

ELEKTRA

NEW ELEKTRA LINE

ELECTROFUSION MACHINES



PATENT PENDING

**BRING ME WITH YOU
FEEL THE DIFFERENCE!**

**THE
LIGHTEST IN
THE
MARKET**



LIGHTWEIGHT

UNIVERSAL

COMPACT



THE RIGHT PATH THAT GOES ON

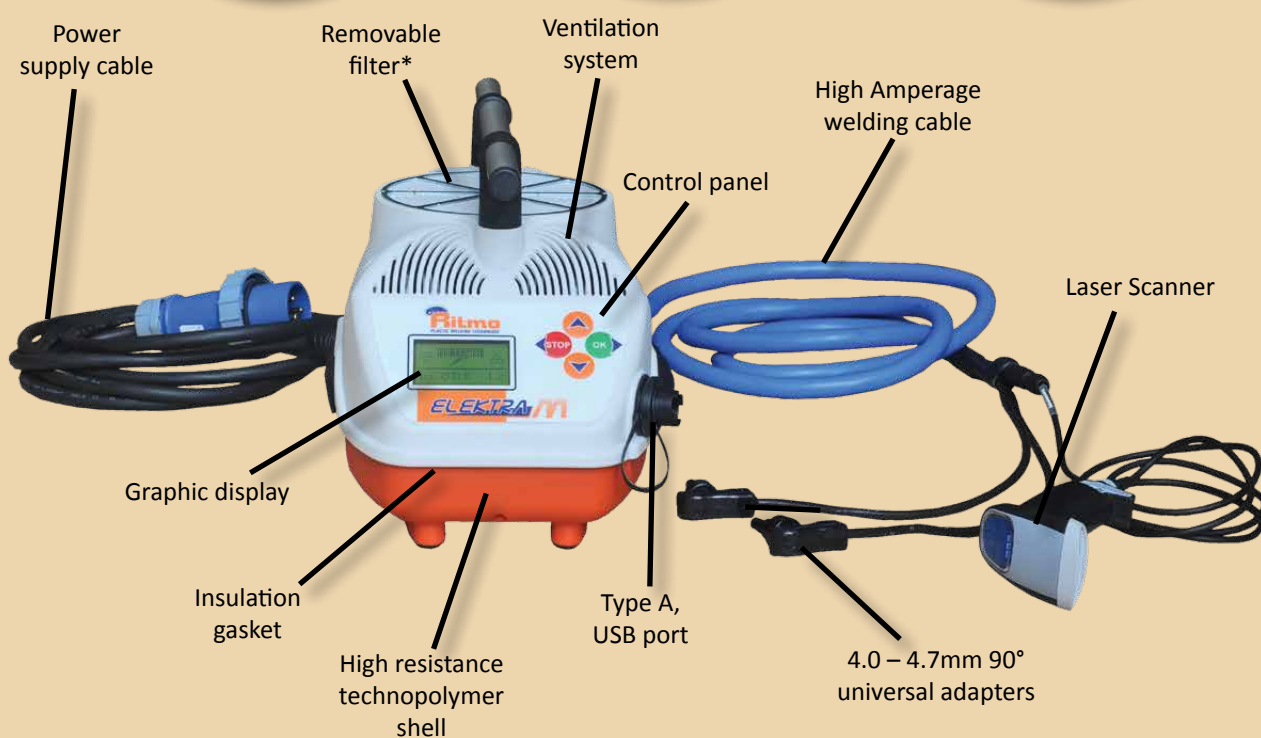
The new electrofusion machines, ELEKTRA S - M - XL, are characterized by: Quality, Performance, Reliability.
Since 2008 the distinctive features of our ELEKTRA LINE

ELEKTRA, ATTENTION TO DETAILS

**INNOVATIVE
DESIGN**

PERFORMANCE

RUGGED



*Not necessary in the
ELEKTRA S - 230 V



NEW TECHNOLOGY BEST PERFORMANCE

**HIGH-PRESSURE
EF FITTING**

DESIGNED FOR

PE - PP

8 - 48 V

8 - 80 V*

* See Product
sheet detail

ELEKTRA S

ALL THE ADVANTAGES OF A WELDING MACHINE FOR THE SMALL DIAMETERS



**THE "SMALL" THAT
COMPETES AGAINST
THE "BIG"**



**Up to
200 mm**

ELEKTRA M

HIGH-PERFORMANCE WELDING MACHINE DESIGNED FOR MEDIUM DIAMETERS. VERSATILITY IS ITS STRENGTH



**NO WAIVER,
ALWAYS READY TO
GIVE YOU THE BEST**



**Up to
315 mm**

ELEKTRA XL

THE BEST OF TECHNOLOGY IN AN ASTONISHING WEIGHT. NO COMPROMISE TO YOUR WELD!



