



HUGONG



TYPE
NVT233ACDC



**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 with care and avoid damage.
- The use of the product by persons who are not familiar with the instructions and procedures in this manual is not permitted.

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 Hugong NVT233ACDC is an advanced inverter AC/DC TIG welding machine with an MCU-controlled control system for optimum precision and stability during welding. The machine supports multiple welding methods, including DC TIG, AC TIG, DC and AC pulse welding and MMA (electrode welding), suitable for a wide range of metals such as carbon steel, cast iron, stainless steel, copper, aluminium and their alloys. Thanks to the integrated PFC technology, the device operates stably within an input voltage range of 100–250 V.

2. Safety instructions

Working environment

- Ensure that the welding area is free of flammable materials.
- Always keep a fire extinguisher within reach.
- Only work in well-ventilated, dry environments.
- Only allow qualified personnel to perform installation and maintenance.
- Keep bystanders, especially children, away.
- Shield the welding light from third parties.

Device condition

- Regularly check for damaged cables or components.
- Only use the welder when all parts are in good condition.

Use

- Do not use wet cables or electrodes.
- Switch off the device when not in use.
- Ensure good earthing as close as possible to the welding point.
- Avoid contact between skin and welding wire, ground or electrode.
- Work from a stable position and use a safety harness if necessary.
- Always wear a welding helmet that complies with ANSI Z87.1 and suitable protective clothing.
- Allow the device to cool sufficiently between work cycles.

Specific risk areas Electric shocks

- Welding equipment contains live parts that can be fatal.

- Wear dry, insulated clothing and footwear.
- Avoid contact with the workpiece or the ground.

Fumes and gases

- Welding fumes displace oxygen and may be toxic.
- Always work in well-ventilated areas.
- Do not weld on coated or galvanised materials without suitable protection.

UV and IR radiation

- UV and IR rays can cause serious damage to skin and eyes.
- Wear protective clothing and a suitable helmet with the correct lens

(e.g. lens 10 for <160A, lens 12 for >160A).

Fire hazard

- Keep flammable materials at least 10 metres away.
- Do not use a welder in potentially explosive environments.
- Remove or cover flammable objects in the vicinity.

Hot parts

- Do not touch hot workpieces or welding torches without protection.

Sparks and Flying Metal

- Always wear eye and ear protection and flame-retardant clothing.

Electromagnetic Field

- Keep your distance when using pacemakers.
- Avoid wrapping cables around the body.

Gas cylinders

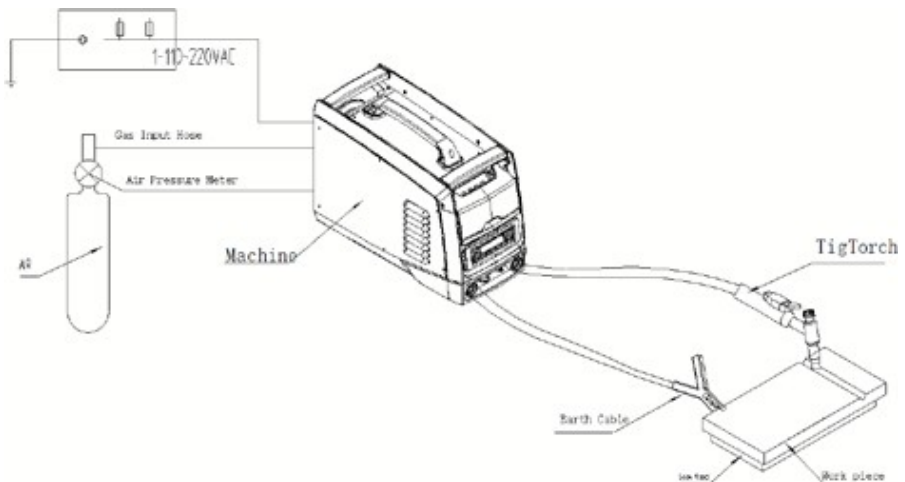
- Protect cylinders from heat, flames and shocks.
- Always use the correct pressure regulators and keep cylinders upright and securely fastened.

