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ADG20WS

Standby Diesel Generator PRO

POWERED BY
WEICHAI
World's largest manufacturer of diesel engines



Prime Power	Standby Power	Phase/Voltage	Rated Current	Hz/rpm
20kVA/16kW	22kVA/17.6kW	Three/400V	28.8A	50/1500

Prime Power - Unlimited hours usage with an average load factor of 80% of the published Prime power over each 24 hours period. A 10% overload is available for 1 hour in every 12 hours operation.

Standby Power - Limited to 500 hours annual usage with an average load factor of 80% of the published Standby power rating over each 24 hour period. Up to 300 hours of annual usage may be run continuously. No overload is permitted on Standby power.

DIESEL GENERATOR SET	
Engine Make/Model	Weichai / WP2.3D25E200
Alternator Make/Model	Senci / QYI-184ES
Control Panel	LED / DC42D
Base Frame / Silent Canopy	Robust Structure/ Corrosion Resistant
Built-in Base Fuel Tank Capacity	70L
Battery	Maintenance free Lead Acid

DIMENSIONS	Length(mm)	Width (mm)	Height (mm)	Weight (Kg)
	1520	920	1220	630

ENGINE SPECIFICATIONS	
Make / Model	Weichai / WP2.3D25E200
Rated Power	23kW
Number of Cylinders / Valves	4/8
Displacement(L)	2.3L
Cooling Method	Water Cooled
Fuel System	Electronic
Aspiration	Naturally aspirated
Starting Method	Electrical
Compression Ratio	17.5
Bore / Stroke	89x92 mm
Flywheel	7.5
Emission Standard	Non
Engine Dry Weight	235Kg
Engine Noise(Acoustic Power Level)	105.9dBA

ALTERNATOR SPECIFICATIONS	
Make / Model	Senci / QYI- 184ES
Rated Power / Speed	16kW / 1500rpm
Insulation Class	Class H
Ingress Protection	IP23
Mode of Connection	3-Phase, 4-Wire, Y-Type
Mode of Adjust	AVR
Frequency	50Hz
Power Factor	0.8

FEATURES

- Weichai 4-stroke heavy duty high performance industrial type diesel engine.
- Senci high performance alternator
- Radiator and cooling fan designed to cool the engine at high ambient temperatures
- Compact and rugged design.
- Heavy duty Industrial Exhaust Silencer
- Low noise and vibration, considering critical applications where noise level matters.
- Easy maintenance and long service intervals, saving on maintenance cost.
- Equipped with built-in fuel tank sufficient for 8-10 hours of operations.

LUBRICATION SYSTEM

Oil Capacity Low/High	5.8/8 (L)
Oil Pressure idle speed	≥100kPa
Oil Flow	22 (L/Min)

AIR SYSTEM

Air intake restriction clean filter (kPa)	≤3.5
Air intake restriction dirty filter (kPa)	≤6
Recommended Air Flow (PRP)	100 Kg/h
Recommended Air Flow (ESP)	99 Kg/h
Min.Diameter of intake Pipe (mm)	50

EXHAUST SYSTEM

Min.Dia of Pipe	50mm
Max. Back Pressure	8kPa
Exhaust flow @ PRP	104.9(kg/h)
Exhaust flow @ ESP	105.1(kg/h)

COOLING SYSTEM

Total Coolant Capacity	5L
Ambient temperature	up to 40 °C
Coolant alarm temperature	98±2 °C
Min. pressure (kPa)	15
Thermostat opening temp/full open temperature (°C)	72/82

Note: Specifications are subject to change without prior notice due to ongoing research and product development.

Ratings Definitions	Operating Conditions
COP	<ol style="list-style-type: none"> 1. Unlimited using time per year. 2. Continuous power is the maximum power available at a constant load factor. 3. No overload capability is allowed.
PRP	<ol style="list-style-type: none"> 1. Unlimited using time per year; 2. The average load rate is no more than 70 % over 24 hours 3. Overloading 10 % for 1h within 12 hours of operation is allowed
ESP	<ol style="list-style-type: none"> 1. The annual operating time shall not exceed 200h. 2. The average load rate shall not exceed 70 % over 24hr operation cycle. 3. No overload capability is allowed 4. The acceleration of starting of diesel engines are carried out in accordance with Q/WCG136.13, and there's no engine process. From acceleration of starting to calibration speed shall be completed within 10s. Natural aspirated diesel engine, when the environment temperature is below 5°C, need to increase preheat facilities to ensure that diesel engine water temperature above 30°C. When environment temperature over 5°C, no preheating facilities are required. Supercharged diesel engine, when the environment temperature is below 10°C, need to increase preheat facilities to ensure that diesel engine water temperature above 30°C. When environment temperature over 10°C, no preheating facilities are required.
LTP	<ol style="list-style-type: none"> 1. No ability to overload. 2. The annual operating time shall not exceed 500h while supplying a variable electrical load.
DCP	<ol style="list-style-type: none"> 1. It has %10 overload capacity. 2. Annual run time is unlimited. 3. Working under variable or continuous load of less than 100 %. 4. The power load shall not exceed %70 of the calibration power when the device is running continuously.
Descriptions	<ol style="list-style-type: none"> 1. All ratings are based on operating conditions under ISO 8528-1, ISO 3046, DIN6271. Performance tolerance of $\pm 5\%$. 2. Test conditions : 100 kPa, 25°C air inlet temperature, relative humidity of 30 %, with fuel density 0.84 kg/L. Derating may be required for conditions outside these; please contact the factory for details. 3. Power output curves are based on the engine operating with fuel system, water pump and lubricating oil pump, without battery charging alternator, fan and optional equipment.

