

USER'S MANUAL

IGBT Inverter type Dual Function
MMA and MIG Welding Power Source

GORILLA POCKETMIG 205 SILVERBACK
GORILLA POCKETMIG 235 SILVERBACK

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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

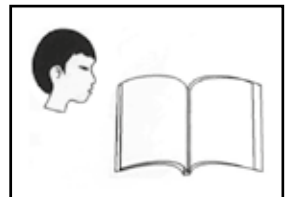
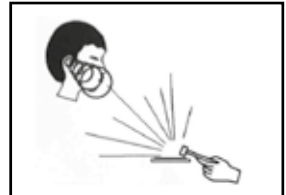
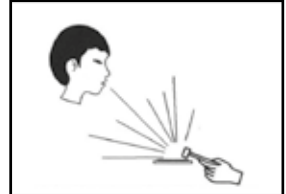
- The welding spatter may cause fire, thus remove flammable materials from the working area.
- Have a fire extinguisher nearby in your reach!

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.



1. The Main Parameters

		GORILLA POCKETMIG 205 SILVERBACK	GORILLA POCKETMIG 235 SILVERBACK	
Art. Nr.		80POCMIG205	80POCMIG235	
FUNCTIONS	Inverter type	IGBT	IGBT	
	LCD	✓	✓	
	MIG/MAG	Reverse Polarity - FCAW	✓	✓
	Compact Design	✓	✓	
	Number of Wire Feeder Rolls	2	2	
	MMA	Arc Force	✗	✗
	Hot Start	✓	✓	
PARAMETERS	Accessories MIG Torch	IGrip 150	IGrip 150	
	Phase number	1	1	
	Rated input Voltage	230V AC±15% 50/60 Hz	230V AC±15% 50/60 Hz	
	Max./eff. input Current	MIG: 30.8A/20.2A	MIG: 34A/23.5A	
	Power Factor (cos φ)	0.7	0.7	
	Efficiency	85%	85%	
	Duty Cycle (10 min/40 °C)	190A@60% 138A@100%	210A@70% 155A@100%	
	Welding Current Range	MIG: 60A-190A	MIG: 60A-210A	
	Output Voltage	14V-23.5V	14V-24.5V	
	No-Load Voltage	60V	65V	
	Insulation	F	F	
	Protection Class	IP23	IP21S	
	Welding Wire Diameter	0.6 - 0.8 mm	0.6 - 0.8 mm	
	Size of Coil	Ø 200 mm, 5 kg	Ø 200 mm, 5 kg	
Weight	12.5 kg	12.5 kg		
Dimensions (LxWxH)	485 x 185 x 370 mm	485 x 185 x 370 mm		

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.



2-2-1. Installation of MMA welding

1. All machine has two air sockets, connect the plug to the socket on the panel board, and tighten it and make sure that it's well-connected, or it may cause the damage of both the plug and socket.
2. The electrode holder wire is connected to the negative terminal, while the work piece is connected to the positive terminal; connect one terminal of the earth clamp to the red air plug, and tighten it with hexagon spanner to make the secondary wire well connected to the air plug, or the air plug may get burned.
3. Pay attention to the electrode of the wire. Generally, there are two ways of the DC welder connection: positive connection and negative connection.

Positive: electrode holder to ,while work piece to " + " ;

Negative: work piece to ,while electrode holder to " + " ; Choose the way according to the practical requirements, and wrong choose may cause unstable arc and big splash, etc. Under this circumstance, renew the air plug rapidly in order to change the poles.

4. If the work piece is too far away from the machine (50-100m), and the secondary wire is too long, the section of the cable should be bigger to reduce the lower of the cable voltage.

2-2-2. Operation instructions of MMA welding

1. Turn on the power switch, and the LCD meter indicates the set current value, and the fan begins to spin.
2. According to practical need, adjust the welding current to the welding requirement.
3. Generally, the welding current of each wire is :
 $\varnothing 2,5$: 70-100A $\varnothing 3,2$:110-160A $\varnothing 4,0$: 170-220A
4. Select the welding mode by the welding mode switch. MMA or MIG.

2-3-1. Installation of MIG welding

1. Plug the welding torch into the output socket “ ” on the front panel, and tighten it. Thread the wire into the torch manually.
2. Insert the earth cable plug into the negative socket “1” on the front panel, and tighten it clockwise.
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 groove of the wire feed wheel, press the wire tightly, but not too tight, and then thread the wire into the torch. Press the “ wire feeding” button to feed the wire out of the welding gun.
4. Tightly connect the gas hose, which come from the back of the machine to the copper nozzle of gas bottle.

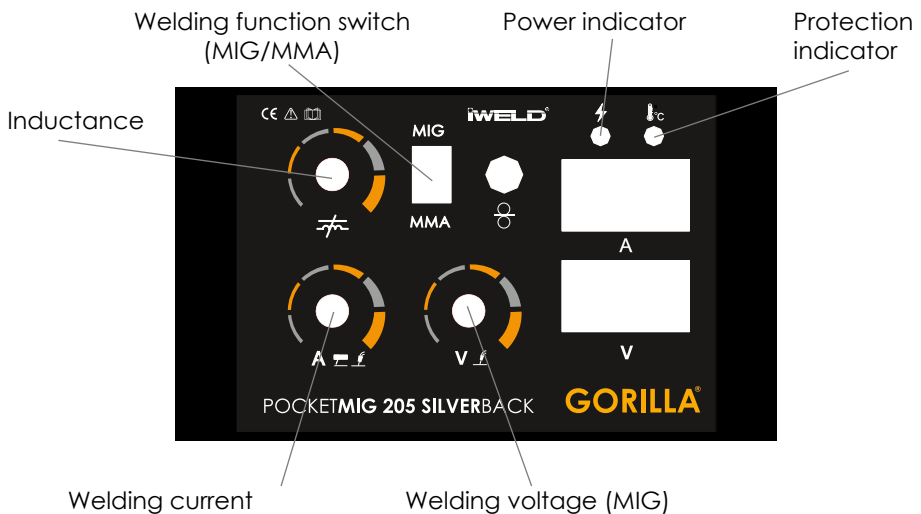
2-3-2. Operation instructions of MIG welding

1. After installation according to the above steps, turn the power switch on the back panel to “ON” position, then the power LED turns on, and the fan works. Open the gas cylinder valve, and adjust the flow meter to the desired position.
2. Turn the conversion switch on the front panel to “MIG” position, and adjust the welding voltage adjustment knob and wire feeding speed adjustment knob according to practical needs to get the desired welding voltage and welding current.
3. Press the welding torch switch, and welding can be carried out.
4. Adjust the burback time potentiometer on the clapboard to get the desired length of welding wire stretching into the contact tip after welding.
5. Cut off the gas 1s after the arc is stopped.

2-3-3. Operation instruction of FCAW welding (self shielded arc welding)

In FCAW mode use reserv polarity

1. Turn the power switch on the back panel to “ON” position, then the power LED turns on, and the fan works. Close the gas cylinder valve.
2. Turn the conversion switch on the front panel to “MIG” position, and adjust the welding voltage adjustment knob and wire feeding speed adjustment knob according to practical needs to get the desired welding voltage and welding current.
3. Press the welding torch switch, and welding can be carried out.



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.

Certificate identification number: LIV_IWELD_MIG/MAG_02/2023

EC type-examination certificate

Liverton Ltd. certifies on the basis of the report LIV_IWELD_MIG/MAG_02/2023 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, 21 March 2023.


Molnár János
Managing Director

