

USER MANUAL

**INWERTOROWA SPAWARKA
PÓŁAUTOMATYCZNA
MIG 200 SMART**

Sherman®

hobby—

CE



ATTENTION!

Before installing and starting the device, please read this manual

1. GENERAL NOTES

The device may be started and operated only after carefully reading this User Manual.

Due to continuous technical development of the device, the external appearance and some of its functions may be modified and their operation may differ in detail from the descriptions in the manual and on the box. This is not a device error, but the result of progress and continuous modifications to the device. The standard equipment of the device may also change.

Damage to the device caused by improper operation will void the warranty.
Any modifications to the rectifier are prohibited and will void the warranty.

2. SECURITY

Employees operating the device should have the necessary qualifications entitling them to perform welding work:

- they should have electric welder qualifications in the field of welding in gas shields,
- know the health and safety rules when operating electrical equipment, such as welding equipment and auxiliary equipment powered by electricity,
- know the health and safety rules when operating compressed gas cylinders and installations (argon),
- know the content of this manual and use the device in accordance with its intended purpose.



WARNING



Welding may pose a threat to the safety of the operator and other people nearby. Therefore, special precautions must be taken when welding. Before starting welding, familiarize yourself with the occupational health and safety regulations applicable at the workplace.

The following dangers exist during electric MIG/MAG welding:

- **ELECTRIC SHOCK**
- **NEGATIVE EFFECTS OF ARC ON HUMAN EYES AND SKIN**
- **POISONING BY FUMES AND GASES**
- **BURNS**
- **EXPLOSION AND FIRE HAZARDS**
- **NOISE**

Preventing Electric Shock:

- connect the device to a technically efficient electrical installation with appropriate protection and zeroing efficiency (additional protection against electric shock); other devices at the welder's workplace should also be checked and properly connected to the network,
- install power cables with the device turned off,
- do not touch the non-insulated parts of the electrode holder, the electrode and the object at the same time welded, including the device housing,
- do not use handles and power cords with damaged insulation,
- in conditions of particular risk of electric shock (work in high-humidity environments and closed tanks), work with an assistant who supports the welder's work and ensures safety, use clothes and gloves with good insulating properties,
- If you notice any irregularities, contact competent persons to correct them
- deletion,
- It is prohibited to operate the device with covers removed.

Preventing the negative impact of an electric arc on human eyes and skin:

- Wear protective clothing (gloves, apron, leather shoes),
- Use protective shields or visors with a properly selected filter,
- Use protective curtains made of non-flammable materials and choose appropriate wall colors absorbing harmful radiation.

Preventing poisoning from vapors and gases emitted from the electrode coating and metal evaporation during welding:

- Use ventilation and extraction devices installed in places with limited exchange air,
- Blow with fresh air when working in confined spaces (tanks),
- Use masks and respirators.

Burn prevention:

- Wear appropriate protective clothing and footwear to protect against radiation burns arc and spatter,
- Avoid getting your clothes dirty with grease and oil that may cause them to catch fire.

Explosion and fire prevention:

- Operating the device and welding in potentially explosive atmospheres is prohibited fire,
- The welding station should be equipped with fire extinguishing equipment,
- The welding station should be located at a safe distance from flammable materials.

Preventing the negative impact of noise:

- Use earplugs or other noise protection measures,
- Warn people nearby about danger.



WARNING!

Do not use a power source to thaw frozen pipes.

Before starting the device:

- Check the condition of electrical and mechanical connections. It is prohibited to use handles and power cords with damaged insulation. Improper insulation of handles and power cables may result in electric shock,
- Ensure proper working conditions, i.e. ensure appropriate temperature, humidity and ventilation in the place work. Protect against precipitation outside closed rooms,
- Place the charger in a place where it can be easily operated.

Persons operating the welding machine should:

- have qualifications for electric welding using the MIG/MAG method,
 - know and comply with health and safety regulations applicable when performing welding work,
 - use appropriate, specialized protective equipment: gloves, apron, rubber boots, shield or a welding helmet with a properly selected filter,
 - know the content of this user manual and use the welding machine in accordance with its intended purpose.
- Any repairs to the device may only be made after disconnecting the plug from the power socket.

When the device is connected to the mains, it is not allowed to touch any elements constituting the welding current circuit with bare hands or wet clothing.

It is forbidden to remove external covers when the device is connected to the network.

Any modifications to the rectifier on your own are prohibited and may result in a deterioration of safety conditions.

All maintenance and renovation works may only be carried out by authorized persons while maintaining the occupational safety conditions applicable to electrical devices.

It is forbidden to use the welding machine in rooms at risk of explosion or fire!

The welding station should be equipped with fire extinguishing equipment.

After finishing work, disconnect the device's power cord from the mains.

The above-mentioned threats and general occupational health and safety rules do not exhaust the issue of welder's work safety, as they do not take into account the specificity of the workplace. An important complement to them are occupational health and safety instructions as well as training and instructions provided by supervisory employees.

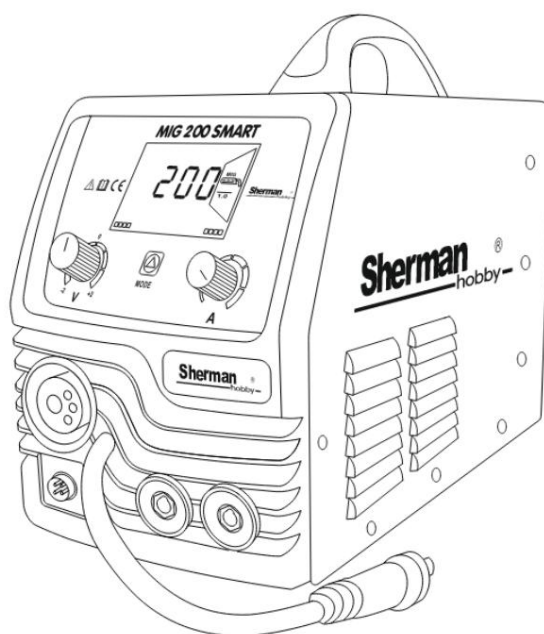
3. GENERAL DESCRIPTION

The synergic MIG 200 SMART welding machine is used for manual welding of steel. Enables welding methods MMA (coated electrode), TIG Lift, and MIG/MAG in synergic mode. By changing the polarity, the device allows MIG/MAG welding using both standard wires shielded with protective gases and self-shielded flux-cored wires.

