



HUGONG



TYPE
EMIG250LCDIII



**Read this manual carefully before
using the product.**

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Storing the user manual

- Keep the user manual in an accessible place, close to the product.
- Ensure that the manual is stored in a dry place.
- Use the manual carefully and avoid damage.
- The product must not be used by persons who are not familiar with the instructions and procedures in this manual.

This user manual is an integral part of the product and must therefore be kept in a safe place. If the product is transferred to another user, the manual must be included.

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1. General

The EMIG LCD series consists of semi-automatic CO₂/MAG welding machines that use an IGBT inverter. This technology enables efficient welding with high efficiency. The machines are suitable for MIG, TIG and MMA welding, with options for fine adjustment of parameters such as wire feed speed, voltage, inductance and more.

Thanks to closed-loop inverter technology and an operating frequency of 20 kHz, efficiency has been improved by more than 30%. The EMIG LCD is equipped with functions such as wire feed control, gas pre-flow, gas post-flow, anti-spatter settings and burn-back control, with support for both CO₂ and mixed shielding gases.

The welding machine is suitable for wire diameters from Ø0.6 to Ø1.0 mm and offers stable performance thanks to voltage compensation for mains voltage fluctuations of up to ±15%.

2. Safety instructions

Read and understand the manual completely before use.

Do not use the device without prior instruction and knowledge of the operating principles.

Always wear a welding helmet in accordance with ANSI Z87.1 and safety goggles.

Use insulated footwear and wear a safety harness when working at heights.

Do not touch live parts during use. Always connect a reliable earth clamp as close as possible to the workpiece.

Ensure good ventilation or use an extraction system. Never weld on materials with harmful coatings such as zinc or cadmium.

Warn bystanders when igniting the arc and use shields against welding light.

Remove all flammable materials within a radius of 35 cm and keep a fire extinguisher nearby.

Always secure gas cylinders upright and use suitable pressure regulators.

Never look into an open valve.

3. Assembly

Place the device on a stable surface with a maximum inclination of 10°. Leave at least 50 cm of free space around the device.

Do not use the device in the rain or in locations where there is a risk of explosion.

The ambient temperature must be between -10 °C and +40 °C.

Connect the device to a 3~400V mains supply via a 4-pin plug with the correct fuses (250 LCD ≥25A, 300 LCD ≥32A).

Securely attach the gas pressure regulator to the cylinder and connect the gas hose so that it is leak-proof. Install the correct wire in the wire mechanism and check the wire feed. Connect the welding torch, earth connection and control module according to the manual.

4. Use

Clean the workpiece thoroughly within 10–20 mm of the weld seam. Check the wire feed and gas flow before welding.

Set the welding process and parameters via the LCD control panel.

Use manual welding by switching the function on the control panel.

Use the wire feed and gas check function to confirm correct operation.

Set voltage, inductance and other parameters according to workpiece thickness.

5. Maintenance

Only to be carried out by qualified personnel. Measure the insulation resistance ($>2.5 \text{ M}\Omega$) during prolonged periods of inactivity.

Clean the machine with dry compressed air. Inspect internal parts, cables and fans for damage or loose connections.

Use only dry, clean storage space ($-20 \text{ }^{\circ}\text{C}$ to $+55 \text{ }^{\circ}\text{C}$, $<90\% \text{ RH}$). Clean weld spatter, replace worn wire wheels and keep the wire system in good condition.

