

# Orbital welding : Welding power sources



Our AXXAIR orbital power supplies has been designed to be user friendly and intuitive. Our step by step design allows, even beginner, to easily generate programs after only a short learning period, while very advanced functions are available to advance users looking to customize their programs.

A particular attention has been paid to using as much as possible standard industrial components for their reliability and availability. The facilitated access to parts makes our power sources robust and easy for maintenance.



The combination of an easy to use and sturdy package allows you to be competitive and makes this range the best choice for all your current or future projects.

The electronics in charge of piloting the rotors of the welding heads is specifically designed to support various motor type, CD, brushless, stepping motors but also encoders or tachometers, making these power supply one of the most versatile on the market today.

Because our power supply can control most type of motors, we are able to control not only our products but also many of the other products available. Using a 32-pin « quick fit » connector we are able to design several cable adaptor to connect most products available today on our power supply. This great feature allows our customers to use our power supply as a one fits all, reducing the cost of ownership.

## FLEXIBILITY, PRODUCTIVITY

Our latest touch screen interface allows us to make available even the most advanced features in a user friendly and intuitive way.

## QUALITY AND REPEATABILITY

Part of the conviviality of our power supply comes from the innovative way we register a program. First you will create a configuration that includes the model and type of welding head, the tube diameter, the tube wall thickness and the tube material. Then within this configuration you will add you programs, up to 10 per configuration. This makes it really easy to retrieve and select a program even if it was created months ago.

## PORTABILITY

Our power supply are among the easiest to carry on site or move around the workshop, however if you want to be able to move effortlessly the gas cylinder together with the power supply we designed a very convenient trolley.



Do not hesitate to contact us for all enquiries relating to orbital welding power sources.

We will be glad to share our know-how with you and to devise a solution that best meets your needs!

# Orbital welding

## Welding power sources

Since the launch of our orbital welding power sources SAXX in 2017, **WiFi has been offered as an option** to our customers in order to use the «Remote HMI» application (third party application).

Thanks to this application, combined with the WiFi, remote control of the SAXX with a smartphone, computer or tablet becomes possible.

The wifi option also allows **sending and retrieving data from the SAXX** thanks to a remote access to the power source's USB key.

Access to the USB key's content allows:

- **to monitor alarms.**
- **to retrieve data from the acquisition files.**
- **to exchange configuration and programs** from one power source to another power source from the SAXX range.

AXXAIR is **constantly striving to improve the operator's experience** of our customers. This is why we improved our SAXX power sources.

The new generation of SAXX-200, SAXX-210 and SAXX-300 completely moves into the **Industry 4.0** era with a new WiFi module and an Ethernet interface to make the operator's work even more efficient.

### New WiFi module

An improved WiFi module with an external antenna will be offered on the new SAXX versions : SAXX-200, 210 and 300.



On the SAXX-200, the antenna is hidden under the power source's cover. It will be visible on the SAXX-210 and 300.

These improvements allow:

- an increased WiFi operating distance: **up to 100 m** depending on the working environment.\*
- a better WiFi communication: quality and stability of the data transfer.

\*It is important to ensure that there is no obstacle between the SAXX power source and the remote control tool.



### Network interface

From now on, access to the USB key and remote control of the SAXX power sources will also be possible with an **Ethernet network cable**.



All SAXX welding power sources are now equipped as standard with an **Ethernet socket** at the rear of the power sources. It allows **fast connection to an existing computer network** by using a RJ45 of category at least 5 S/STP cable.

In order to operate the SAXX remotely, the «Remote HMI» application is still required. The application is available on App Store, Google Play and Windows.



# SAXX-200



## Fully-assured gas management

2 separate gas lines, free choice of inserting gas flow management

- Gas flow control and flow alarms
- Display of the actual flow rate right on the screen



The ergonomic shape of the power source, the water cooler and the carrying handle make transport easy

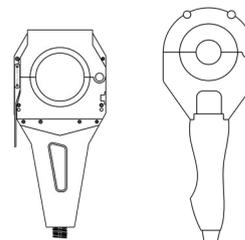
## Interface 5.7 colour touch screen + WiFi

13 languages, possibility of remote control by smartphone or tablet



## Compatible with most closed head on the market

AMI, Polysoude, ESAB, Orbitec and Orbitalum



## Axis for added metal

Possibility of using Step mode

## Removable water colling

Can be separated **without tools** and makes the power source extremely portable

Cooling capacity 700W, flow mini alarm



## Data acquisition

Records the last 999 welds on the USB key

Integrated WeldReport, data's formatting and presenting of the instructions in the form of DMOS.

## USB port on front panel

200 programs per USB key, several keys can be used

- Software: Remote update possible
- Sending and retrieving data through remote access to the SAXX's USB key



## Technical characteristics

### Duty cycle:

| 230 V |       | 110 V |       |
|-------|-------|-------|-------|
| 25 %  | 200 A | 35 %  | 140 A |
| 60 %  | 140 A | 60 %  | 115 A |
| 100 % | 115 A | 100 % | 100 A |

### Power supply:

- Single phase network **with earth**
- Supply voltage: 110 to 230 V +/-15%
- Input current consumed 23A at 230V and 32A at 110V
- Frequency: 50/60Hz
- Cable supplied: HO7RN-F 3x2.5 mm<sup>2</sup> black, length 3m

This equipment comes with a 16A plug of type CEE7 / 7 to be connected to a socket protected by a 16A fuse or circuit breaker.