The device allows you to connect a Spool Gun (SG) holder with a mini wire feeder and a D100 spool of steel or colored wire. The built-in synergistic system allows less experienced users to select welding parameters

The device is made using IGBT technology, which allows for a significant reduction in the weight and dimensions of the welding machine and an increase in efficiency while reducing energy consumption.

The welding machine can be used in closed or roofed rooms, not exposed to direct weather conditions.



4. TECHNICAL PARAMETERS

4.1 Welding machine

Supply voltage:	AC 230V 50Hz
Maximum power consumption:	4.6 kVA
Rated welding current:/duty cycle	200A / 60%
Rated no-load voltage Wire spool diameters:	78 May 100mm, 200mm
Maximum current consumption:	MIG: 19.9 A; MMA: 23.9 A; TIG: 14.8 A
Network security	20 A
Mass:	12.5 kg
Dimensions [mm]:	430 x 185 x 320
Level of security:	IP23S

4.2 MIG gun

Handle type:	TW-15
Maximum current carrying capacity:	200 A (CO2)
Cooling type:	gas
Cooling gas flow:	10-18 l/min
Length:	3 m

Duty cycle

The duty cycle is based on a 10-minute period. A 60% duty cycle means that after 6 minutes of operation, a 4-minute break is required. A 100% duty cycle means that the device can work continuously, without interruption.

Attention! Heating tests were carried out at ambient air temperature. The duty cycle at 20°C was determined by simulation.

Level of security

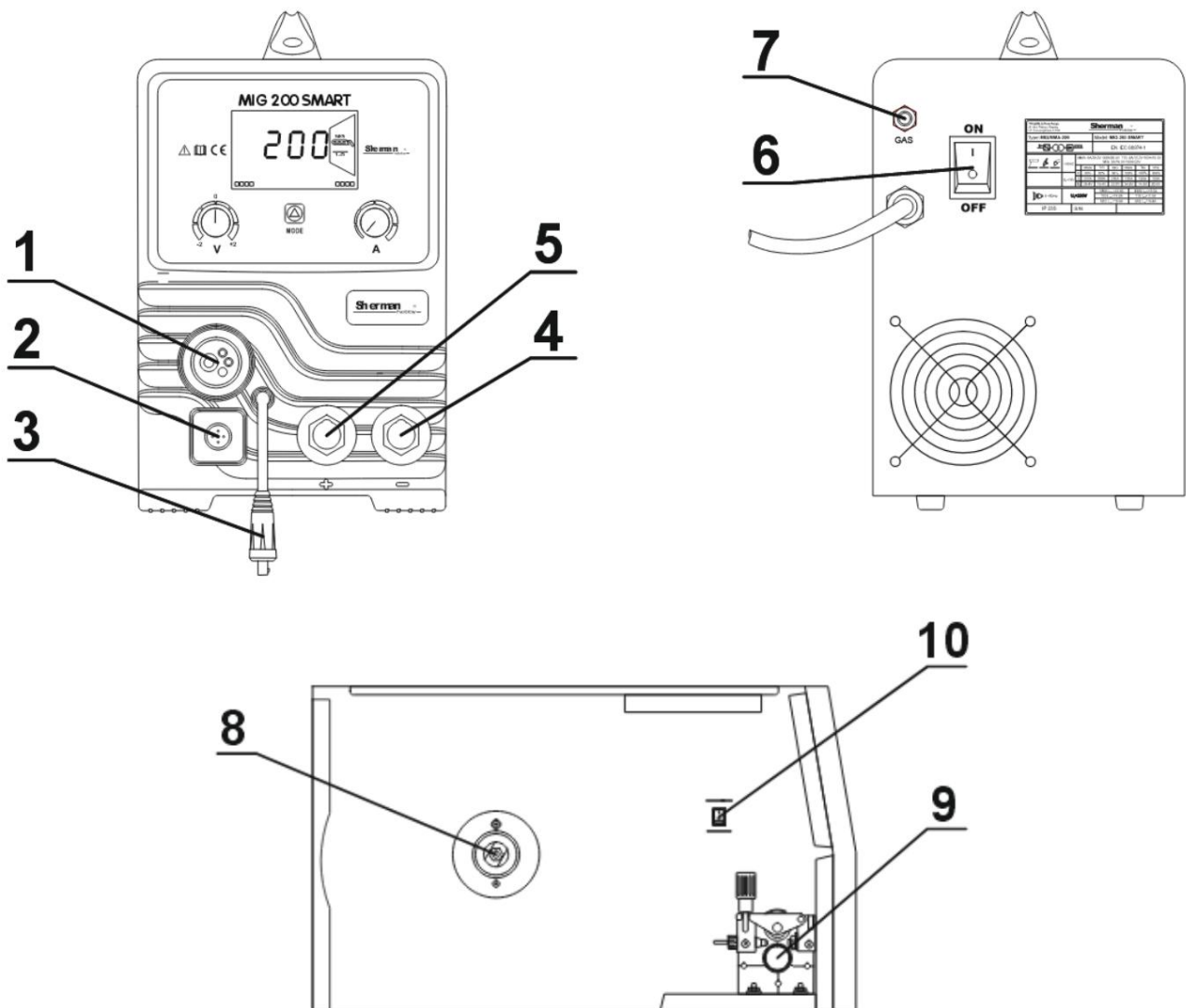
IP determines the degree to which the device is resistant to the ingress of solid and water contaminants. IP23S means that the device is suitable for operation in closed rooms.

Overheating protection

The IGBT module is protected against overheating by a protective installation that turns off the welding circuit devices. After a few minutes, the welding machine cools down to a temperature that allows it to be turned on automatically again. Do not disconnect the power supply during this time, as the continuously operating fan cools the device's internal heat sinks to lower the temperature more quickly. After restarting, remember to limit the welding parameters in order to continue continuous operation of the device.

5. PREPARING THE DEVICE FOR WORK

If the device is stored or transported in frosty conditions, bring the device to a temperature above freezing before starting work.



