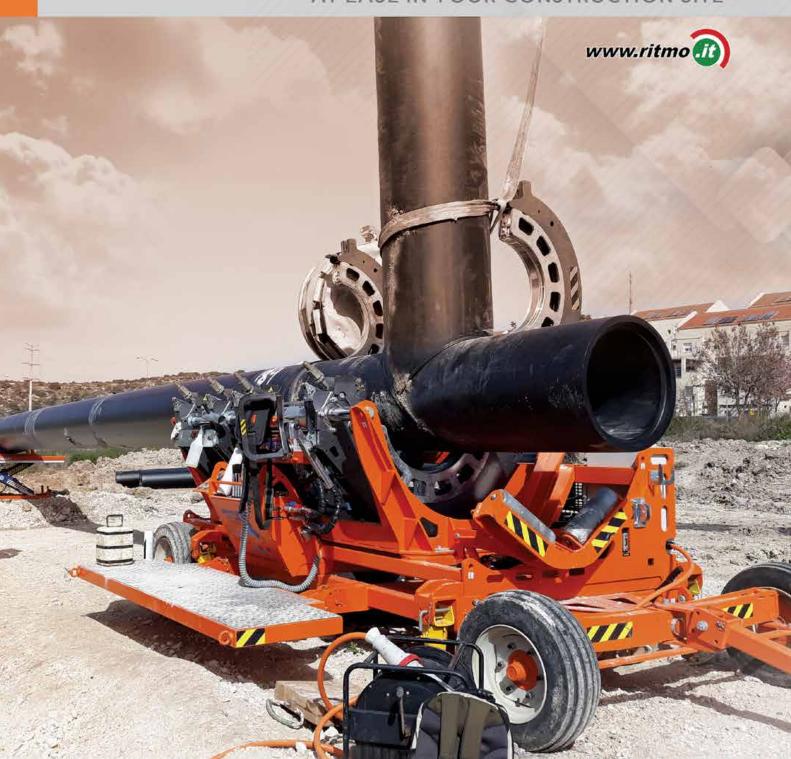


### PRODUCTS CATALOGUE

"AT EASE IN YOUR CONSTRUCTION SITE"





# Ritmo meets all your welding needs in your jobsite



The information and photos in this publication are not binding and RITMO S.P.A. is free to make any alterations without prior notice.



## DVANTAGE RITMO



### RITMO WORLDWIDE

Ritmo has professional distributors and resellers all over the world. Our staff is ready to assist you in English, Spanish, French, German, Arab, Italian, Russian and Portuguese.

#### TRAINING

From many years now, we have decided that the best way to grant a client/ distributor a perfect knowledge of our products is to invest in custom training, in our own premises. These courses are aimed to teach how to operate the products in the best way, and how to supply the "first aid" when necessary.

### PRESALES TECHNICAL ASSISTANCE

When a client or a potential client wants to buy us a product, it is our standard procedure to help find the best solution to its needs.

### **GLOBAL ADVICE**

In such a technical field as ours, the customer requires the best assistance. Thanks to the experience developed along the years, and to the co-operation with several manufacturers, institutions, schools and training institutes, RITMO is able to give the most comprehensive advice to no matter which related issue. Our company is a long-time member of a UNIPLAST's (UNI-Italian National Plastics Standards Body) working group dedicated to the study and draw up of new standards within our field. The importance of this group is linked to the fact that the expansion of the plastic welding field ought to be followed by a crescent sensitivity for safety issues, so to have a sustainable and continuous growth. The working group prepares draws, hence present them to the UNI to be discussed and eventually transformed into new standards.

### AFTER SALES TECHNICAL ASSISTANCE

Ritmo's Service Centre can solve all kind of technical issues, as well as overhaul our machines. Ritmo has other Service Centres abroad, linked to its official distributors.

#### **STARTING AND TESTING**

RITMO' technicians are prepared to make the starting and testing of workshop machines at the client' own premises, so that the fittings production can start almost immediately.