6. Specifications

EMIG250LCDIII

Mains voltage: 3~400V, 50/60 Hz

MIG: 30–250 A / 30–300 A

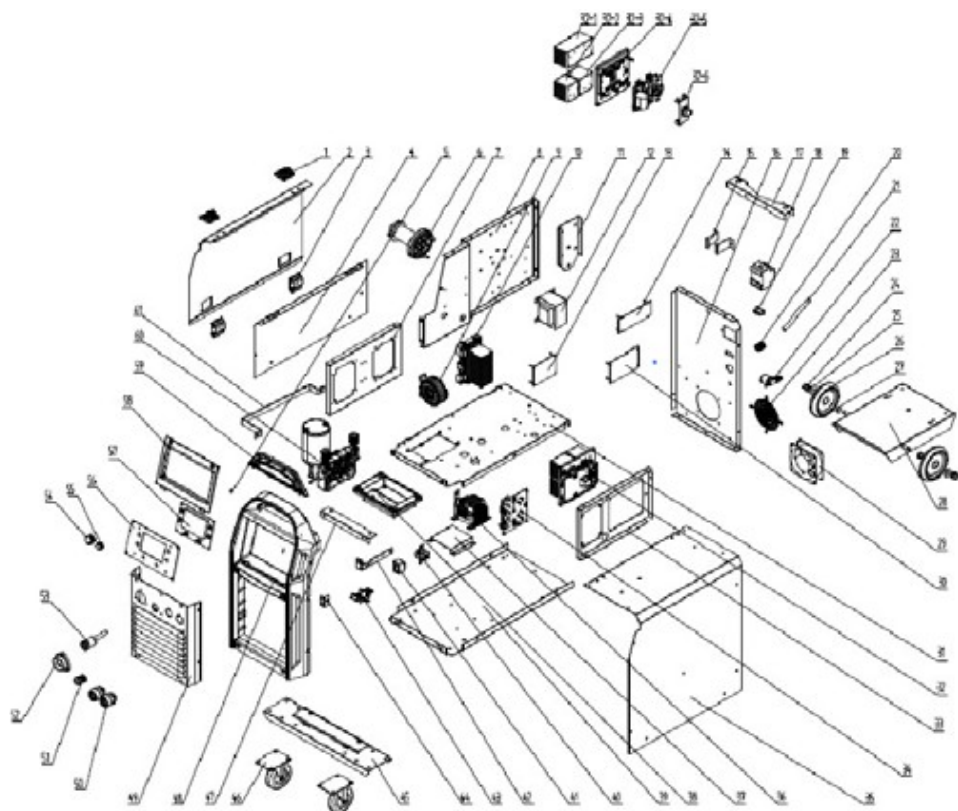
TIG: 10–250 A / 10–300 A

MMA: 30–200 A / 30–250 A

No-load voltage: 65 V, Efficiency: 85%, Insulation class: F, Protection class: IP21S

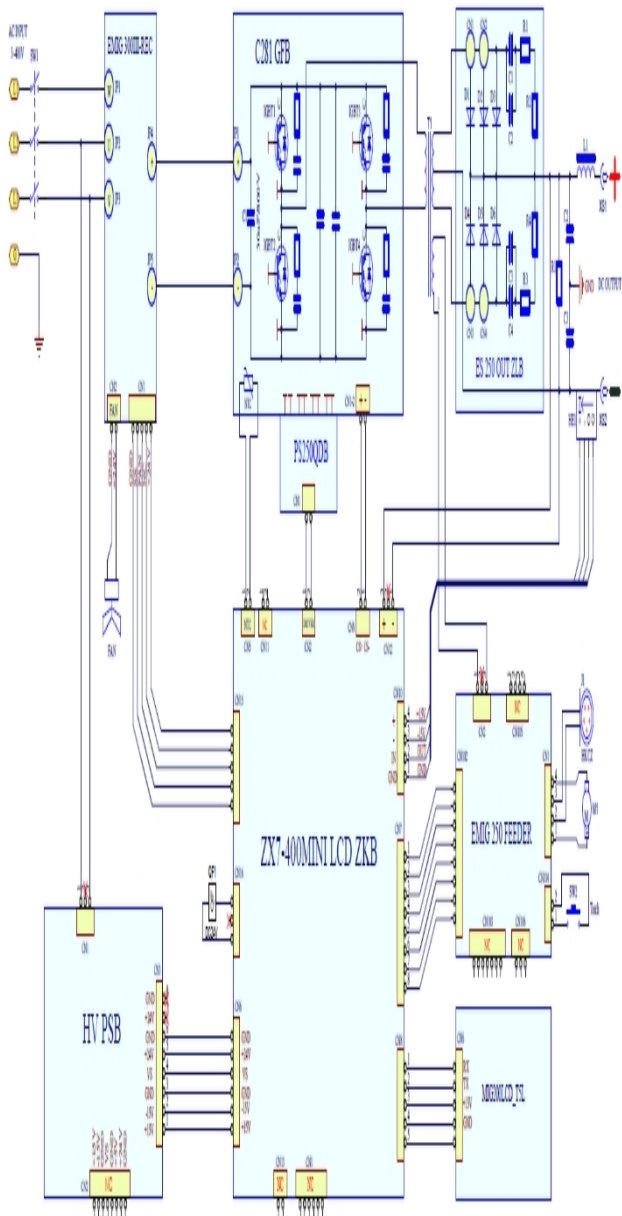
Dimensions: 904 × 510 × 763 mm, Weight: 50 kg