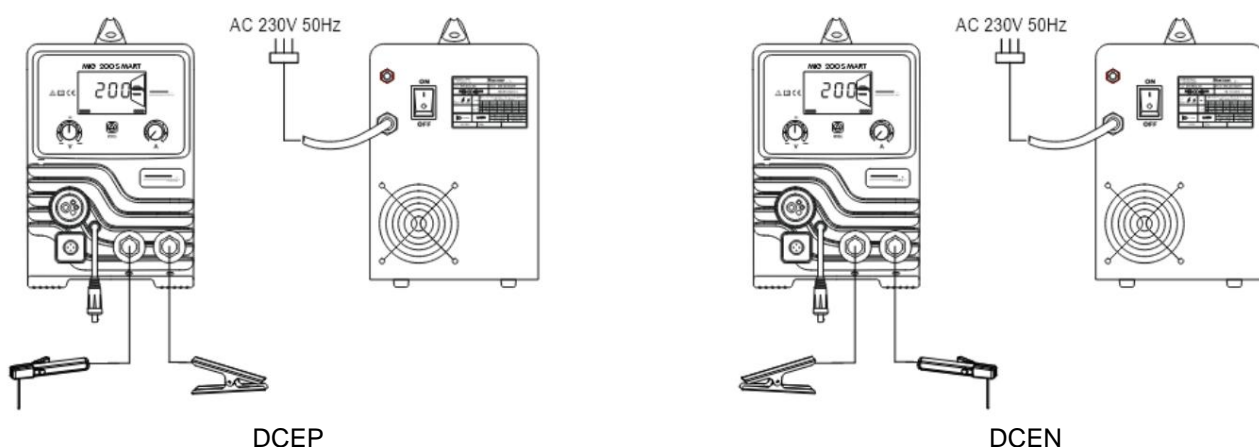
1. MIG gun socket
2. Spool Gun control socket.
3. Polarity change plug
4. "-" socket
5. "+" socket

6. Power switch
7. Shielding gas connection stub.
8. Wire spool pin
9. Wire feeder
10. Spool Gun handle switch

5.1 Connecting the cables

5.1.1 MMA method

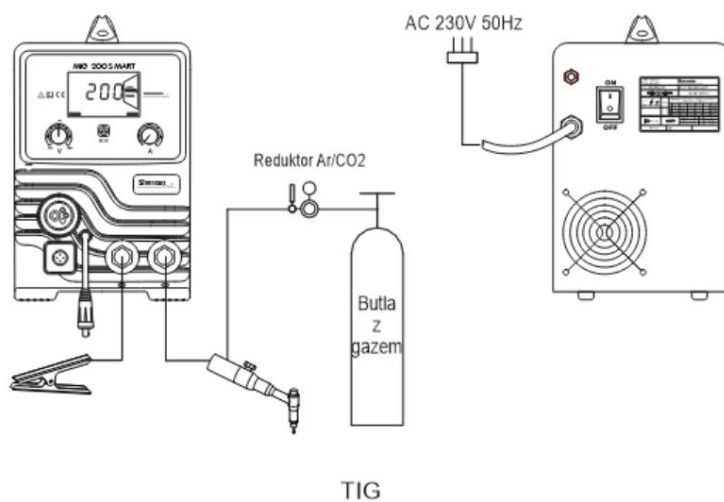
The ends of the welding cables should be connected to the sockets (4) and (5) located on the front panel so that the correct pole for the given electrode is on the electrode holder. The polarity of the welding cable connection depends on the type of electrode used and is indicated on the electrode packaging (negative polarity DCEN or positive DCEP). The earth clamp must be carefully attached to the workpiece. Connect the device plug to a 230V 50Hz power socket.



5.1.2 TIG method

To weld with this method, it is necessary to use an additional TIG torch. A gas-cooled handle with a current capacity of 200A, equipped with a shielding gas control valve, is required.

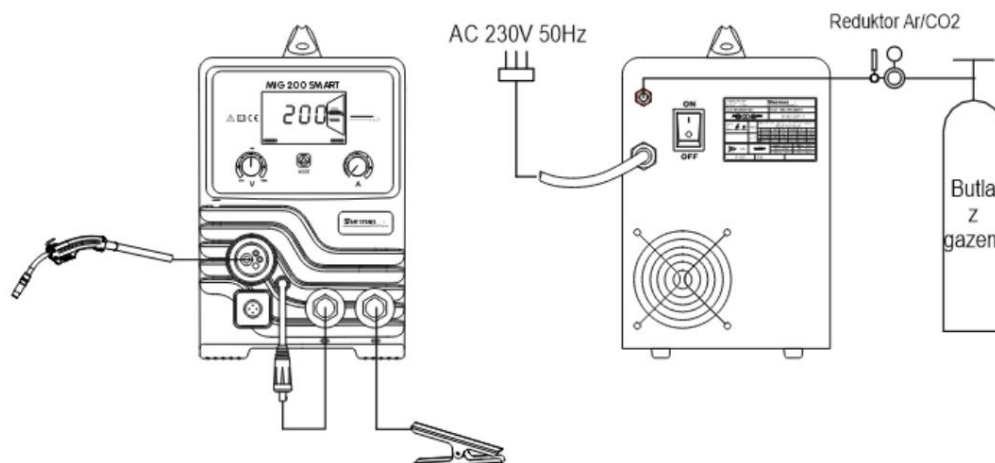
The current terminal of the holder should be connected to the negative polarity socket (4), and the gas cable should be connected to the reducer on the gas cylinder. Connect the positive pole of the source (5) to the welded material using a cable with a tong clamp. Connect the device plug to a 230V 50Hz power socket.