**BEST PERFORMANCE,
THE LIGHTEST WEIGHT,
THE BEST QUALITY,
AS ALWAYS!**

**Up to
1600 mm**



ADVANTAGES



KNOW-HOW

Thanks to the collaboration with our Business Partners worldwide, RITMO has been able to achieve a great technical knowledge not linked to a single manufacturer of EF fittings. A know-how in our ELEKTRA.

INTERNATIONAL

Since always a friend of our customers. This is a benefit that you can see in all our line: "ELEKTRA speaks your language". You can choose among 20 different languages, making your experience on site even easier and more intuitive.

PERFECT FOR ANY APPLICATION

Thanks to our wide range, ELEKTRA S – M – XL suit any of your project requirement.

ELEKTRA S – M are available in 110 V and 230 V versions. ELEKTRA XL is available in 230 V version and with EF Fittings range: 8÷48 V or 8÷80 V.

RELIABLE WITH GENERATORS

The new ELEKTRA electrofusion machines have a hardware technology that makes the difference on site and that gives you the maximum stability against any generator power surge.

ISO 13950 : 2017

Automatic detection of the welding parameters of the EF fitting barcode thanks to the laser scanner. In case it is possible to enter manually the digits of the welding barcode or the welding parameters only

TRACEABILITY

All the models are in compliance with the International Standards: ISO 12176-3
Operator traceability

ISO 12176-4
Fitting/ Pipe traceability

GPS

Job-site location thanks to the GPS device. (accessory on request in all models).

GPS information is included in the welding report.

QUALITY

The machines generate a PDF welding report that certifies your project. An in-built memory of 4000 PDF welding report can be downloaded easily thanks to an USB port on the lateral part of the machine.



IMPACT RESISTENCE TOUGH

The right mix. The lightness comes together with the choice of heavy-duty and flexible materials. That gives you the right strength against the hard job-site conditions.

COOLING

Stop the heat! The opening vents together with the forced ventilation air flow* enable the perfect cooling. ELEKTRA gives you the best welding performance even in extreme environment.

IP 54 PROTECTION

"Defender" is the new protection system against dust and rain. The combination between a shaped sealing gasket and a filter* easily removable, gives you the best level of insulation.

*Not necessary in
ELEKTRA S - 230 V

TECHNICAL FEATURES ELEKTRA S - M - XL

	ELEKTRA S	ELEKTRA M	ELEKTRA XL
Working range *	20 ÷ 200*	20 ÷ 315*	20 ÷ 1600*
GPS	On request	On request	On request
Automatic ambient temperature compensation (through the reading of the EF fitting barcode)	✓	✓	✓
Continuous welding cycle monitoring	✓	✓	✓
Barcode scanner (ISO 13950)	✓	✓	✓
Manual welding parameters input	Tension/time welding barcode digits	Tension/time welding barcode digits	Tension/time welding barcode digits
Welding report	✓	✓	✓
Connections	USB port (type A)	USB port (type A)	USB port (type A)
Welding report format	PDF - BIN - CSV	PDF - BIN - CSV	PDF - BIN - CSV
Memory	4000 Cycles	4000 Cycles	4000 Cycles
Sound alarm	✓	✓	✓
Error detection	✓	✓	✓
Fusion time	✓	✓	✓
Cooling time	✓	✓	✓
Connectors	90° Universal adapters 4.00 - 4,7 mm	90° Universal adapters 4.00 - 4,7 mm	90° Universal adapters 4.00 - 4,7 mm
Ambient temperature range	-20° ÷ 50° C	-20° ÷ 50° C	-20° ÷ 50° C
Power supply (Vac)	110 V ± 15% 230 V ± 15%	110 V ± 15% 230 V ± 15%	230 V ± 15%
Frequency	50/60 Hz	50/60 Hz	50/60 Hz
Max output current	60 A (110 V) 70 A (230 V)	80 A (110 V) 100 A (230 V)	120 A (230 V)
Welding output voltage **	8 ÷ 48 V	8 ÷ 48 V	8 ÷ 48 V o 8 ÷ 80 V
Absorbed power ***	1700W (110 V) *** 1800 W (230 V)***	2200 W (110 V) *** 2300 W (230 V) ***	3500 W (230 V) ***
Suggested generator	3,5 ÷ 4 kVA	5,5 ÷ 6 kVA	6,5 ÷ 7 kVA
Protection degree	IP 54	IP 54	IP 54
Electrical fuse protection	✓	✓	✓
Display	2,4" LCD Graphic	2,4" LCD Graphic	2,4" LCD Graphic
Machine body overall dimensions	246 x 390 x 240 mm	246 x 390 x 240 mm	246 x 390 x 240 mm
Carrying case overall dimensions	290 x 445 x 295 mm	290 x 445 x 295 mm	290 x 445 x 295 mm
Weight machine body	5,75 Kg	6,55 Kg	6,75 Kg
Weight, machine body + welding and power supply cable + laser scanner	8,4 Kg	9,2 Kg	9,4 Kg
Welding cable length	3,1 m	3,1 m	3,1 m
Traceability ISO	12176 - 3 12176 - 4	12176 - 3 12176 - 4	12176 - 3 12176 - 4

