CUTTING EDGE WELDING

USER'S MANUAL

IGBT Inverter type Welding Power Source

GORILLA MULTI**FLUX 153 SYNERGIC NO**GAS

GORILLA®

Introduction

First of all, thank you for choosing an IWELD welding or cutting machine!

Our mission is to support your work with the most up-to-date and reliable tools both for DIY and industrial application.

We develop and manufacture our tools and machines in this spirit.

All of our welding and cutting machines are based on advanced inverter technology, reducing the weight and dimensions of the main transformer.

Compared to traditional transformer welding machines the efficiency is increased by more than 30%.

As a result of the technology used and the use of quality parts, our welding and cutting machines are characterized by stable operation, impressive performance, energy efficient and environmentally friendly operation.

By activating the microprocessor control and welding support functions, it continuously helps maintain the optimum character of welding or cutting.

Read and use the manual instructions before using the machine please!

The user's manual describes the possible sources of danger during welding, includes technical parameters, functions, and provides support for handling and adjustment but keep in mind it doesn't contain the welding knowledge!

If the user's manual doesn't provide you with sufficient information, contact your distributor for more information!

In the event of any defect or other warranty event, please observe the „General Warranty Terms".

The user manual and related documents are also available on our website at the product data sheet.

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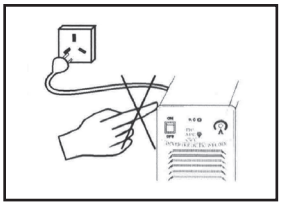
WARNING!

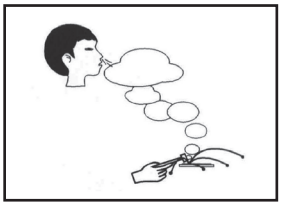
Welding is a dangerous process! The operator and other persons in the working area must follow the safety instructions and are obliged to wear proper Personal Protection Items. Always follow the local safety regulations! Please read and understand this instruction manual carefully before the installation and operation!

- The switching of the machine under operation can damage the equipment.
- After welding always disconnect the electrode holder cable from the equipment.
- Always connect the machine to a protected and safe electric network!
- Welding tools and cables used with must be perfect.
- Operator must be qualified!



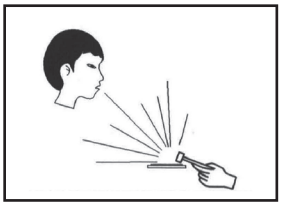
ELECTRIC SHOCK: may be fatal

- Connect the earth cable according to standard regulation.
- Avoid bare hand contact with all live components of the welding circuit, electrodes and wires. It is necessary for the operator to wear dry welding gloves while he performs the welding tasks.
- The operator should keep the working piece insulated from himself/herself.



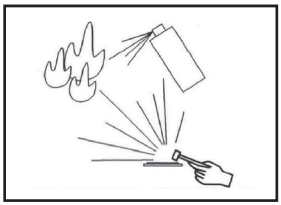
Smoke and gas generated while welding or cutting can be harmful to health.

- Avoid breathing the welding smoke and gases!
- Always keep the working area good ventilated!



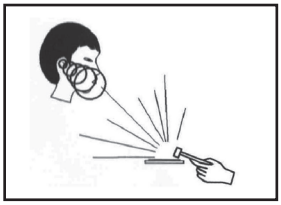
Arc light-emission is harmful to eyes and skin.

- Wear proper welding helmet, anti-radiation glass and work clothes while the welding operation is performed!
- Measures also should be taken to protect others in the working area.



FIRE HAZARD

- The welding spatter may cause fire, thus remove flammable materials from the working area.
- Have a fire extinguisher nearby in your reach!

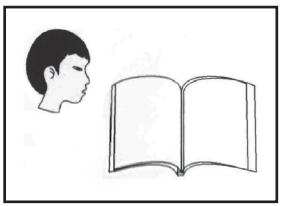


Noise can be harmful for your hearing

- Surface noise generated by welding can be disturbing and harmful. Protect your ears if needed!

Malfunctions

- Check this manual first for FAQs.
- Contact your local dealer or supplier for further advice.