5.1.3 MIG method

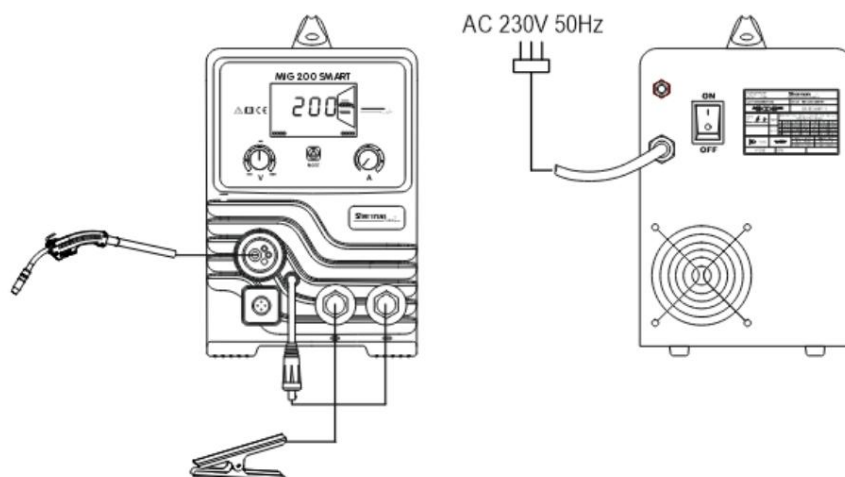
5.1.3.1 Welding under protective gases

The power plug of the gun should be connected to the MIG gun socket (1). The gas hose from the reducer should be led and attached to the gas connector (7) located on the rear wall of the device. Place the polarity change plug (3) in the socket (5). Connect the negative pole of the source (4) to the welded material using a cable with a tong clamp. Switch the switch (10) located inside the feeder chamber to the STANDARD position. Connect the device plug to a 230V 50Hz power socket.



5.1.3.2 Welding with self-shielding steel wire

The power plug of the gun should be connected to the MIG gun socket (1). Place the polarity change plug (3) in the socket (4). Connect the positive pole of the source (5) to the welded material using a cable with a tong clamp. Switch the switch (10) located inside the feeder chamber to the STANDARD position. Connect the device plug to a 230V 50Hz power socket.



5.1.3.3 Spool Gun welding (optional)

The power plug of the gun should be connected to the MIG gun socket (1). Place the polarity change plug (3) in the + socket (5). Connect the negative pole of the source (4) to the welded material using a cable with a tong clamp. Switch the switch (10) located inside the feeder chamber to the SPOOL GUN position. Connect the control plug of the handle to the socket (2). Connect the device plug to a 230V 50Hz power socket.

5.2 Shielding gas connection

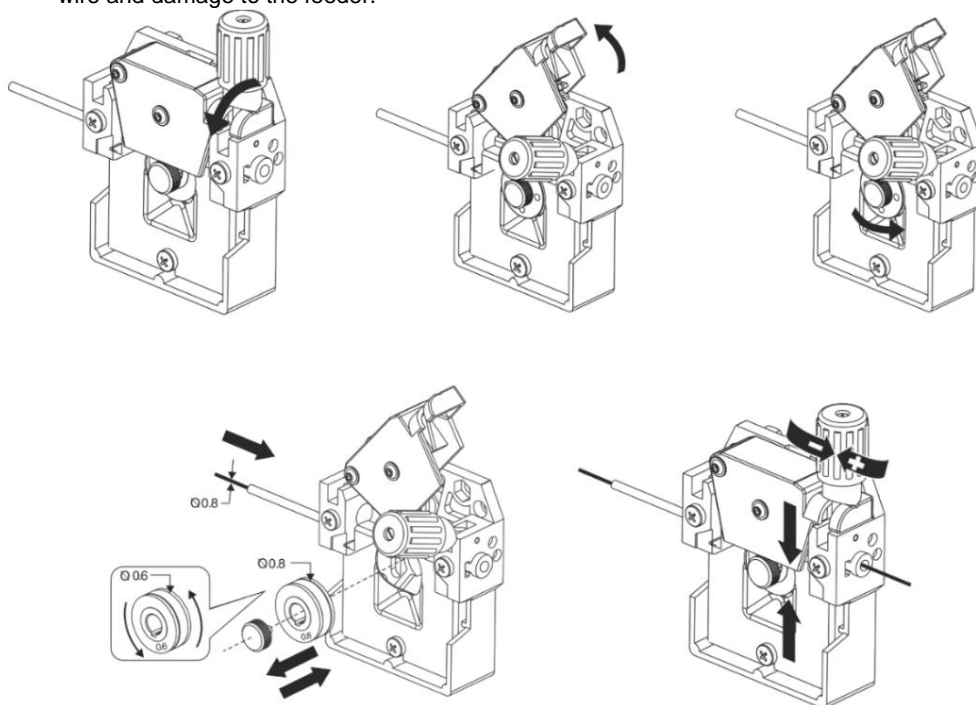
1. Secure the gas cylinder against tipping over.
2. Open the cylinder valve for a moment to remove any contamination.
3. Install the reducer on the cylinder.
4. Connect the reducer with a hose to the gas connector (7) on the back wall of the welding machine.
5. Unscrew the cylinder and reducer valve.

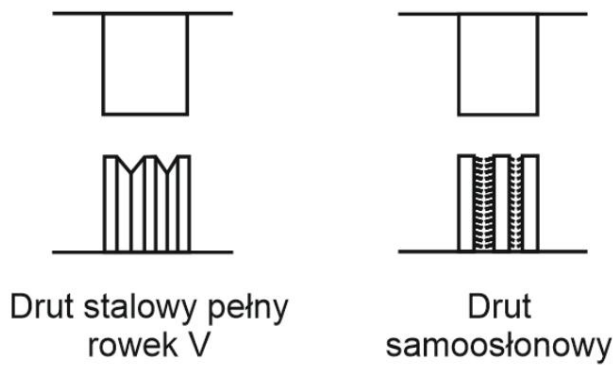
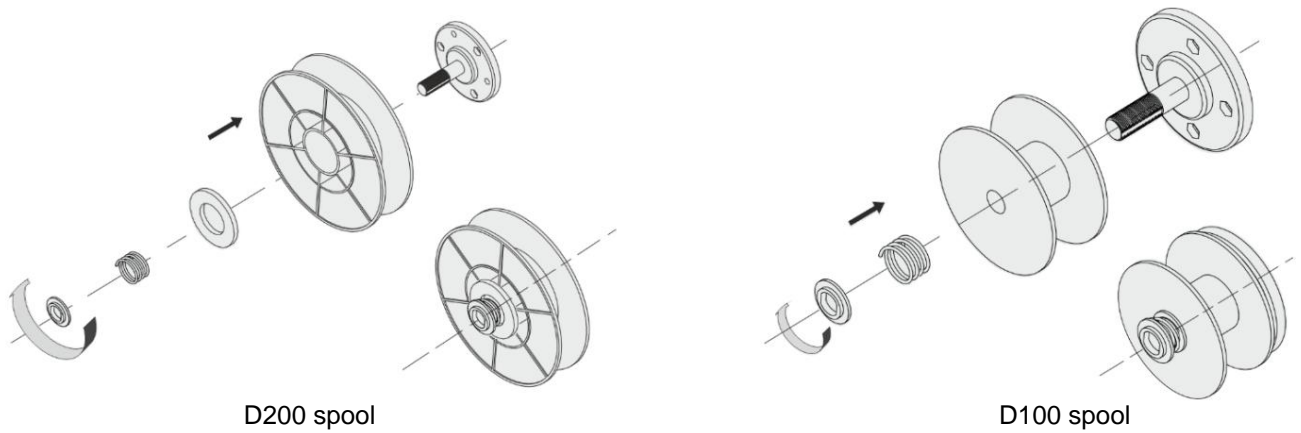
5.3 Connection to the power supply network

