

#### **DESIGN SPECIFICATIONS**

VHigh quality, reliable, long life and complete power unit. √ compact design.

VEasy 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.

# YCW-1688T6 powered by:

### YC16VTD2270-D32

 $\sqrt{\text{Fully}}$  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	1688	1125	
Active power output %	kW	1875	1500	
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		

e data refer to Standard Reference Conditions of ISO 8528: +25°C.100m ALT.relativ

ower 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		P.R.P	Standby	
Rated output	KW	1520	1672	
Manufacturer		YUCHAI		
Model		YC16VTD2270-D32		
4 stroke Diesel Engine - Injection type		Direct		
Aspiration type		Turbocharged & Intercooled		
Cylinders,number and arrangement		16 -V		
Bore×Stroke	mm	152×180		
Total Displacement	L	52.26		
Cooling system		W	ater	
Lube oil specifications		Summer: 15W-40 CH-4; Winter: 5W-30 CH-4, 10W-30 CH-4		
Compression ratio		14:1		
Specific fuel consumption(P.R.P)	L/h	368.3		
Specific oil consumption(at full load)	%	≤0.3%		
Total coolant capacity	L			
Speed governor	Туре	HF	PCR	

DP.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.

(3) 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 20h per year. No verticed available. Applicable in case of failure of the main in areas of reliable electrical network.

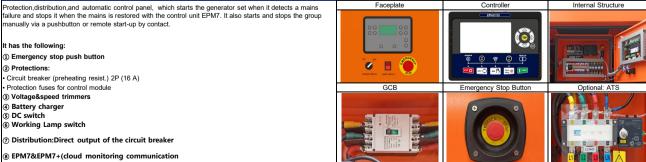
Synchronous Generator		
Manufacturer		Guericke
Model		GRK 1875G4
Rated output		1875
Poles	num	4
Winding Conections (standard)		Star-serie
Insulation	class	Н
Enclosure(according to IEC-34-5)		IP23
Phases		3+N
Votage Regulaors		A.V.R (MX341B)
Steady voltage precision		within±1.5% from no load to full loading with cosΦ=0.8-1.0
	VIDEOCOO NEMA MOA	

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		
	°F		
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

4G)control and protection centre



EPmaster	EPM7

EPmaster EPM7				
		ne 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 character		teristics:	
<u>Engine</u> :cooling temperature/oil pressure/revolution speed (rpm)/f uel level/battery voltage/battery alternator voltage/operating hours number of start			e clock, scheduled start & stop generator rt genset once a day/week/month whether with load or not). Maximu an be memorized.	
<u>Alterator</u> :voltages between phases and between phases and ne utral/frequency/phase sequence	<u>Alterator:</u> /ow and high voltage/low and high frequency/overl oad /short-circuit/		function. Types (date or running time) can be optional and actions ( shutdown) can be set when maintenance time out.	
<u>Mains:</u> 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	monitor frequently temperature, oil p	NBUS port and can communicate with J1939 enginet. Not only can -used data (such as water ressure, speed, fuel consumption and so on) of ECU machine, but al up, shutdown, raising speed and speed droop via CANBUS port	
	•Control of the set:	(remote control, re	ation interface enables "Three remote" functions emote measuring and remote communication) according to MODBU	
	also operate MANI IALLY and Auto Transfer Switch control		g: parameters can be modified and stored in internal FLASH memory st even in case of power outage; most of them can be adjusted using f controller 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 role inter		Intake air heater	
	Low coolant level sensor		Oil temperature sensor	
	Exhaust gases compensator		Diesel-powered heater	
	24V Electrical system		Engine water heater	
Engine	Radiator with bloweing fan			
	Electronic governor			
	Electronic governor Sender WT			
	Sender OP			
	Hot components and radiator guards			
	Hot components and radiator guards Mobile components guards			
	Self-excited and Self-regulated		Air inlet filter	
	IP23 protection degree		IP44/IP54/IP55	
	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	
	Battory onargon 220-240 V		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	

Over All Size Length Height

Shipping Volume

Dry Weight Fuel Tank Capacity

Width

## Generating Set transport data

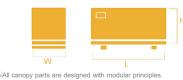
Dimensions(Open Skid Type) With Standard Fuel Tank





VThe 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; Ubial 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	23000	
Fuel Tank Capacity	L	1000	

mm

mm

mm

m3

Kg

vali 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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