Antivibration pads are fixed between the engine/ alternator feet and the base frame ;
- √ Base frame design incorporates an integral fuel tank
- √ The generating set can be lifted or carefully pushed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

Over All Size

Length	mm	1600
Width	mm	860
Height	mm	1360
Shipping Volume	m3	1.87
Dry Weight	Kg	820
Fuel Tank Capacity	L	62.5

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.





