

WDG60-3

DIESEL MULTI OPERATOR

3 WELDER



An ISO 9001 certified company

WDG60-3

SPECIFICATION

Part Name	Unit	Specification
Engine		
Engine		DEUTZ Turbocharged BF4L 914
Rated speed	RPM / Hz	1500 / 50
Cooling system		Air cooled
Driving system		Direct coupling
Fuel oil		Diesel
Starting system		Electric touch start
Battery capacity	V / A-Hr	12 / 120
Emission Compliance		Conforms to ISO8178 as directed by National Environment Agency Singapore (US Tier II / EU STAGE II)
Welding Output – 3 WELDER		
Rated current	A	400 x 3
Output voltage	V DC	36
Current range (CC)	A DC	10 – 400 x 3 welder
OCV (CC)	V DC	60
Rated duty cycle	%	70
Electrode Size	mm	1.6 to 10 mm (SMAW)
Welding Process		SMAW & Scratch TIG
Optional Units		HF TIG unit, Remote Current control unit
AC Auxiliary Output – 45KVA		
Number of Sockets		2 x 32 A Sockets, 415 V 6 x 16 A Sockets, 230 V
Dimension		
Overall Length	mm	2900
Overall Width	mm	1400
Overall Height	mm	1530
Weight	Kg	2500
Fuel		
Diesel tank capacity	Litre	150

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CONFORMANCE TO INTERNATIONAL STANDARDS

Part Name	Standard
Turbo Engine, DEUTZ	US Tier II / EU STAGE II, ISO8178, compliance to NEA Singapore Regulation, ISO14396
MCCB	IEC60947 – 2, JIS C 8201-2-1, IP20
ELCB	IEC 61008-1
MCB	IEC 61008, CCC, IRAM, PSB
Fuse Holder	EN60268, EN 60947

BENEFITS

- ✓ **No coolant water** maintenance required due to air cooled engine
- ✓ **Worldwide warranty** for engine
- ✓ **High fuel efficiency** due to turbo charged engine
- ✓ **Anti-air lock** design with fuel sensor and Gen-set controller
- ✓ **Cleaner environment** due to compliance with more stringent Emission Standards Tier 2
- ✓ **Low noise** due to robust canopy with fire retardant foam
- ✓ **Corrosion protection for** alternator windings with epoxy coating
- ✓ **Sufficient safety** margin for alternator with 15% more capacity
- ✓ **High insulation protection** (Class H) for alternator
- ✓ **IEC complied** electrical protection components
- ✓ **High output** current (430A)
- ✓ **High duty cycle** (70%)
- ✓ **Simultaneous usage of** 3 welders and auxiliary outputs together
- ✓ **Long engine life** expectancy
- ✓ **Single lifting point** for easy and effective lifting of the equipment
- ✓ **Eco friendly chassis design** that saves the earth by eliminating spillage

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WDG60-3 is the diesel driven three operator welding equipment. It is specially designed and built to meet the required welding characteristics under heavy duty and long cable welding conditions.

KEY FEATURES

- ✓ Built in eco-friendly skid base spill collection system. This has the capacity to hold entire fuel and oil in the worst case without spilling it to the environment
- ✓ Oil pressure sensor
- ✓ Spark arrestor
- ✓ Emergency Stop
- ✓ Rugged and reliable 4 cylinder air – cooled turbo diesel engine
- ✓ Highly efficient engine and alternator
- ✓ Intelligent Gen-set controller for engine operation as well as monitoring of engine and generator parameters
- ✓ Higher maintenance interval and service friendly design
- ✓ Innovative cooling air duct design for heavy duty welding
- ✓ Large fuel tank capacity with sensor. Low fuel level warning and subsequent engine shut down to prevent air lock
- ✓ Rugged and innovative construction of frame
- ✓ Designed and built to operate under harshest environment and meet the requirement of quality welding
- ✓ Welder friendly controls, long life and excellent arc welding performance
- ✓ Protection against over current and thermal over load
- ✓ Low KVA requirement by welding power sources reduces fuel consumption
- ✓ Three welders (with independent controls) and auxiliary output can be used at the same time
- ✓ Each welding power source can deliver maximum 400 A @ 70 % duty cycle
- ✓ Suitable for SMAW & Scratch TIG welding (optional High Frequency TIG)
- ✓ Single heavy duty battery.



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Output terminals



DB and Sockets



Control Panel

HIGH PERFORMANCE TURBO ENGINE

Deutz **turbo charged** diesel engine complies with **US Tier II (EU STAGE II)**. This engine is highly efficient in reducing emissions and making cleanest diesel power. Compared with a naturally aspirated engine of identical power output, the fuel consumption of a turbocharger engine is lower, as some of the normally wasted exhaust energy contributes to the engine's efficiency. Due to the lower volumetric displacement of the turbo engine, frictional and thermal **losses are less**. The power-to-weight ratio, i.e. kilowatt (power output)/kilograms (engine weight), of the turbocharged engine is much better than that of the naturally aspirated engine.

The turbocharger engine's installation space requirement is smaller than that of a naturally aspirated engine with the same power output. A turbocharged engine's torque characteristic is better and it also provides **exceptional fuel efficiency** by burning every last drop of fuel out of the engine instead of sending it out as particulate matter