### **ELECTROFUSION MACHINES**



### \* WORKING RANGE Ø mm

	•						- ~	• • • • • •	••																				
HIGH PRESSURE	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	355	400	450	500	560	630	710	800	900	1000	> 100
ELEKTRA LIGHT	20	25	32	40	50	63	75	90	110	125	140	160																	
ELEKTRA S	20	25	32	40	50	63	75	90	110	125	140	160	180	200	х	х	х	х											
ELEKTRA M	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	х	х	х	х							
ELEKTRA 315	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315											
ELEKTRA 500	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	355	400	450	500							
ELEKTRA 1000	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	355	400	450	500	560	630	710	800	900	1000	> 100
ELEKTRA XL	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	355	400	450	500	560	630	710	800	900	1000	> 1000

LOW PRESSURE	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315
MUSTANG 160 V2			32	40	50	63	75	90	110	125	140	160						
UNIVERSAL 160 V1			32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315

\* Working range might vary according to fittings brand. Check with the fitting manufacturer the power and the welding time required



ONLY 110 V MODEL





### **ELEKTRA 500 - ELEKTRA 1000**

ELEKTRA is an high performance universal electrofusion machine, suitable for welding HDPE, PP, PP-R couplings (from 8 to 48 V). It is available in two versions: ELEKTRA 500, ELEKTRA 1000, and are composed of:

- machine body surrounded by a tubular steel frame, thus creating a protective structure that gives to the welding design and functionality while also serving as transport handle and cable winding
- large graphic display that stands out for the size and resolution of the icons, making them easy to read in the setting and welding stages
- intuitive control panel that simplifies and speeds up the setting of the welder
- Universal connectors 90° 4 4,7 mm; no need of adapters
- Laser scanner barcode reading system that allows the welding parameters automatic setting. Possibility to set the welding parameters manually: by setting the welding Voltage/Time, or by entering the fiitting's numerical code indicated under the bar code. Traceability function ISO 12176
- internal memory of 4000 welds; the name of the operator among with the traditional welding data can be generated in PDF format. These reports can be downloaded to a PC through a USB port
- the USB port allows updating the welder firmware, the reports download or a printer ESC-POS connection
- GPS (on request)

#### **STANDARD COMPOSITION**







Laser scanner



Manual scraper



Transport case

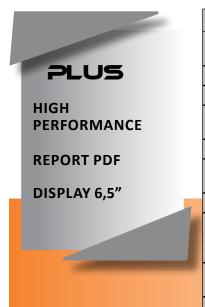
#### Models available:

ELEKTRA 500 230 V CE or Schuko socket ELEKTRA 1000 230 V CE or Schuko socket.

250 V OL OI SCHAIR SOCIACI

ELEKTRA 500 GPS 110 V or 230 V ELEKTRA 1000 GPS 230 V

### **TECHNICAL FEATURES**



- \* Working range might vary according to fittings brand. Check with the fitting manifacturer the power and the welding time required.
- \*\* Power at 60% Duty Cycle



