

# ENGINE DRIVEN WELDER

## MAGIC WELD 250

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
- Single-Phase, 50Hz aux current, inverter generated
- Arresto motore per basso livello olio (oil alert)
- Hour counter
- **Power optimiser** (patent pending)
- Auto Idle
- Protective frame
- Portable
- Meets EC directives

### 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



petrol



manual recoil

## ENGINE 3600 RPM

### 4 STROKE, OHV, NATURAL ASPIRATED

Model	HONDA GX 390
* Stand-By net power	8.7 kWm (11.8 hp)
* PRP net power	7 kWm (9.5 hp)
* COP net power	/
Cylinders / Displacement	1 / 389 cm <sup>3</sup> (0.39 lt.)
Bore / Stroke	88 / 64 (mm)
Compression ratio	8.2: 1
BMEP (Brake Mean Effective Pressure : LTP - PRP)	/
Speed governor type	Mechanical
<b>FUEL CONSUMPTION</b>	
110 % (Stand-by power)	3.85 lt./h
100 % to PRP	3.5 lt./h
75 % to PRP	2.7 lt./h
50 % to PRP	1.8 lt./h
<b>COOLING SYSTEM</b>	
Total system cap. - only engine	/
Fan air flow	/
<b>LUBRICATION SYSTEM</b>	
Total oil system capacity	/
Oil capacity in sump	1.1 lt.
Oil consumption at full load	/

### EXHAUST SYSTEM

Maximum exhaust gas flow	/
Max. exhaust gas temp.	/
Maximum back pressure	/
External diameter exhaust pipe	/
<b>ELECTRICAL SYSTEM</b>	
Starter motor power	/
Battery charging alternator cap.	/
Cold start	/
With cold start aid	/
<b>AIR FILTER</b>	Dry
Combustion air flow	/
<b>HEAT REJECTED AT FULL LOAD</b>	
To exhaust system	/
To water and oil	/
Radiated to room	/
To charge cooler	/

\* Output powers according to ISO 3046-1

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# CHARACTERISTICS OF WELDING AND GENERATION

M. WELD 250

## D.C. WELDING

CONSTANT CURRENT	
Current range	250A @ 25V
Type of regulation	continue 20A @ 20.8V - 250A @ 25V
Duty cycle	220A @ 28.8V / 35%   200A @ 28V / 60%   175A @ 27V / 100%
Open circuit voltage	70 Vdc (Vdc peak)
Arc force control	No

## GENERAL SPECIFICATIONS

Fuel tank capacity	6.1 l	IP protection degree	IP 23
Fuel consumption (welding 60%)	/	* Acoustic power LwA (pressure LpA)	99 dB(A) (74 dB(A) @ 7 m)
Running time (welding 60%)	2.8 h	Performance class (ISO 8528)	/
Starter battery	/	* Only for fixed installation in the EU market.	

## A.C. GENERATION

PERMANENT MAGNET ALTERNATOR, SELF-EXCITED, BRUSHLESS	
Insulation class	H

## AUXILIARY GENERATION

	OUTPUT 1	
	STANDARD 230Vdc	VOLTAGE 110 Vdc
Type of source	Single-Phase	Single-Phase
Frequency	50 Hz - 60 Hz	50 Hz - 60 Hz
Power kVA (Power kW) Max	3.3 kVA (2.4 kW)	2.1 kVA
Cos φ	0.8	0.8
Voltage	230V ±1%	110V ±1%
Max current	14.3 A	19 A

## CONTROL PANEL

- Manual recoil
- Motor switch ON-OFF
- Air control
- Hour counter
- Welding current adjustment knob
- Soldering sockets
- Auxiliary generation overload LED
- Output sockets: 1x 230V 16A 2P+T CEE  
1x 110V 15A 2P+T NEMA 5 - 15R (option vers.110)

## SIMULTANEOUS UTILIZATION FACTORS

WELDING CURRENT	≥ 200A	175A	150A	125A	100A	0A
SINGLE-PHASE POWER 230V	0kVA	1kVA	2kVA	3 kVA	3kVA	3kVA
SINGLE-PHASE POWER 110V	0kVA	1kVA	1.8kVA	1.8kVA	1.8kVA	1.8kVA

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

# WEIGHT - DIMENSIONS ACCESSORIES

M. WELD 250

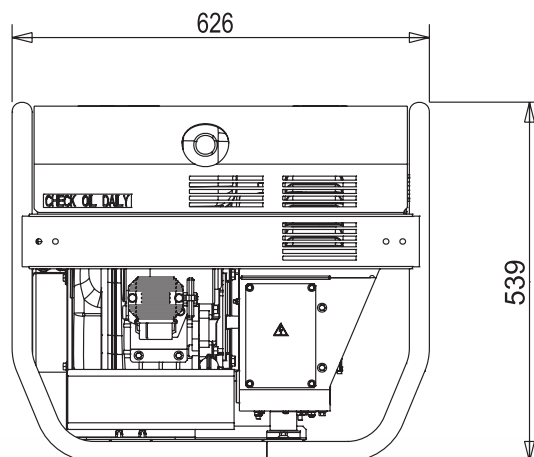
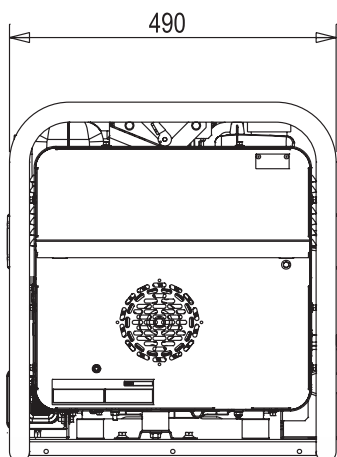


DRY WEIGHT:  
• 71 Kg

The welding machine pictured may include optional accessories.



DIMENSION PICTURE (mm)



## OPTIONS ON REQUEST

- Welding cables: K185 (4.5+3m, 35mm<sup>2</sup>)  
K190 (10+8m, 35mm<sup>2</sup>)  
K 200 (20+15m, 35mm<sup>2</sup>)
- Welding parallel cables K2x150 (35mm<sup>2</sup>)
- Welding kit (mask, gloves, etc.)
- Manual trolley TRM-MW200
- Manual trolley CTM-MW200
- Lifting kit
- Welding cable reel kit



## AVAILABLE VERSIONS

C1VN7000	MW 250 230V 50HZ CEE
C1VN7070	MW 250 110V 60Hz USA

## GENERAL INFORMATION

### COMPLIANCE GENERATING SETS WITH EC DIRECTIVES AND STANDARDS

2006/42 / EC (Machines Directive)  
2014/35 / EU (Low Voltage Directive)  
2014/30 / EU (EMC Directive)  
2000/14 / EC (Directive Acoustic Emission for machines for use outdoors)  
ISO 8528 (Reciprocating internal combustion engine driven alternating current generating sets )



ISO 9001:2015 - Cert. 0192

### WARRANTY

All devices are covered by the manufacturer's warranty.

The company reserves the right to change this specification without notice. For further information please contact the sales department.

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