# YCW-2125T6 powered by: YC16VTD2700-D32

## 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 — 60Hz

| Service | | P.R.P | Standby |
|---|---|---|---|
| Rated output | kVA | 2125 | 2250 |
| Active power output※ | kW | 1700 | 1800 |
| 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 | |

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℉) approx.4% per 10℃(50℉).

※Considering cos phi=0.8

## Prime Mover Performance — 1800 r.p.m

| SERVICE | | P.R.P | Standby |
|---|---|---|---|
| Rated output | KW | 1805 | 1985 |
| Manufacturer | | YUCHAI | |
| Model | | YC16VTD2700-D32 | |
| 4 stroke Diesel Engine - Injection type | | Direct | |
| Aspiration type | | Turbocharged & Intercooled | |
| Cylinders,number and arrangement | | 16 -V | |
| Bore×Stroke | mm | 152×180mm | |
| Total Displacement | L | 52.26L | |
| Cooling system | | Water | |
| Lube oil specifications | | Oil brand: 15W-40 in summer; 10W-30 or other environmentally suitable diesel engine oils with the quality grade not lower than Grade CH-4 as provided in GB 11122-2006 in winter | |
| Compression ratio | | 14:1 | |
| Specific fuel consumption(P.R.P) | L/h | 443.1 | |
| Specific oil consumption(at full load) | % | ≤0.3 | |
| Total coolant capacity | L | | |
| Speed governor | Type | HPCR | |

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

| Manufacturer | | Guericke |
|---|---|---|
| Model | | GRK 1700G4 |
| Rated output | | 1700 |
| 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 (MX341B) |
| 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 | ℃ | |
| | ℉ | |
| Exhaust gas flow | L/s | |
| Maximum allowed back pressure | Kpa | |
| **AIR REQUIREMENT** | | |
| Air requirement for combustion at 100% load/rated speed | L/s | |
| | ft3/min(CFM) | |
| **ELECTRIC STARTING SYSTEM** | | |
| Starting motor output | kw | |
| Minimum Recommended Battery Capacity-Cold Soak @ 32°F (to 0°C) | CCA | |
| Standard Battery Charging System | A | |
| Auxiliary voltage | V | |
| **LUBRICATION SYSTEM** | | |
| Lube oil system including sump,filters,etc. | L | |

## Standard Control Panel -EPmaster EPM7

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 EPM7. 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:**

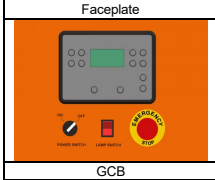
- Circuit breaker (preheating resist.) 2P (16 A)
- Protection fuses for control module

**③ Voltage&speed trimmers**
**④ Battery charger**
**⑤ DC switch**
**⑥ Working Lamp switch**

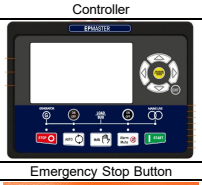
**⑦ Distribution:Direct output of the circuit breaker**

**⑧ EPM7&EPM7+(cloud monitoring communication 4G)control and protection centre**

Faceplate

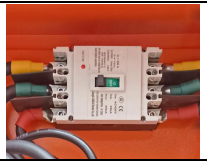


Controller



Internal Structure

GCB



Emergency Stop Button

Optional: ATS

**EPmaster EPM7**

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.

| ▪ READINGS that can be made: | ▪Protection of the engine and alternator, with the ALARMS activated: | ▪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). Maximum 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 neutral (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 also control starting up, shutdown, raising speed and speed droop via CANBUS port |
| | **▪Control of the set:** | RS485 communication interface enables “Three remote” functions (remote control, remote measuring and remote communication) according to MODBUS protocol. |
| | STARTS and STOPS the set AUTOMATICALLY when mains failure is detected and when it is restored, respectively.It can also operate MANUALLY and Auto Transfer Switch control | 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 front panel of the controller and also can be modified using PC via USB or RS485 port. |

## Standard Configuration & Option

| Item | Standard | Option |
|---|---|---|
| Engine | 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 |
| | 24V Electrical system | Engine water heater |
| | Radiator with bloweing fan | |
| | Electronic governor | |
| | Sender WT | |
| | Sender OP | |
| | Hot components and radiator guards | |
| | Mobile components guards | |
| Alternator | Self-excited and Self-regulated | Air inlet filter |
| | IP23 protection degree | IP44/IP54/IP55 |
| | Insulation H class | Space heater/anti-condensation heater |
| | | Environment protection |
| | | Temperature detectors |
| | | Parallel operation |
| Electrical system | Battery isolator switch | Distribution board with sockets kit and power busbar |
| | 3 poles circuit breaker | 4 poles circuit breaker |
| | 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


| Over All Size | | |
|---|---|---|
| Length | mm | 6140 |
| Height | mm | 2600 |
| Width | mm | 2900 |
| | | |
| Shipping Volume | m3 | 46.30 |
| Dry Weight | Kg | 14650 |
| Fuel Tank Capacity | L | 1000 |

√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);

### Dimensions(Silent Type) With Standard Fuel Tank


| Over All Size | | |
|---|---|---|
| Length | mm | 12192 |
| Height | mm | 2438 |
| Width | mm | 2896 |
| | | |
| Shipping Volume | m3 | 86.08 |
| Dry Weight | Kg | 23650 |
| Fuel Tank Capacity | L | 1000 |

√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.

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