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1. The Main Parameters

GORILLA MULTIFLUX 153 SYNERGIC NOGAS		
	Art. Nr.	80MLTFLUX153
FEATURES	Inverter type	**IGBT**
	FCAW	✓
	Compact Design	✓
	Number of Wire Feeder Rolls	2
PARAMETERS	Accessories MIG Torch	Hobby 150 FIX
	Phase number	1
	Rated input Voltage	230V AC±10% 50/60 Hz
	Max./eff. input Current	22A/12A
	Power Factor (cos φ)	0.7
	Efficiency	85%
	Duty Cycle (10 min/40 °C)	**140A@ 40% 88A @ 100%**
	Welding Current Range	50-140A
	Output Voltage	15.5V-21V
	No-Load Voltage	55V
	Insulation	F
	Protection Class	IP23
	Welding Wire Diameter (only Flux Cored)	0.8-0.9 mm
	Size of Coil	Ø 100 mm, 1 kg
	Weight	6 kg
	Dimensions (LxWxH)	325 x 165 x 225 mm

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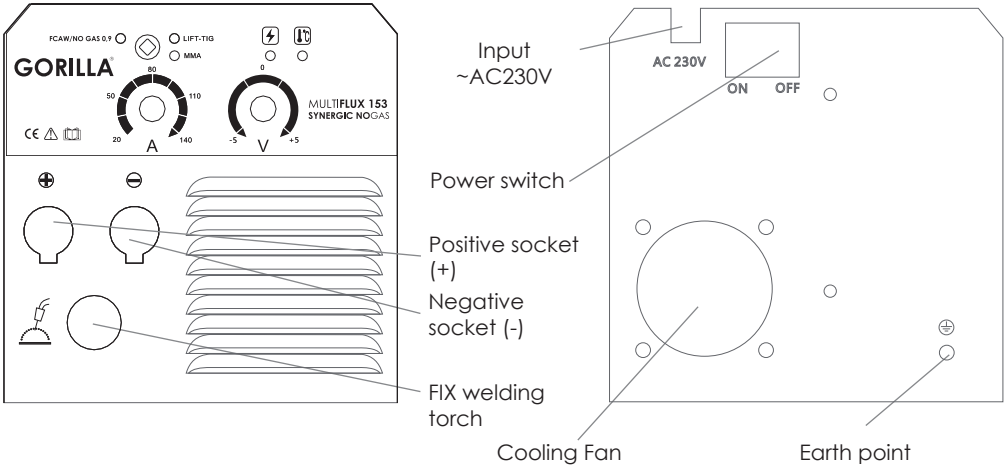
2. Installation & Operation

2-1. Connection of the power wires

1. Each machine is equipped with primary power wire, according to the input voltage, please connect the primary wire to the suitable voltage class.
2. The primary wire should be connected to the corresponding socket to avoid oxidization.
3. Use multimeter to see whether the voltage value varies in the given range.



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2-2. Installation

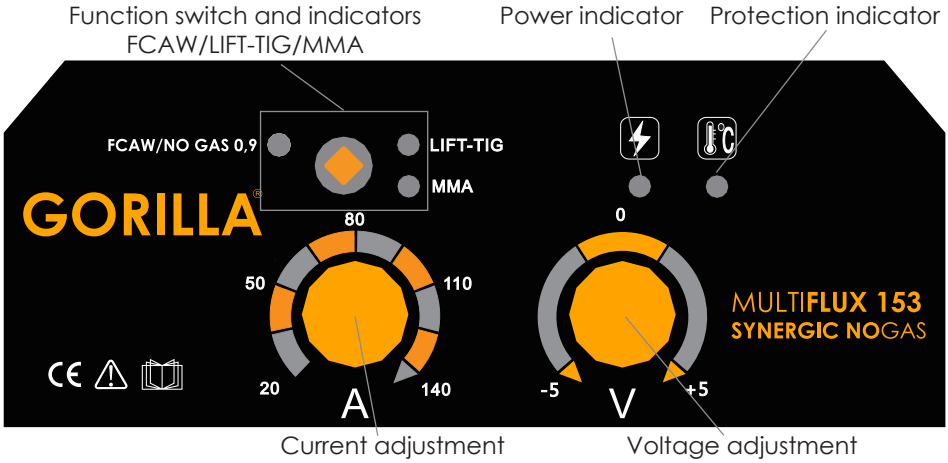
1. Insert the ground cable into the positive output (+) and connect the ground clamp to the workpiece.
2. Connecting the earth cable to the workpiece.
3. Fix the welding wire coil to the rack axis on the wire feeder; make sure the hole of the wire feeding wheel matches well with the bolt on the rack axis and the welding wire diameter. Unfasten the screw on the wire-pressing wheel, and make the wire into the glove of the wire feed wheel, press the wire tightly, but not too tight, and then thread the wire into the torch.

Attention! The welding machine can only be used with self-shilded, flux-cored welding wire!

2-3. Operation

1. Turn the power switch on the back panel to "ON" position, then the power LED turns on, and the fan works.
2. Adjust the welding voltage and welding current according to practical needs.
3. Press the welding torch switch, and welding can be carried out.

