

# **YMW-13T5** powered by:

## 3TNV84T GGE

## **DESIGN SPECIFICATIONS**

- High quality,reliable,long life and complete power unit.
- √compact design. √Easy start and maintenance possibility.
- VEvery 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.

  VFully 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		50Hz	
Service		Prime Power	Standby Power
Rated output	kVA	15.0	16.5
Active power output **	kW	12	13.2
Rated Speed	r.p.m	15	00
Standard Voltage	V	400/	230
Voltage available	V	380/220 -	415/240

o Standard Reference Conditions of ISO 8528:+25°C.100m ALT relative humidit

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	1500 r.p.m		
SERVICE		Prime Power	Standby Power
Rated output	KW	14	15.8
Manufacturer		Yanmar	
Model		3TNV84T GGE	
4 stroke Diesel Engine - Injection type		Direct	
Aspiration type		Turbocharged Aspirated	
Cylinders,number and arrangement		;	3-L
Bore×Stroke	mm	84	X90
Total Displacement	L	1.	496
Cooling system		W	ater
Emission Certification		Ti	ier 2
_ube oil specifications		SAE ·	15 W 40
Compression ratio			19
Special fuel consumption	g/kw-h	245	
Oil capability	L		6.7
Total coolant capacity	L	2	
Speed governor	Туре	Med	hancial

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		GRK12G4
Rated output	KW	12
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

Generationg Set Installation Data 1500 r.p.m		1500 r.p.m
EXHAUST SYSTEM		
Exhaust Gas Temperature at full load	$^{\circ}$	450
Exhaust Gas Temperature at full load	F	842
Exhaust gas flow	Kg/h	3.6
Maximum allowed back pressure	mm / H20	199
AIR REQUIREMENT		
Air requirement for combustion at 100% load/rated speed	m³/min	1.3
ELECTRIC STARTING SYSTEM		
Starting motor output	kw	1.2
Battery		75D31
Auxiliary voltage	V	12
LUBRICATION SYSTEM		
Lube oil system including sump, filters, etc.	L	9.5

# 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
- Distribution: Direct output of the circuit breaker
- ® EPM6&EPM6+(cloud monitoring communication 4G)control and protection centre



#### EPmaster EPM4

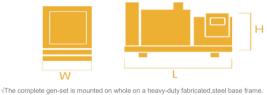
t has a digital LCD screen, which provides easy reading of the information regarding the Engine, Alterator, Mains and Charging. The controller meets all requirements for Auto Mains Failure (AMF) applications including remote communication

and internet control,user configuration and complete genset monitoring and protection.			
READINGS that can be made:	<ul> <li>Protection of the engine and alternator, with the ALARMS activated:</li> </ul>	•Other characteristics:	
Engine: cooling temperature/oil pressure/revolution speed (rpm)/fuel level/battery voltage/battery alternator voltage/operating hours/number of start	Engine:low oil pressure/high coolant temperature/low and high battery Voltage./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 phasesand between phases and neutral/frequency/phase sequence	<u>Alterator:</u> :low 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 neutral (L1-N, L2-N, L3-N)/voltages between phases and (L1-L2, L2-L3, L1-L3)/phase sequence  Load: Current(la,lb,lc)and each phase and total active power(kw)/reactive	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 lso control starting up, shutdown, raising speed and speed droop via CANBUS port	
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.	
	ed and when it is restored, respectively. It can also operate MANUALLY and A	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		0.5
em	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
gine	24V Electrical system	Engine water heater
giile	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
ernator	Insulation H class	Space heater/anti-condensation heater
emator		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
ectrical 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



- 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;

  Violat type fuel gauge and drain plug on the fuel tank;

  √ Forklift pockets within base frame (up to 500kVA);

### Over All Size

Length	mm	1320
Width	mm	604
Height	mm	1280
Shipping Volume	m3	1.02
Dry Weight	Kg	372
Fuel Tank Capacity	L	30

## Dimensions(Silent Type) With Standard Fuel Tank



- $\sqrt{\text{All}}$  canopy parts are designed with modular principles.  $\sqrt{\text{Without welding}}$  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.

## Over All Size

Length	mm	1480
Width	mm	790
Height	mm	1120
Shipping Volume	m3	1.31
Dry Weight	Kg	666
Fuel Tank Capacity	L	30