1. The device should only be used in a single-phase power supply system, three-wire, with grounded neutral point.
2. The MIG 200 SMART inverter rectifier is designed to operate with a 230V50 Hz network protected by 20 A time-delay fuses. The power supply should be stable, without voltage drops.
3. The device is equipped with a power cord and plug. Before connecting the power supply, make sure that the power switch (6) is in the OFF position.

5.4 Installing the spool with electrode wire

1. Open the side cover of the housing.
2. Check whether the drive rollers are suitable for the type and diameter of the wire. If necessary, install the correct roller. For solid steel wires, use rollers with V-shaped grooves, and for self-sheathed wires, use Flux knurled grooves.
3. Place the spool with electrode wire on the pin.
4. Secure the spool against falling.
5. Release the pressure of the feed rollers.
6. Blunt the end of the electrode wire.
7. Insert the wire through the feeder drive roller into the holder.
8. Press the wire into the grooves of the drive roller.
9. Unscrew the contact tip from the holder, turn on the welding machine and pull the wire into the holder welding machine by pressing the button in the MIG gun handle.
10. When the wire appears in the handle outlet, release the button and screw on the contact tip.
11. Adjust the pressure of the feed roller by turning the pressure knob. Too little pressure force will result in the drive roller slipping, too much pressure force will increase the feeding resistance, which may lead to deformation of the wire and damage to the feeder.



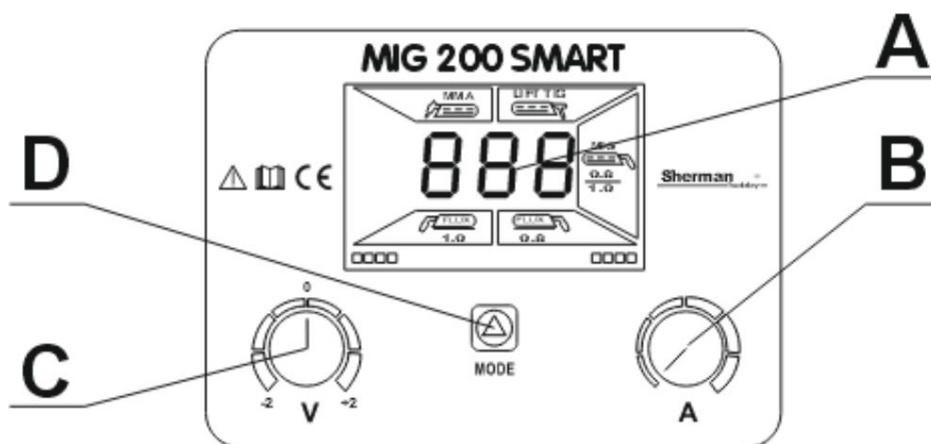


5.5 Preparing the MIG gun for work

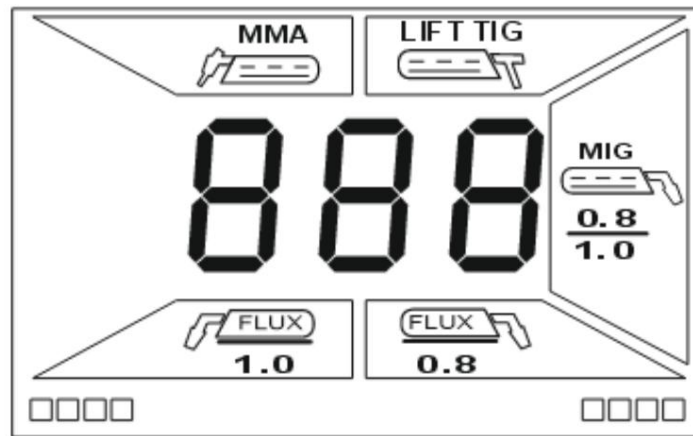
Depending on the type of material being welded and the diameter of the electrode wire, attach an appropriate contact tip and wire guide insert to the MIG gun.

6. OPERATION

6.1 Front panel

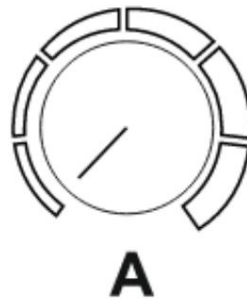


A – Display



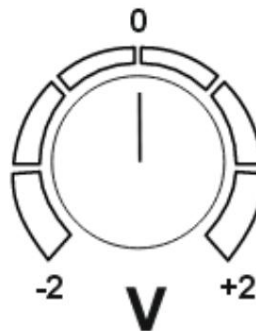
The display shows the welding current and the selected welding method.

B – Current adjustment knob



The knob is used to adjust the welding current. The value of the set current is shown on the display.

C – Welding voltage correction knob




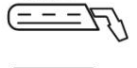




The knob is only active during MIG welding. In this method, after selecting the diameter and type of wire and setting the welding current, the welder will automatically select the wire feed speed and welding voltage. The welding voltage can be adjusted using the knob (D) in the range -2 - +2V.

D – Welding method selection button



The button is used to select the welding method. The selected method is indicated on the display:

 MMA	MMA welding
 LIFT TIG	TIG Lift welding
 MIG 0.8	MIG welding with 0.8 wire
 MIG 1.0	MIG welding with 1.0 wire
 FLUX 0.8	MIG welding with self-shielded 0.8 flux-cored wire
 FLUX 1.0	MIG welding with self-shielded 1.0 flux-cored wire

7. PARAMETER SETTINGS

After selecting the MMA and TIG Lift methods, it is possible to adjust the welding current. After selecting the MIG method, the user can adjust the welding current, and the corresponding welding voltage and wire feed speed will be selected automatically depending on the selected wire type and its diameter. After setting these parameters, manual correction of the welding voltage is possible.