To allow use at maximum conditions or according to the country, it will be necessary to change the setting.

The nameplate of the equipment will allow you to choose the socket and the protection (fuse and / or circuit breaker) adapted to the conditions of use (voltage and current).

### Gas supply:

- Maximum inlet pressure: 5 bars
- Maximum flow rate: 50 l / min per gas line
- Inlet connectors: M12x100 male
- Outlet connectors: female blanking union Series 20

### Technology:

- Colour touch screen 5.7"
- 13 languages
- Up to 16 users with passwords and custom permissions
- Simple and intuitive programming with automatic parameter calculation and programming
- 200 programs in 20 sectors maximum / key



### Intelligence:

- Alarms: More than 30 alarms to protect the system and check that welding is normal.
- Welding voltage measured in increments of 0.1 A
- Minimum pulse time of 50 ms

### Auxiliary connector:

- Possibility of triggering the welding start via an oxygen meter (dry contact)

### Wi-fi: (Option)

Remote control of the screen on smartphone or tablet via an application  
 Range: 20 to 30 m

### Cooling connector:

For SCOOOL-700 cooler only: It must be connected to the SAXX-200 to operate (No standalone operation)

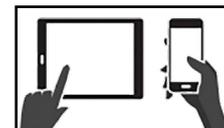
- Max pressure: 5 bars
- Cooling power according to CEI60974-2 standard: 0.7 kW

**CAUTION:** The power source is delivered without coolant. See "Consumables" to order the 3 liter can (SACW-C006).

### Integral printer:

- 32 characters / line
- Print program and actual parameters

# SAXX-200



You can order your SAXX-200 power source with **the options you need.**

**Second gas line:** This second gas line allows control from the power source of **your internal inerting** and / or dual gas management of the welding torch.

- Gas saving
- Welding process safety

**Wire feed:** This option includes the axis board and the connectors. It must be completed by the dispenser (see accessories).

There is the possibility to use the **step mode** and to **synchronize the wire feed** with the current pulse.

**Water cooler:** Removable cooler without tools with a cooling capacity of **700W** with a flow safety sensor. It is essential to use in all water cooled machines.

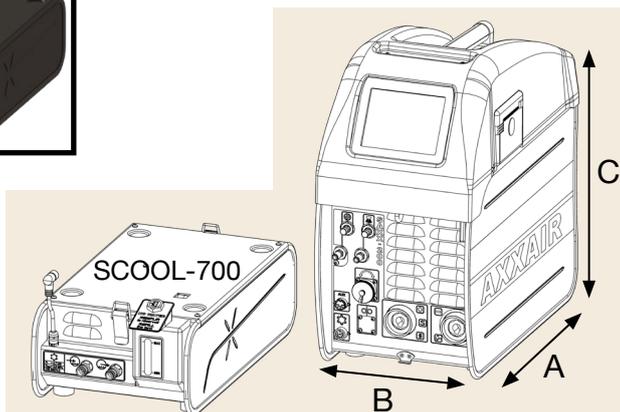
- Increasing the duty cycle



**WIFI:** This option includes a built-in **Wifi antenna** in the power source.

Remote control by a smartphone, computer or tablet to use it as a remote control is possible.

In fact, through an application, you have access to all functions including programming. The option also allows **sending and retrieving data** from the SAXX through access to the power source's USB key. Range: **up to 100m**



| Description                                      | Product code | Cooled              | Gas line  | Second gas line | Wire feed | Wifi Antenna | Net weight | Dimensions AxBxC         |
|--|--------------|---------------------|---|-----------------|-----------|--------------|------------|--------------------------|
| Orbital TIG welding power source, 200A, autoline | SAXX-200     | AIR                 | x   |                 |           |              | 21 kg      | 468 mm x 249 mm x 482 mm |
|  | SAXX-200I    | AIR                 | x   |                 |           | x            | 21 kg      |                          |
|  | SAXX-200W    | AIR                 | x   |                 | x         |              | 21 kg      |                          |
|  | SAXX-200DG   | AIR                 | x   | x               |           |              | 21 kg      |                          |
|  | SAXX-200IW   | AIR                 | x   |                 | x         | x            | 21 kg      |                          |
|  | SAXX-200DGI  | AIR                 | x   | x               |           | x            | 21 kg      |                          |
|  | SAXX-200DGW  | AIR                 | x   | x               | x         |              | 21 kg      |                          |
|  | SAXX-200DGIW | AIR                 | x   | x               | x         | x            | 21 kg      |                          |
|  | SCOOOL-700   | Water cooler (700W) | Essential to the use of all water cooled machines. Compatible with all SAXX models listed above |                 |           |              | 8 kg       | 468 mm x 249 mm x 146 mm |

All options must be mounted at AXXAIR.