Maintenance

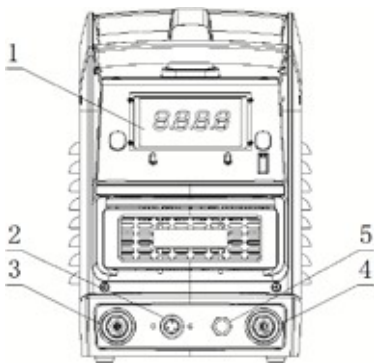
- Disconnect the power supply during maintenance.
- Be earthed when handling circuit boards.

3. Assembly

- Secure the device on a stable, horizontal surface.
- Connect the power cable, earth clamp and welding torch correctly.
- Connect an argon cylinder with a suitable regulator for TIG welding.
- Connect the foot pedal or remote control to the designated connection.



4. Use



- 1. Panel
- 2. Control connection TIG welding torch
- 3. “+” or DC TIG earth cable
- 4. “-” or TIG welding torch connection
- 5. Gas outlet



- 1. Power cable
- 2. On/off switch
- 3. Rear panel
- 4. Protective gas inlet connection

General safety warnings

- Switch off power when wiring or making adjustments.
- Avoid contact with moving parts.
- Always use personal protective equipment.

MMA electrode welding

- Connect the electrode clamp and ground cable.
- Refer to the recommended current values for each electrode diameter:

Electrode diameter (mm)	Current (A)
1.0	2
2.4	80–120
3.2	108–148
4.0	140–180

TIG welding

- Open the gas cylinder and set the correct argon flow (typically 8–12 l/min).
- Set the polarity correctly: DC+ for steel, AC for aluminium.
- Refer to the reference values below:

Material	Thickness (mm)	Current (A)	Gas (l/min)
Steel (DC)	1.6–6	50–150	8–14
Aluminium (AC)	1	45–220	2–16
- Use TIG start without contact and avoid short-circuiting of tungsten electrode.

Foot pedal and remote control

- The foot pedal continuously regulates the welding current up to the set maximum.
- Connect the pedal or remote control to the appropriate output.

5. Maintenance

- Always switch off the mains power before opening the device.
- Only open by qualified personnel.
- Clean the inside of the device every six months with dry compressed air.
- Regularly check for loose connections or damaged cables.
- Keep the device dry and avoid prolonged exposure to sunlight.

6. Specifications

Electrical

- Input voltage: 120V \pm 10% / 230V \pm 15%, 50/60 Hz
- Max. input current: 22.4A (120V), 27A (230V)
- Power: 2.5kVA (120V), 5.95kVA (230V)
- Open voltage: 68V
- Duty cycle: 30% @40°C
- Cooling: Fan
- Protection rating: IP21S
- Dimensions: 532 x 245 x 382 mm
- Weight: 19.5 kg

Welding parameters

- MMA: 10–180A (depending on voltage)
- DC TIG: 5–230A
- AC TIG: 15–230A
- Pulses: 0.2–300Hz, duty cycle 10–90%
- AC frequency: 50–150Hz, AC balance: 50–90%

8. HUGONG warranty conditions

1. Warranty period

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 is only valid for 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 with official purchase 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 outlets 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 complete 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 claim warranty (standard or extended), the following conditions must be met:

- The product was purchased from a dealer recognised on HUGONG-WELDS.EU
- The product is 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 warranty: the product has been 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 for 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
- Ingress of dust, moisture or metal particles into 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 repairs, 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 - Declaration of conformity

We, We, Wir, Nous, Noi, La empresa, **Valkenpower BV, Industrieweg 4, 6051 AE Maasbracht, Netherlands**, declare under our sole responsibility that the product declare under our sole 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
NVT233ACDC	Inverter AC/DC TIG 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:
The declaration refers to the following documents:
The present declaration refers to the following documents:

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

2014/35/EC

Netherlands, Maasbracht, 14-08-2025

Serial number:

Director Valkenpower



B.A.H Valkenburg

Valkenpower BV, Industrieweg 4, 6051 AE Maasbracht, Netherlands