Recommendations for selecting parameters

High-quality argon should be used: recommended 4.8 and higher

8. ARC INITIATION

8.1 MMA method

1. Touch the electrode to the workpiece, rub it briefly and tear it off.
2. If the arc is initiated with electrodes whose coating forms a non-conductive slag after solidifying, pre-clean the tip of the electrode by hitting it several times on a hard surface until metallic contact is achieved with the welded material.

8.2 TIG method

1. Unscrew the valve in the TIG torch to allow the protective gas to flow out.
2. Lightly touch the electrode to the welded material, tear the electrode from the welded material through tilting the handle so that the gas nozzle touches the material.
3. Once the arc is lit, straighten the handle and start welding.

8.3 MIG/MAG method

1. Bring the handle closer to the workpieces to be welded so that there is a distance between the nozzle and the workpieces elements was approximately 10 mm.
2. Press the button on the welding gun and start welding.

9. TABLE OF RECOMMENDED PARAMETERS VALUES

9.1 MMA method

Electrode diameter	2.5	3.2	4.0	5.0
Welding current	70 – 100A	110 – 140A	170 – 220A	230 – 280A

9.2 TIG method

Thickness(mm)	Electrode diameter (mm)	Electrode wire diameter (mm) 1.0	Welding current (A)	Protective gas flow (l/min)
0.8	1.0	1.6	35 – 45	4 – 6
1.0	1.6	1.6	40 – 70	5 – 8
1.5	1.6	2.0	50 – 85	6 – 8
2.0	2.0 – 2.4	2.4	80 – 130	8 – 10
3.0	2.4 – 3.2		120 - 150	10 – 12

9.3 MIG method

		Sheet thickness (mm)	Wire diameter (mm)	Space (mm)	Welding current voltage (AND)	Welding speed (cm/min)	Free electrode outlet (mm)	Gas flow (l/min)			
Vertical	Welding	0.8	0.8,0.9	0	60y70 75	16y16.5 17	50y60 50	10	10		
		1.0	0.8,0.9	0	y85	y17.5	y60	10	10y15		
		1.2	0.8,0.9	0	80y90	16y16.5	50y60	10	10y15		
		1.6	0.8,0.9		95y105	17y18	45y50	10	10y15		
		2.0	1.0,1.2	0 0y0.5	110y120 18y19	120y130 19	45y50 45	10 10y15			
		2.3	1.0,1.2	0.5y1.0 1.0	y19.5 140y150	20y21	y50 45y	10 10y15			
		3.2	1.0,1.2	y1.2			50	10y15 10y15			
		4.5	1.0,1.2	1.0y1.5	160y180	22y23	45y50	15	15		
			1.2	1.2y1.6 220y250		24y26	45y50	15	15y20		
			1.2	1.2y1.6 220y250		24y26	45y50	15	15y20		
			1.2	1.2y1.6 300y340 1.2y1.6 300		32y34 32	45y50 45	15	15y20		
			1.2	y340		y34	y50	15	15y20		
		Vertical	Spotting	0.8	0.8,0.9	0	100	17	130	10	15
				1.0	0.8,0.9	0	110	17y5	130	10	15
1.2	0.8,0.9			0	120	18y5	130	10	15		
1.6	1.0,1.2			0	180	19y5	130	10	15		
2.0	1.0,1.2			0	200	21	100	15	15		
2.3	1.0,1.2			0	220	23	120	15	20		
3.2	1.2			0	260	26	120	15	20		

		Sheet thickness (mm)	Wire diameter (mm)	Torch tilt (°)	Welding current voltage (AND)	Welding speed (cm/min)	Free electrode outlet (mm)	Gas flow (l/min)	
Vertical	Spotting	1.0	0.8,0.9	450	70y80	17y18	50y60	10	10y15
		1.2	0.9,1.0	450	85y90	18y19	50y60	10	10y15
		1.6	1.0,1.2	450	100y110 19y20		50y60	10	10y15
		2	1.0,1.2	450	115y125 19y20		50y60	10	10y15
		2.3	1.0,1.2	450	130y140 20y21		50y60	10	10y15
		3.2	1.0,1.2	450	150y170 21y22		45y50	15	15y20
		4.5	1.0,1.2	450	140y200 22y24		45y50	15	15y20
		6	1.2	450	230y260 24y27		45y50	20	15y20
		8.9	1.2,1.6	500	270y380 29y35 45y50			25	20y25
	12	1.2,1.6	500	400	32y36	35y40	25	20y25	

	Welding	1.0	0.8,0.9	450	140	19~20	160	10	15
		1.2	0.8,0.9	450	130~150	19~20	120	10	15
		1.6	1.0,1.2	450	180	22~23	120	10	15~20
		2	1.2	450	210	24	120	15	20
		2.3	1.2	450	230	25	110	20	25
		3.2	1.2	450	270	27	110	20	25
		4.5	1.2	500	290	30	80	20	25
		6	1.2	500	310	33	70	25	25
	Welding	0.8	0.8,0.9	100	60~70	16~17	40~45	10	10~15
		1.2	0.8,0.9	300	80~90	18~19	45~50	10	10~15
		1.6	0.8,0.9	300	90~100	19~20	45~50	10	10~15
		2.3	0.8,0.9	470	100~130	20~21	45~50	10	10~15
			1.0,1.2	470	120~150	20~21	45~50	10	10~15
		3.2	1.0,1.2	470	150~180	20~22	35~45	10~15	20~25
		4.5	1~2	470	200~250	24~26	45~50	10~15	20~25

	Sheet thickness (mm)	Wire diameter (mm)	Welding current (AND)	Welding voltage (V)	Welding speed (cm/min)	Free electrode outlet mm	Gas flow (l/min)
Inguinal	1.6	0.8,0.9	60~80	16~17	40~50	10	10
	2.3	0.8,0.9	80~100	19~20	40~55	10	10~15
	3.2	1.0,1.2	120~160	20~22	35~45	10~15	10~15
	4.5	1.0,1.2	150~180	21~23	30~40	10~15	20~25

Electrode wire diameter 0.8 1.0	Contact tip diameter 0.8 1.0	Wire guide insert
		Blue
		Blue/Red
1.2	1.2	Red
1.6	1.6	Yellow

10. BEFORE YOU CALL SERVICE

In the event of a malfunction of the device, before sending the welding machine to the service center, check the list of basic failures and try to eliminate them yourself.