7. Parts list



№	CODE	DESCRIPTION	B2C
	20050050769	Plastic hinge	2
2	12010054358	Side panel	
3	20050050270	Door lock	2
	11010012954	Left panel	
5	20030306205	Trigger switch harness	
	20050050274	Reel axis	
	11020017171	Left plate of radiator	
9	11010050647	Vertical Plate	
7	20070250953	Main transformer	
10	11050111078	Output rectifier PCB board	
	11020017170	Holder of reel axis	
12	20070250401	Control transformer	
13	11050110947	Wire feeding PCB board	
	11050010194	POWER PCB board	
15	20010410088	Switch holder	2
	11010033394	back panel	
	11020017166	Cylinder holder	
*g	20070800005	Circuit breaker	
*7	20030306114	Heater output harness	
20	20040300009	Power line fixed holder	
21	12070020933	Input power line	
22	12070024440	Gas Valve	
23	20010290207	Fan cover	
24	20060140059	Cap nut	2
25	2006	Flat pad	2
26	2005007007	Back wheel	2
27	20050100050	Axle fixing cover	2
28	11010042465	Base plate holder	
29	20070890268	Fan	
30	11050021634	Main control PCB board	
3	11010050647	Median septum	
32	11050050503	IGBT radiator assembly	
32.1	20070430258	Radiator/left	
32.2	20070430005	Radiator/right I	
32.3	20070430013	Radiator/right II	
32.4	20050050927	Radiator holder fixed plate	
32.5	12020161523	Inverter PCB board	
32.6	11050030136	Driving board	
33	11020017172	Driving PCB board	
34	11050111077	Input rectifier PCB board	
35	11010012953	Shell	
36	11040030335	Output reactor	
37	11020017173	Reactor holder	
38	20050051324	Double drive wire feeder holder	
39	11010042464	Bottom plate	
40	20050030018	Terminal connetor	
	12070020096	Hall sensor	
42	11020017168	Output busbar	
43	11050110219	Small loading PCB board	
	11020017165	Side cover connecting plate	
43	12010036866	Front wheel fixed plate	
	20050070079	Universal wheel (Front)	2
	11020017164	Shell connecting plate	
9	20050051326	Plastic panel	
7	11010033393	Front panel plate	
d0	20070570197	Euro Quick connector	2
51	20040300015	External force cable fixing head	
52	20050050092	flange plate	
53	12070024714	Torch socket	
54	200701 10032	Potentiometer knob	
55	200701 10005	Potentiometer knob	
56	11020017284	Front palte holder	
57	11050071244	Panel control PCB	
58	20050051328	Control panel	
59	20050051325	Handle cover	
60	12070024713	Wire feeder	
	11020017167	Connecting bar	

8. Circuit diagram



9. HUGONG warranty conditions

1. Warranty

We offer the following on all our products:

- 2-year standard warranty on manufacturing and material defects from the date of purchase
- 5-year extended warranty, provided the product is registered within 30 days of purchase
- The extended warranty applies only to the original owner and is not transferable. For business applications, different terms may apply unless otherwise agreed in writing.

2. Unique HUGONG warranty:

5 years when purchased from an official HUGONGWELDS.EU sales point
The 5-year warranty on our HUGONG welding machines is unique in the market and underlines our commitment to quality, durability and service.

This extended warranty applies only if:

- The machine was purchased from an authorised dealer listed on HUGONGWELDS.EU, the central platform for official HUGONG sales points and service partners.
- The product has been correctly registered online within 30 days of purchase
- Any repairs or maintenance are carried out exclusively by an authorised HUGONG service partner, as listed on HUGONG-WELDS.EU
- Repairs carried out by unauthorised parties will invalidate the warranty.
- The full list of authorised dealers and service points can be found at:
 - www.hugongwelds.eu
- Purchases made through unauthorised sales channels or grey imports are not covered by the warranty conditions.
- Valkenpower B.V. is the official importer of HUGONG welding equipment for Western Europe. The 5-year extended warranty is provided exclusively by Valkenpower in collaboration with HUGONG.