watch the video

Model	ELEKTRA 500	ELEKTRA 1000				
Working range*	20 ÷ 500 mm ½" IPS ÷ 20" IPS	20 ÷ 1600 mm ½" IPS - 63" IPS				
Materials	HDPE, PP, PP-R	HDPE, PP, PP-R				
Welding output voltage	8 ÷ 48 V	8 ÷ 48 V				
Power supply	110 V Single Phase 50/60 Hz 230 V Single Phase 50/60 Hz	230 V Single Phase 50/60 Hz				
Absorbed power**	3100 W (110 V) 3100 W (230 V)	3500 W				
Max. output current	100 A (110 V) 120 A (230 V)	120 A				
60% Duty Cycle output	70 A	90 A				
Operating mode	Barcode Manual (Numerical code or Voltage/Time )	Barcode Manual (Numerical code or Voltage/Time)				
Connections	USB for external memory and ESC-POS	USB for external memory and ESC-POS				
Memory	4000 Reports	4000 Reports				
Outside temperature range	-20° ÷ 50° C; (-4° ÷ 122° F)	-20° ÷ 50° C (-4° ÷ 122° F)				
T° reading probe precision	± 1° C (± 33,8° F)	± 1° C (± 33,8° F)				
Traceability data	ISO 12176	ISO 12176				
Protection degree	IP 54	IP 54				
Languages	19	19				
Dimensions machine body	255 x 270 x 385 mm 10" x 10.6" x 15.1"	255 x 270 x 385 mm 10" x 10.6" x 15.1"				
Dimensions transport case	410 x 290 x 485 mm 16.1" x 11.4" x 19.1"	410 x 290 x 485 mm 16.1" x 11.4" x 19.1"				
Weight with cables	~ 18 Kg (39.6 lb)	~ 20 Kg (44.1 lb)				
Suggested power generator for full welding range	5,5 ÷ 6 kVA	6,5 ÷ 7 kVA				