Any repairs to the device may only be made after disconnecting the plug from the power socket.

Attention! The device is not sealed and the user can remove the welder's casing to remove minor failures.

Symptoms	Cause	Procedure
No power, failure signal or device malfunction	No connection or loose plug inside the device	Check and correct the connections of all electrical plugs inside the device
No electrode wire feeding (feeder motor is running)	Roller pressure too weak	Set the correct pressure
	Incorrect guide roller groove diameter	Install the correct guide roller
	Wire guide in the holder is dirty	Clean the electrode wire guide
	Blocked electrode wire in the contact tip	Replace contact tip
Irregular feed of the electrode wire	Damaged contact tip	Replace contact tip
	The feed roller groove is dirty or damaged	Clean the roller groove or replace the roller
	The wire spool rubs against the walls of the welding machine cover	Attach the wire spool correctly

The arc does not ignite	Lack of proper contact between the ground cable terminal	Improve the contact of the ground terminal
	Damaged switch in the MIG gun	Replace the switch
	Improper connection of the MIG gun to the device	Check the condition of the electrical connections of the handle, check whether the pins in the socket are not broken or stuck.
	Device switched to Spool Gun mode	Switch the device to the standard MIG gun mode using the switch (10) in the feeder chamber
The arc is too long and irregular	Welding voltage too high	Reduce the welding voltage
	Wire feed speed too slow	Increase the wire feed speed
Arc too short	Welding voltage too low	Increase the welding voltage
	Wire feed speed too high	Reduce the wire feed speed
After turning on the power, the displays and LEDs do not light up	No supply voltage	Check the fuses at the mains connection
The fan does not work	The fan was blocked with a bent cover	Straighten the fan cover
Unsatisfactory weld quality during MIG welding	Inappropriate or poor quality materials or consumable parts used,	Replace consumable parts. Replace the welding wire or gas cylinder with suitable or higher quality materials
	Shielding gas flows out with inappropriate intensity.	Check the gas supply hose, improve the connection of the hose with the connectors and the condition of the quick connectors Check the cylinder regulator
Unsatisfactory weld quality during MMA welding, the electrode sticks to the welded material	Incorrect polarity of welding cable connection	Connect the welding cables correctly
	Wet electrode.	Replace the electrode
	The welder is powered by a generator or a long extension cord with too small a cable cross-section	Connect the device directly to the power supply
Unsatisfactory weld quality during TIG welding	Check the quality of the materials and consumables used, especially the tungsten electrode and shielding gas	Replace consumable parts, replace shielding gas with a higher quality one
	Shielding gas does not flow or flows insufficiently	Check the cylinder reducer, gas supply hose, improve the connection of the hose with the connectors and the condition of the quick connectors

11. OPERATING MANUAL

The MIG 200 SMART welding machine should be operated in an atmosphere free from corrosive ingredients and high dust. Do not place the device in dusty places, near operating grinders, etc. Dust and metallic filings on the control boards, cables and connections inside the device may lead to an electrical short circuit and, consequently, damage to the welding machine.

Avoid operation in high-humidity environments, especially when dew occurs on metal elements.

If dew occurs on metal elements, e.g. after introducing a cold device into a warm room, wait until it dries completely and the device is heated to the ambient temperature. Running the welding machine cold in these conditions may damage it. If the welder is used outdoors, it is recommended to place it under a roof to protect it against unfavorable weather conditions.

The MIG 200 SMART device should be operated in the following conditions: - changes in the effective value of the supply voltage not greater than 10%
 - ambient temperature from -10°C to $+40^{\circ}\text{C}$
 - atmospheric pressure 860 to 1060 hPa
 - relative humidity of atmospheric air not more than 80%
 - altitude above sea level up to 1000m

List of consumable parts:

No.	For solid steel wires	For self-shielding wires
1	Feeder roll 30x10x10mm	Flux feed roll 30x10x10mm
2	TW-15 M6x25 contact tip	
3	TW-15 current switch	
4	TW-15 gas nozzle	
5	3m steel insert	3m Teflon insert

A full list of consumables and spare parts is available on the website www.tecweld.pl and at TECWELD. It is possible to purchase these parts directly.

12. MAINTENANCE INSTRUCTIONS

As part of daily maintenance, keep the welding machine clean, check the condition of external connections and the condition of electric wires and cables.

Replace consumable parts regularly.

Periodically (depending on operating conditions), remove the casing and clean the inside of the device by blowing it with compressed air to remove dust and metal filings from the control boards and electrical cables and connections.

At least once every six months, the general device and the condition of electrical connections should be inspected, in particular:

- the status of protection against electric shock -
the status of insulation
- condition of the security system
- correct operation of the cooling system

Damage resulting from operating the welding machine in inappropriate conditions and failure to follow maintenance recommendations are not covered by warranty repairs.

15. STORAGE AND TRANSPORT INSTRUCTIONS

The device should be stored at a temperature of -10°C to +40°C and a relative humidity of up to 80%, free from corrosive fumes and dust. Transport of packaged devices should be carried out by covered means of transport. During transport, the packed device must be secured against shifting and ensured that it is in the correct position.

13. SET SPECIFICATION

1. Welding machine	1 piece.
2. TW-15 welding torch	1 piece.
3. Mass cable with tong clamp	1 piece.
4. Electrode cable	1 piece.
5. gas hose	1 piece.
6. User manual	1 piece.
7. Packaging	1 piece.

14. WARRANTY

The warranty is granted for a period of 12 months for business entities, but excluding warranty claims, or 24 months for consumers from the date of sale.

The warranty will be honored after the complainant presents proof of purchase (invoice or receipt) and a warranty card with the product name, serial number, date of sale and a stamped sales point.

To order a warranty repair, please complete the form available at www.tecweld.pl _____ in the SERVICE tab. Based on the notification, the device will be transported to the service center by courier. Devices sent in any other way at TECWELD's expense will not be accepted!

The welding machine must be delivered with a welding gun. Complaints about a device without a welding torch will not be considered.