3. Warranty conditions (standard and extended)

To be eligible for warranty (standard or extended), the following conditions must be met:

- The product must have been purchased from a dealer recognised on HUGONG-WELDS.EU.
- The product must be used in accordance with the user manual and the prescribed maintenance instructions.
- Maintenance and/or repairs are carried out exclusively by authorised HUGONG service partners
- For extended warranties: the product must be correctly registered within 30 days of purchase
- The original purchase invoice is available and can be presented
- Please note: In the event of incorrect or improper use, the warranty will be void, including the standard warranty.

- If the product is not registered or is registered incorrectly within 30 days, only the standard 2-year warranty applies.

4. What is covered by the warranty?

Within the valid warranty period, HUGONG covers:

- Manufacturing defects
- Material defects
- Functional defects under normal use We

will:

- Repair or replace the defective part
- Replace the entire product if necessary
- Or, in consultation, refund the purchase price (in part), minus depreciation
- The choice of solution is at the discretion of Valkenpower B.V. or an authorised service partner.

5. What is not covered by the warranty?

The warranty does not apply to:

- Normal wear and tear of parts such as:
- Electrodes, torches, cables, connectors, filters
- Hose couplings, switches, seals
- Water pumps in water coolers – these are considered wear parts
- Incorrect use, overloading or incorrect installation
- Modified or altered products without written permission
- Use of non-approved accessories or parts
- Dust, moisture or metal particles entering the machine – this is not covered by the warranty and is considered user error
- Damage caused by external influences: moisture, dust, overheating, power surges, lightning, fire, corrosion or transport
- Use in rental applications, unless agreed in writing in advance

6. Warranty procedure

In the event of a defect:

Please contact our customer service or an authorised HUGONG dealer.

Please provide the following:

- Proof of purchase
- Serial number (legible on the type plate)
- Description of the problem and the circumstances

Shipping:

- The product must be returned safely packaged to the designated service point.
- Transport and shipping costs are at the customer's expense, unless otherwise agreed.
- During repair, there is no automatic right to a loan or replacement product.

7. Limitation of liability

HUGONG and Valkenpower are not liable for:

- Loss of income, consequential damage or business interruptions
- Costs for disassembly/assembly or adjustments
- Work carried out by third parties without written permission
- Claims exceeding the original purchase price
- Statutory consumer rights remain unaffected.

8. Warranty on parts and repairs

- Repaired or replaced parts retain the remaining warranty period of the original product
- Separately purchased parts have a warranty period of 6 months

9. Applicable law

These warranty conditions are governed by Dutch law. Disputes will preferably be resolved through consultation. If necessary, the matter may be submitted to the competent court in Roermond or to a recognised dispute resolution body.

Questions?

Our customer service team will be happy to help you. Visit:

www.hugongwelds.eu – for dealers, service partners and registration

**EC Declaration of Conformity - Declaration of Conformity -
EG- Konformitätserklärung - Declaration de conformité
- Dichiarazione di conformità - Declaración de conformidad**

We, We, Wir, Nous, Noi, La empresa,
Valkenpower BV, Industrieweg 4, 6051 AE Maasbracht, Netherlands,
declare under our sole responsibility that the product
responsibility that the product
erklären in alleiniger Verantwortung, dass das Produkt
déclarons sous notre seule responsabilité que le produit
dichiariamo sotto la nostra responsabilità che il prodotto
declare under our sole responsibility that the product

Type	Description	Brand
Model	Description	Brand
Type	Description	Marke
Type	Description	Marque
Tipo	Description	Marca
Tipo	Description	Marca
EMIG250LCDIII	MIG welding machine	Hugong

To which this declaration relates is in conformity with the following standards:
To which this declaration relates is in conformity with the following document:
Auf welche sich diese Erklärung bezieht, den folgenden Normen entspricht:
Auquel se réfère cette déclaration est conforme à le document suivant:
To which this declaration relates is in conformity with the following document:
To which this declaration relates is in conformity with the following document:

Low Voltage Directive, Niederspannungsrichtlinie, la Directive Basse Tension, la direttiva
bassa tensione, la norma Baja tensión:

2014/35/EC

Netherlands, Maasbracht, 05-08-2025

Serial
number:

Director Valkenpower



B.A.H Valkenburg

Valkenpower BV, Industrieweg 4, 6051 AE Maasbracht, Netherlands