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

** ELEKTRA XL is available in two versions: 8÷48V EF fitting and 8÷80V EF fitting

*** Power at 60% Duty Cycle

RITMO ELECTROFUSION, THE COMPLETE SYSTEM AROUND YOUR CONSTRUCTION SITE

BEVELERS



Up to
Ø 315 mm

ALIGNERS



Up to
Ø 500 mm

PIPE SCRAPERS



Up to
Ø 710 mm

PIPE SUPPORT



Up to
Ø 400 mm

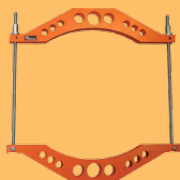


SHEARS



Up to
Ø 75 mm

REROUNDERS



Up to
Ø 800 mm

SQUEEZERS



Up to
Ø 200 mm

PIPE CUTTER



Up to
Ø 315 mm



ELEKTRA S

ELEKTRA S is an universal electrofusion machine characterized by high performance and reduced weight. The welding machine has been designed to weld EF fittings up to OD 200mm* for PE, PP, PP-R high pressure pipelines. It is available in two different power supplies: 230V and 110V. It can weld EF fittings within the range $8 \div 48$ V. Provided with:

- High resistance technopolymer shell
- "Defender" protection system against dust and rain
- Lifting handle and cable wrapping
- in-built memory of 4000 welding report
- Possibility to download the welding report thanks to the USB port in PDF, CSV, BIN format. For BIN format it is necessary the RITMO transfer software. The USB port is also used to upgrade the welding machine firmware and to plug the ESC-POS printer to get immediately the welding report printed on site.
- 2,4" LCD Graphic display
- Intuitive control panel with the possibility to customize the menu with 20 different languages
- 90° universal connectors 4.0-4.7mm, no need of adapters
- Laser scanner in order to read the EF fitting barcode and to set automatically the welding parameters according to the ISO 13950. The laser technology of the scanner enhances the reading quality in case of severe light reflections or contrasts. It is also possible to enter manually both the welding parameters (tension/time) and the welding barcode digits.
- Traceability: ISO 12176-3 Operator traceability; ISO 12176-4 Fitting/ pipe traceability
- In-built GPS device (on request)

STANDARD COMPOSITION



90° Universal
connectors
4.0-4.7mm



Laser Scanner



Manual scraper



Carrying case

ON REQUEST



Software
Ritmo Transfer

TECHNICAL FEATURES (additional details on pag 8)

PLUS

**HIGH
PERFORMANCE**

**PDF WELDING
REPORT**

**RESISTANT AGAINST
GENERATOR POWER
SURGES**

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

** Power at 60% Duty Cycle

Model	ELEKTRA S
Working range *	20 ÷ 200 mm
Materials	PE, PP, PP-R
Welding output voltage	8 ÷ 48 V
Power supply	110 V ±15% Single Phase 50/60 Hz 230 V ± 15% Single Phase 50/60 Hz
Absorbed power **	1700 W (110 V) 1800 W (230 V)
Max. output current	60 A (110 V) 70 A (230 V)
60% Duty Cycle output ISO 12176-2	45 A
Operating mode	ISO 13950 welding barcode Manual (barcode digits, tension/time)
Connections	USB port for the pen drive and for the ESC-POS printer
Memory	4000 welding report
Ambient temperature	-20° ÷ 50° C;
T° probe precision	± 1° C
Traceability	ISO 12176-3 ISO 12176-4
Protection degree	IP 54
Languages	20
Overall dimensions, machine body	246 x 390 x 240 mm
Overall dimensions, carrying case	290 x 445 x 295 mm
Weight machine body	5,75 Kg
Weight, machine body + welding and power supply cable + laser scanner	8,4 Kg
Recommended generator to cover the complete working range	3,5 ÷ 4 kVA