2-4. Control panel



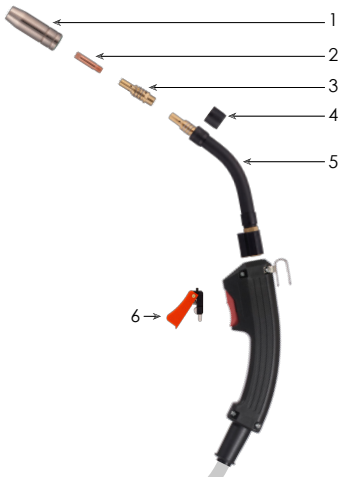
3. The Welding Torch

Attention!

Before each use, check the condition of the welding torch! The maintenance of the welding torch and the proper condition of its components are essential for reliable operation.

Parts list:

MIG DIY Welding Torch cpl.			800MIG153DIY
1	Gas Nozzle	9,5 mm	800CN15095
	Gas Nozzle	12 mm	800CN15012
2	Contact Tip M6x25x0,9mm		340P091073
3	Contact Tip Holder		800CCTH150
4	Head insulator		8102P002003
5	Swan Neck		800CSN15AK
6	Switch		800CMIGSWI



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Precautions

Workspace

1. Welding equipment free of dust, corrosive gas, non-flammable materials, up to 90% humidity for use!
2. Avoid welding outdoors unless protected from direct sunlight, rain, snow, work area temperature must be between -10 °C and +40°C.
3. Wall to position the device at least 30 inches away.
4. Well-ventilated area to perform welding.

Safety requirements

Welding provides protection against overvoltage / overcurrent / overheating. If any of the above events occurs, the machine stops automatically. However, over- stress damage to the machine , keep the following guidelines :

1. Ventilation . When welding a strong current going through the machine , so the machine is not enough natural ventilation for cooling . The need to ensure adequate cooling, so the distance between the plane and any object around it at least 30 cm . Good ventilation is important to normal function and service life of the machine.
2. Continuously , the welding current does not exceed the maximum allowable value. Current overload may shorten its life or damage to the machine .
3. Surge banned ! Observance of tension range follow the main parameter table . Welding machine automatically compensates for voltage , allowing the voltage within permissible limits of law. If input voltages exceed the specified value , damaged parts of the machine .
4. The machine must be grounded! If you are operating in a standard, grounded AC pipeline in the event of grounding is provided automatically . If you have a generator or foreign , unfamiliar , non-grounded power supply using the machine , the machine is required for grounding connection point earth to protect against electric shock .
5. Suddenly stopping may be during welding when an overload occurs or the machine overheats . In this case, do not restart the computer , do not try to work with it right away, but do not turn off the power switch , so you can leave in accordance with the built-in fan to cool the welding machines .

WARNING!

If the welding equipment is used with the welding parameters above 180 amperes, the standard 230V electrical socket and plug for 16 amp circuit breaker is not sufficient for the required current consumption, it is necessary to use the welding equipment with 20A, 25A or even to the 32A industrial fuses! In this case, both the plug and the plug socket fork have to be replaced to 32A single phase fuse socket in compliance with all applicable rules. This work may only be carried out by specialists!

Maintenance

1. Remove power unit before maintenance or repair!
2. Ensure that proper grounding!
3. Make sure that the internal gas and electricity connections are perfect and tighten, adjust if necessary, if there is oxidation, remove it with sandpaper and then reconnect the cable.
4. Hands, hair, loose clothing should be kept away under electric parts, such as wires, fan.
5. Regularly dust from the machine clean, dry compressed air, a lot of smoke and polluted air to clean the machine every day!
6. The gas pressure is correct not to damage components of the machine.
7. If water would be, for example. rain, dry it in the machine and check the insulation properly! Only if everything is all right, go after the welding!

8 When not in use for a long time, in the original packaging in a dry place.

TANÚSÍTVÁNY

LIVERTON Minőségbiztosítási és Pénzügyi Tanácsadó Kft

Certificate identification number: LIV_IWELD_MIG/MAG_02/2023_V4

EC type-examination certificate

Liverton Ltd. certifies on the basis of the report LIV_IWELD_MIG/MAG_02/2023_V4 that the IWELD MIG/MAG technology family and accessories manufactured by IWELD Ltd. comply with the requirements of the European Union Directives 2006/42/EC, 2014/30/EU, 2014/35/EU and 2009/125/EC.

IWELD Ltd can use the "CE" certification mark on the technical data plate and in the technical documentation of the equipment to demonstrate compliance.

The manufacturer is obliged to certify in an EC certificate of conformity that the manufactured equipment conforms to the sample presented.

The conformity marking must be affixed visibly, legibly and indelibly to the equipment.

No marking may be affixed to the equipment which could confuse the conformity marking. Any other marking may be affixed only in such a way as not to impair the visibility and legibility of the conformity marking.

The test reports are available at: www.liverton.hu

This EC type-examination certificate covers the types of equipment listed in the Annex.

Halásztelek, 12. September 2024.

Molnár János
Managing Director

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