The device sent for a complaint must be packed in the original carton and secured with original Styrofoam shapes. TECWELD is not responsible for any damage to the welding machine caused during transportation.



If you intend to dispose of this product, do not dispose of it with normal household waste. According to the WEEE directive (Directive 2012/19/EU) in force in the European Union, separate methods of disposal must be used for used electrical and electronic equipment.

In Poland, in accordance with the provisions of the Act of September 11, 2015 on waste electrical and electronic equipment, it is prohibited to place waste equipment marked with the crossed-out bin symbol together with other waste.

The user who intends to dispose of this product is obliged to return used electrical and electronic equipment to a waste equipment collection point. Collection points are run, among others: by wholesalers and retailers of this equipment and by municipal organizational units conducting waste collection activities.

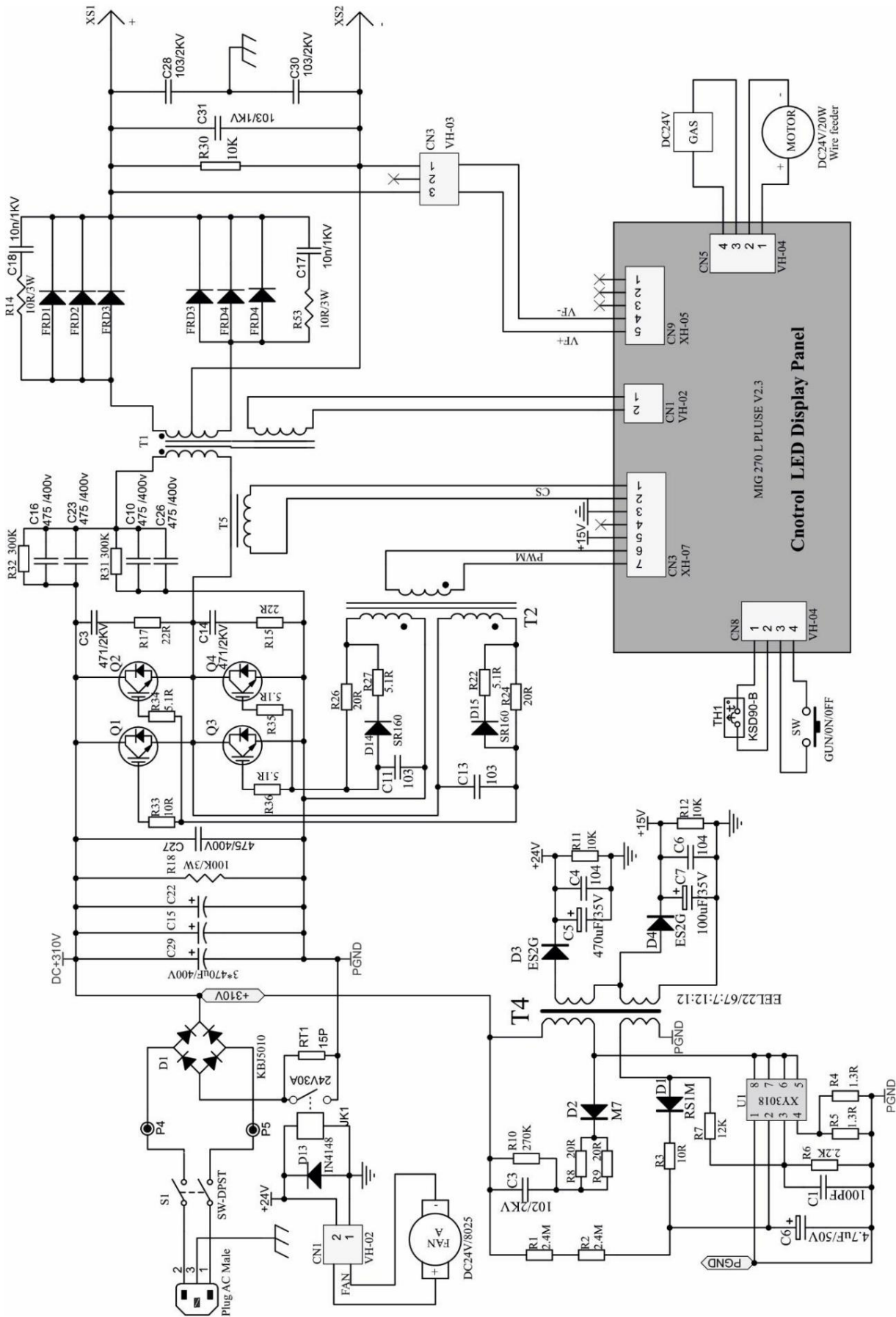
The above statutory obligations were introduced in order to limit the amount of waste generated from waste electrical and electronic equipment and to ensure an appropriate level of collection, recovery and recycling of waste equipment.

The correct implementation of these obligations is especially important when used equipment contains hazardous ingredients that have a particularly negative impact on the environment and human health.

TECWELD Piotr Polak
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Tel. +48 32 386 94 28
e-mail: info@tecweld.pl, www.tecwel.pl

15. ELECTRICAL DIAGRAM



DECLARATION OF CONFORMITY

01/MIG200SMART/2023

Authorized representative of the manufacturer:

TECWELD Piotr Polak

41-943 Piekary ŹlŹyskie
street Emerald 21/3/6

branch:

41-909 Bytom
street KrzyŹowa 1G
POLAND

We declare that the following product:

Inverter welding machine

Trade name:

MIG 200 SMART

Type:

MIG/MMA 200

Manufacturer's trademark:

Sherman [®]
hobby

to which this declaration relates complies with the requirements of the following European Union directives and national provisions implementing these directives:

Low Voltage Directive LVD 2014/35/EU

Electromagnetic Compatibility Directive EMC 2014/30/EU

RoHS II Directive 2011/65/EU

and complies with the following standards:

PN-EN IEC 60974-1:2018-11+A1:2019-06 arc welding equipment - Part 1: Welding energy sources,

PN-EN 60974-10:2014-12 arc welding equipment - Part 10: Electromagnetic compatibility (EMC) requirements,

PN-EN IEC 63000:2019-01 technical documentation for the assessment of electrical products and electronics with regard to the reduction of hazardous substances.

Year of placing the CE mark on the device:

2022

Bytom, on 07/03/2023

Piotr Polak
(signature of authorized person)