



ENGINE DRIVEN WELDER MAGIC WELD 230 YDE

The images are for reference

WELDING PROCESS



Shielded Metal Arc welding SMAW (STICK)



FEATURES

- Arc welding source in D.C. welding
- High frequency control of welding current and voltage
- A.C. auxiliary current single-phase 50/60 Hz generated by inverter
- Engine shut down for low oil level (oil alert)
- Hour counter
- Power optimiser (patent pending)
- Auto Idle
- Protective frame
- Engine EPA TIER 4F

DEFINITIONS

SMAW: Coated electrode welding is an arc welding with protected metal.

GMAW: welding is an arc process with metal under gas protection.

FCAW (FLUX CORED): The process with cored wires is very similar to MIG / MAG welding. Continuous wire is not full but consists in a metal strip that wraps a powders core (flow).

GTAW: is a welding process that uses a tungsten electrode that cannot melt.



air cooled



diesel



electric starter

ENGINE 3600 RPM

4 STROKE, OHV, NATURAL ASPIRATED

Model	YANMAR L100W6
* Stand-By net power	6,8 kW (9,2 hp)
* PRP net power	6,2 kW (8,4 hp)
* COP net power	/
Cylinders / Displacement	1 / 435 cm ³ (0,435 lt.)
Bore / Stroke	86 / 75 (mm)
Compression ratio	/
BMEP (Brake Mean Effective Pressure : LTP - PRP)	/
Speed governor type	Mechanical
FUEL CONSUMPTION	
110 % (Stand-by power)	2,2 lt./h
100 % to PRP	2 lt./h
75 % to PRP	1,5 lt./h
50 % to PRP	1 lt./h
COOLING SYSTEM	
Total system cap. - only engine	/
Fan air flow	/
LUBRICATION SYSTEM	
Total oil system capacity	/
Oil capacity in sump	1,6 lt.
Oil consumption at full load	/

EXHAUST SYSTEM

Maximum exhaust gas flow	/
Max. exhaust gas temp.	570 °C @ 3600 giri/min
Maximum back pressure	/
External diameter exhaust pipe	/
ELECTRICAL SYSTEM	
Starter motor power	/
Battery charging alternator cap.	180 W (15A / 12Vdc)
Cold start	/
With cold start aid	- 10°C
AIR FILTER	
Combustion air flow	/
HEAT REJECTED AT FULL LOAD	
To exhaust system	/
To water and oil	/
Radiated to room	/
To charge cooler	/

* Output powers according to ISO 3046-1



CHARACTERISTICS OF WELDING AND GENERATION

D.C. WELDING

CONSTANT CURRENT

Current range	20 A / 20.8 V - 230 A / 22 V 20 A / 20.8 V ÷ 190 A / 27.6 V (IEC Rating)
Type of regulation	continue
Duty cycle	190 A / 27.6 V @ 60% (IEC Rating) 175 A / 27 V @ 100% (IEC Rating)
Open circuit voltage	70 Vcc (Vcc peak)
Arc force control	No

GENERAL SPECIFICATIONS

Fuel tank capacity	5,4 l
Fuel consumption (welding 60%)	1,5 l/h
Running time (welding 60%)	3,6 h
Starter battery	12 Vdc -18Ah / 310A CCA(EN)

IP protection degree	IP 23
* Acoustic power LwA (pressure LpA)	108 dB(A) (83 dB(A) @ 7 m)

* Only for fixed installation in the EU market.

A.C. GENERATION

PERMANENT MAGNET ALTERNATOR, SELF-EXCITED, BRUSHLESS

Insulation class	H
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AUXILIARY GENERATION

OUTPUT 1

VOLTAGE 110 Vdc

Type of source	Single-Phase
Frequency	60 Hz
Power kVA (Power kW) Max	2.1 kVA
Cos φ	0.8
Voltage	110V ±1%
Max current	19 A

CONTROL PANEL

- Engine start and stop key
- Low oil pressure stop warning light
- Battery charge alarm light
- Hour meter
- Welding current adjustment knob
- Welding sockets
- Auxiliary generation overload led
- Output sockets: 1x110V 15A 2P+T NEMA 5 - 15R

SIMULTANEOUS UTILIZATION FACTORS

WELDING CURRENT	≥ 175A	150A	125A	100A	75A	0A
SINGLE-PHASE POWER 230V	0 kVA	1 kVA	1,5 kVA	2 kVA	3 kVA	3 kVA
SINGLE-PHASE POWER 110V	0 kVA	1 kVA	1,5 kVA	1,8 kVA	1,8 kVA	1,8 kVA

The use of the Auxiliary Generation is recommended for tools related to welding (wheels, electric hammers, lights, etc ...)



WEIGHT - DIMENSIONS ACCESSORIES

M. WELD 230 YDE

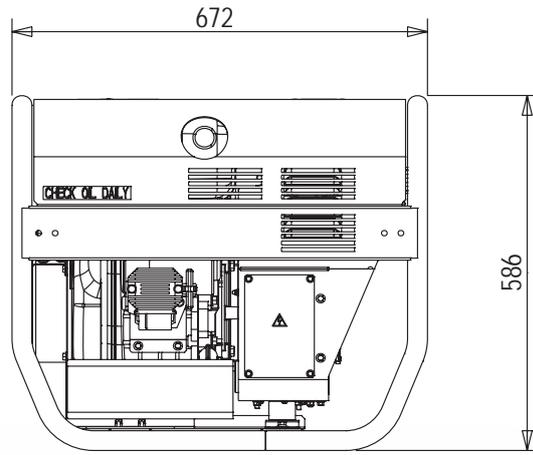
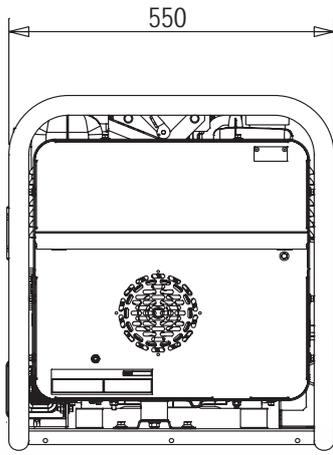


DRY WEIGHT:
• 112 Kg

The welding machine pictured may include optional accessories.



DIMENSION PICTURE (mm)



⊕ OPTIONS ON REQUEST

- Welding cables: K185 (4.5+3m, 35mm²)
K190 (10+8m, 35mm²)
K 200 (20+15m, 35mm²)
- Welding parallel cables K2x150 (35mm²)
- Welding kit (mask, gloves, etc.)
- Trolley CTM-MW230D
- Manual carrying handles TRM-MW200D

☀ AVAILABLE VERSIONS

C1RU4070 230 110V 60HZ USA

GENERAL INFORMATION

COMPLIANCE GENERATING SETS WITH EC DIRECTIVES AND STANDARDS

2006/42 / EC (Machinery Directive)
2014/35 / UE (Low Voltage Directive)
2014/30 / UE (Electromagnetic Compatibility Directive)
IEC-EN 60974-1 Arc welding equipment - Welding power sources
IEC-EN 60974-10 Arc welding equipment - Electromagnetic compatibility (EMC) requirements



ISO 9001:2015 - Cert. 0192
WARRANTY

All devices are covered by the manufacturer's warranty.

Non-contractual document. Specification subject to change without notice.

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