

# I Plast 105

WELDING MACHINE - ELECTRONIC CONTROL UNIT

TECHNICAL DATA SHEET



## DESCRIPTION

**Welding machine – Electronic Control unit – Polyvalent** designed to carry out the welding of all the electrofusion fittings, operating with a fusion voltage between 8 and 48V. It is equipped with an optical reader, scanner type, for the reading of bar code made by ISO 13950. It carries out the fusion cycle as recommended by the fitting producer. It also allows the fusion process with the manual insertion of the fitting fusion data (manual insertion of time and voltage values only are not enough to ensure a good fusion results. This procedure should only be used in case of emergency). The sensing probe for the ambient temperature is placed close to the fitting connection terminals. Welding cable is provided with return signal cables.

## USE

It can be used to build up systems for the transport of fluids under pressure and not, for fuel gas, water and industrial fluids. To ensure the fusion it has been designed with a special internal control system that is unique in the world. During the whole fusion cycle and with a frequency of 4 times per second, it can monitor the congruity of all the fitting electrical parameters: voltage, current and resistance. Controls carried out during the fusion cycle have a tolerance less than  $\pm 1,5\%$ . Further technical features allow the connection and the correct functionality with power generators that control the voltage supplied by a mechanical or an electronic system. The stored data into the memory are transferable to other electronic devices via USB port.

## RANGE OF USE

Electrofusion fittings of our production: all type (up to a diameter of 1200 mm)

Electrofusion fittings of other brands: up to an absorption of 105A for a continuous period of 1400 sec. (at 20 °C)

## CONFORMITY

This electronic equipment complies with the specific product standards ISO 12176-2-3-4; DVS 2207; ECE1; UNI10566

## TECHNICAL DATA

Technical data	
CEI EN 60335 – 1 Classification	<b>Electronic device in Class I</b>
ISO 12176 – 2 Classification	P <sub>2</sub> 4 U S <sub>2</sub> V AK D X
Max Working Range	Fittings up to 1.200 mm diameter
Fusable Materials	PE / PEX / PP / PP-R
Transfer Fusion Parameters	Scanner manual
Input Voltage	230 V AC, (185 V - 260 V)
Input Current	16 A
Input frequency	50 Hz (40 - 70 Hz)
Output Voltage	8 - 48 V AC
Output Current	65 A > 20000 sec. – 105 A per 1400 sec. At 20 °C
Output Peak	120 A (electronically limited)
Nominal Power	3600 W
Working Temperature Range	-10 °C + 50 °C
Protection	IP54
Weight (cables included)	24 kg
Input Cable	Length 4,0 m Equipped with plug of 16 A IEC 309 (overload 22 A per 1/h)
Output Cable	3,0 m
Adapters	4,0 mm (adapters from 4,7 mm)
Display	Graphic, Resolution 128x64 Dots, Backlight
Controlled parameters	
Input	Voltage / Current / Frequency
Output	Voltage / Resistance / Contact / Short Circuit / Current
Other	Software / Working Temperature / Service
Error messages	Plain Text / Acoustic Signals
Included	
	Memory drive usb, Transport box, User Manual
Memory	
No. of reports	7500
Interface	USB / RS232 / RADIO
Data format	CSV - TXT (changeable to any format)

Data Retrieval	
Fusion data	Voltage/Current/Nominal/Actual Fusion Time/Mode/Resistance/Error Messages
Data fitting	Bar Code Information (ISO 13950) / Type / Size / Manufacturer
Welding machine	No. Series / No. Inventory / Last Service Date / Working Hours / Software
Welder	Bar Code (Plastitalia or ISO 12176-3) with functions control: <ul style="list-style-type: none"> <li>• identification</li> <li>• manual setting</li> <li>• system configuration</li> </ul>
Traceability	
No. Work	Max. 40-digits (alphanumeric) by Barcode
Welder code	ISO-12176-3
Weather conditions	DVS 2207/2208
Fusion Bar Code	ISO 13950
Traceability fitting code	ISO 12176-4
1st pipe traceability code	ISO 12176-4
2st pipe traceability code	ISO 12176-4
3st pipe traceability code / Infotext	ISO 12176-4

## ACCESSORIES

Ancillaries (standard supply)
Manual scraper
Optionals
32 A Plug (IEC 309 40 A per 1/h)
16 A Plug (schuko type)
Bar Code reader (Optical)

## DIMENSIONS