Italy



ELEKTRA 1000





### **ELEKTRA LINE - OVERVIEW**

	ELEKTRA S	ELEKTRA M	ELEKTRA XL	ELEKTRA LIGHT	ELEKTRA 315	ELEKTRA 500	ELEKTRA 1000	
Working range * 110 V	20 ÷ 315* ½" IPS ÷ 12 IPS*	20 ÷ 500* ½" IPS ÷ 20" IPS*	-	20 ÷ 125/160* ½" IPS ÷ 6" IPS*	20 ÷ 315* ½" IPS ÷ 10" DIPS*	20 ÷ 500* ½" IPS ÷ 20" IPS*	-	
Working range * 230 V	20 ÷ 200* ½" IPS ÷ 6" DIPS*	20 ÷ 315* ½" IPS ÷ 12" IPS*	20 ÷ 1600* ½" IPS - 63" IPS*	20 ÷ 125/160* ½" IPS ÷ 6" IPS*	20 ÷ 315* ½" IPS ÷ 10" DIPS*	20 ÷ 500* ½" IPS ÷ 20" IPS*	20 ÷ 1600* ½" IPS - 63" IPS*	
Automatic Temperature compensation	٧	٧	٧	٧	٧	٧	٧	
Constantly welding cycle monitored	٧	٧	٧	٧	٧	٧	٧	
Barcode scanner (ISO 13950)	٧	٧	٧	٧	٧	٧	٧	
Manual fusion input	٧	V	٧	٧	٧	٧	٧	
Welding report	٧	√	٧	٧	٧	٧	٧	
Connections	USB port Type A	USB port Type A	USB port Type A	Adapter DB9M-USB	Adapter DB9M-USB	USB port Type A	USB port Type A	
Report file format	PDF - BIN	PDF - BIN - CSV	PDF - BIN - CSV					
Memory	4000 cycles	4000 cycles	4000 cycles	325 cycles	500 cycles	4000 cycles	4000 cycles	
Sound allarm	٧	V	٧	٧	٧	٧	٧	
Error recognition	٧	٧	٧	٧	٧	٧	٧	
Fusion time	٧	٧	٧	٧	٧	٧	٧	
Cooling time	٧	٧	٧	٧	٧	٧	٧	
Connectors	90° universal adapters 4.00 - 4,7 mm							
Outside Temperature range	-20° ÷ 50° C (-4° ÷ 122° F)	-20° ÷ 50° C (-4° ÷ 122° F)	-20° ÷ 50° C (-4° ÷ 122° F)	-10° ÷ 50° C (14° ÷ 122° F)	-10° ÷ 50° C (14° ÷ 122° F)	-20° ÷ 50° C (-4° ÷ 122° F)	-20° ÷ 50° C (-4° ÷ 122° F)	
Power supply (Vac)	110 V or 230 V	110 V or 230 V	230 V	110 V or 230 V	110 V or 230 V	110 V or 230 V	230 V	
Frequency	50/60 Hz							
Max output current	60 A (110 V) 70 A (230 V)	80 A (110 V) 100 A (230 V)	120 A	60 A	100 A	100 A (110 V) 120 A (230 V)	120 A	
Welding output voltage ***	8 ÷ 48 V	8 ÷ 48 V	8 ÷ 48 V or 8 ÷ 80 V	8 ÷ 48 V	8 ÷ 48 V	8 ÷ 48 V	8 ÷ 48 V	
Absorbed power **	1700W (110 V) ** 1800 W (230 V) **	2200W (110 V) ** 2300 W (230 V) **	3500 W (230 V) **	1300 W **	2600 W (110 V) ** 2600 W (230 V) **	3100 W (110 V) ** 3100 W (230 V) **	3500 W **	
Suggested power generator for full welding range	3,5 ÷ 4 kVA	5,5 ÷ 6 kVA	6,5 ÷ 7 kVA	3,5 ÷ 4 kVA	5,5 ÷ 6 kVA	5,5 ÷ 6 kVA	6,5 ÷ 7 kVA	
Protection degree	IP 54							
Electrical fuse protection	٧	IP 54	IP 54	٧	٧	٧	٧	
Display	Graphic LCD 2,4"	Graphic LCD 2,4"	Graphic LCD 2,4"	Single line LCD	Graphic LCD 2,4"	Graphic LCD 6,5"	Graphic LCD 6,5"	
Machine body dimensions	246x390x240mm 7.9"x15.3"x9.4"	246x390x240mm 7.9"x15.3"x9.4"	246x390x240mm 7.9"x15.3"x9.4"	200x250x210mm 7.9"x9.8"x8.3"	263 x 240 x 300 mm 10.3" x 9.4" x 1.8"	255 x 270 x 385mm 10" x 10.6" x 15.1"	255 x 270 x 385mm 10" x 10.6" x 15.1"	
Carrying case dimensions	290 x 445 x 295mm 11.4" x 17.5"x 11.6"	290 x 445 x 295mm 11.4" x 17.5"x 11.6"	290 x 445 x 295mm 11.4" x 17.5"x 11.6"	-	405 x 285 x 340mm 16" x 11.2"x 13.4"	410 x 290 x 485mm 16.1" x 11.4" x 19.1"	410×290×485mm 16.1"×11.4"×19.1"	
Weight machine + cables	8,4 Kg (18.5 lb)	9,2 Kg (20.2 lb)	9,4 Kg (20.7 lb)	~ 7 Kg (15.4 lb)	~ 16 Kg (35.3 lb)	~ 18 Kg (39.6 lb)	~ 20 Kg (44 lb)	
Weight carrying case	4.3 Kg (9.4 lb)	4.3 Kg (9.4 lb)	4.3 Kg (9.4 lb)	-	3.9 Kg (8.6 lb)	4.8 Kg (10.5 lb)	4.8 Kg (10.5 lb)	
Traceability ISO	12176 - 3 12176 - 4	12176 - 3 12176 - 4	12176 - 3 12176 - 4	-	<b>12176 - 4</b> (only fitting)	12176 - 3 12176 - 4	12176 - 3 12176 - 4	

<sup>\*</sup> Working range might vary according to fittings brand. Check with the fitting manifacturer the power and the welding time required.

<sup>\*\*</sup> Power at 60% Duty Cycle

<sup>\*\*\*</sup> Elektra XL is available in two version: for couplings  $8 \div 48 \text{ V}$  and couplings  $8 \div 80 \text{ V}$ 

### RITMO ELECTROFUSION, THE COMPLETE SYSTEM AROUND YOUR CONSTRUCTION SITE





RITMO S.p.A. Via A. Volta, 35/37 - 35037 Bresseo di Teolo (PADOVA) ITALY

Ph. +39 049 9901888 Fax +39 049 9901993

> info@ritmo.it www.ritmo.it

