

# **Engineering at its best**

### Electrofusion Units MSA 2 Family



### Your challenges are our drive

the internal heating

Customers are asking for high efficiency, low cost of ownership, low weight and ease of use. These requirements have driven our engineering team in designing the new MSA 2 family. The MSA 2.0 and MSA 2.1 electrofusion units are the results of our initial effort. The MSA 2 MULTI @ 230V and MSA 2 CF @ 115V are the other members tailored for GF special fittings, on top of the standard ones.



Strong in details

## At a glance



Technical specifications	MSA 2.0 230V	MSA 2.1 230V	MSA 2 MULTI 230V	MSA 2 CF 115V
Operating conditions	2304	2304	2304	1154
Working temperature range (min/max)	-20 °C/+50 °C	-20 °C/+50 °C	-20 °C/+50 °C	-20 °C/+50 °C
Electrical data	190 – 265	190 – 265	190 – 265	90 - 135
Input voltage range (Vac)	50 - 60	50 - 60	50 - 60	50 - 60
Frequency range (Hz)	16 A	16 A	16 A	30 – 60 32 A
Current consumption (Max, A) Output voltage (V ac)				
· · · ·	8 - 42 (48)	8 – 42 (48)	8 – 42 (48)	8 - 42
Output current (max, A)	90	90	90	90
Input power (KW)	3.5	3.5	3.5	3.2
Emergency switch		$\checkmark$		$\checkmark$
Гуре of protection	IP65	IP65	IP65	IP65
Protection class	I		<u> </u>	I
Unit fuse	20A slow	20A slow	20A slow	32A slow
Operating procedures check				
Automatic ambient temperature compensation	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Fusion current monitoring (short/interrupt)				$\checkmark$
Fusion data input				
Operator code/job number		$\checkmark$	$\checkmark$	$\checkmark$
Barcode scanner (ISO 13950 format)	$\checkmark$	$\overline{\checkmark}$		
Manual fusion input	$\overline{\checkmark}$	√		1
Data recording				
Data recording capacity (Number of protocols)	350	1000	500	1000
Documentation of fusion (PDF, BIN)			$\checkmark$	$\checkmark$
Fusion protocol export via USB			$\sqrt[n]{}$	
Welding Book Software		√		
		V	·	V
Operator interface Communication port	USB Type A	USB Type A	USB Type A	USB Type A
Buttons	5+Start+Stop	5+Start+Stop	5+Start+Stop	5+Start+Stop
	•••••••••••••••••••••••••••••••••••••••			·····
Display	graphical LCD	graphical LCD	graphical LCD	graphical LCD
Mechanical data				
Dimensions (mm)	280x480x220	280x480x220	280x480x220	280x480x220
Weight (Kg)	11.9	11.9	11.9	12.5
Case material	Aluminium	Aluminium	Aluminium	Aluminium
Mains cable length	4 m	4 m	4 m	4 m
Fusion cable length	3 m	4 m	3 m	4 m
Mains plug	Schuko 16A	Schuko 16A	Schuko 16A	NEMA 32A
Connectors	4 mm	4 mm	4 mm	4 mm
Adapters (90°)	4.0 mm	4.0 mm/4.7 mm	4.0 mm	4.0 mm/4.0 long
Norms compliance				
EMC (EN61000)	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Safety (EN60335)	√	√		√
IS012176-2	$\overline{}$	$\overline{}$		√

### MSA 2 makes your job easy: time and again

All is meant to simplify the job: the barcode scanner, for long distance reading, the cooling system to joint in series, the icons look and feel, to keep the interaction between user and machine very intuitive. The installer has just to connect the leads to the fitting, scan the fusion parameters and leave the control to the machine.

### Intuitive and complete





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### Easy of use

The unit is intuitive thanks to its User Interface based on icons and international signs. The large graphical display provides an excellent visibility from far: the relevant information are in big chars and the steps of the workflow are always shown to the operator to guide him and minimize mistakes.

### Comfortable

The superior barcode reader, with green spot confirmation and acoustic tones, improves further the communication with the operator, who can additionally use the START/STOP badge to remotely command the unit, without moving forth and back.

The mechanical design ensures a perfect balance in weight, while the compact housing facilitates the usage in cramped spaces. Cables wound on top, speeds up the wrapping/unwrapping when moving from joint to joint.

#### **Fusion data recording**

The machine saves all fusion information automatically in its FLASH memory. Fusion records can be browsed in field by just pressing MENU and the arrow buttons, or easily copied on a standard USB memory stick for further investigation at the office. Data collected can be included in a digital archive on a PC, thanks to the WeldinOne. With such application the user may prepare extended PDF files, in different languages, made of protocols belonging to many electro-fusion units and pictures taken during the pipe preparation process.



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