ELEKTRA M

ELEKTRA M is an universal electrofusion machine characterized by high performance and reduced weight. The welding machine has been designed to weld EF fittings up to OD 315mm* for PE, PP, PP-R high pressure pipelines. It is available in two different power supplies: 230V and 110V. It can weld EF fittings within the range 8 ÷ 48 V. Provided with:

- High resistance technopolymer shell
- "Defender" protection system against dust and rain complete of removable filter
- Lifting handle and cable wrapping
- In-built memory of 4000 welding report
- Possibility to download the welding report thanks to the USB port in PDF, CSV, BIN format. For BIN format it is necessary the RITMO transfer software. The USB port is also used to upgrade the welding machine firmware and to plug the ESC- POS printer to get immediately the welding report printed on site.
- 2,4" LCD Graphic display
- Intuitive control panel with the possibility to customize the menu with 20 different languages
- 90° universal connectors 4.0-4.7mm, no need of adapters
- Laser scanner in order to read the EF fitting barcode and to set automatically the welding parameters according to the ISO 13950. The laser technology of the scanner enhances the reading quality in case of severe light reflections or contrasts. It is also possible to enter manually both the welding parameters (tension/time) and the welding barcode digits.
- Traceability: ISO 12176-3 Operator traceability; ISO 12176-4 Fitting/ pipe traceability
- In-built GPS device (on request)

STANDARD COMPOSITION



90° Universal connectors
4.0-4.7mm



Laser Scanner



Manual scraper



Carrying case

ON REQUEST



Software
Ritmo Transfer

TECHNICAL FEATURES (additional details on pag 8)

PLUS

**HIGH
PERFORMANCE**

**PDF WELDING
REPORT**

**RESISTANT AGAINST
GENERATOR POWER
SURGES**

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

** Power at 60% Duty Cycle

Model	ELEKTRA M
Working range *	20 ÷ 315 mm
Materials	PE, PP, PP-R
Welding output voltage	8 ÷ 48 V
Power supply	110 V ±15% Single Phase 50/60 Hz 230 V ± 15% Single Phase 50/60 Hz
Absorbed power **	2200 W (110 V) 2300 W (230 V)
Max. output current	80 A (110 V) 100 A (230 V)
60% Duty Cycle output ISO 12176-2	60 A
Operating mode	ISO 13950 welding barcode Manual (barcode digits, tension/time)
Connections	USB port for the pen drive and for the ESC-POS printer
Memory	4000 welding report
Ambient temperature	-20° ÷ 50° C;
T° probe precision	± 1° C
Traceability	ISO 12176-3 ISO 12176-4
Protection degree	IP 54
Languages	20
Overall dimensions, machine body	246 x 390 x 240 mm
Overall dimensions, carrying case	290 x 445 x 295 mm
Weight machine body	6,55 Kg
Weight, machine body + welding and power supply cable + laser scanner	9,2 Kg
Recommended generator to cover the complete working range	5,5 ÷ 6 kVA





ELEKTRA XL

ELEKTRA XL is an universal electrofusion machine characterized by high performance and reduced weight. The welding machine has been designed to weld EF fittings up to OD 1600mm* for PE, PP, PP-R high pressure pipelines. It is available in the 230 V version and in two different EF fittings range: 8 ÷ 48 V or 8÷80 V. Provided with:

- High resistance technopolymer shell
- "Defender" protection system against dust and rain complete of removable filter
- Lifting handle and cable wrapping
- In-built memory of 4000 welding report
- Possibility to download the welding report thanks to the USB port in PDF, CSV, BIN format. For BIN format it is necessary the RITMO transfer software. The USB port is also used to upgrade the welding machine firmware and to plug the ESC-POS printer to get immediately the welding report printed on site.
- 2,4" LCD Graphic display
- Intuitive control panel with the possibility to customize the menu with 20 different languages
- 90° universal connectors 4.0-4.7mm, no need of adapters
- Laser scanner in order to read the EF fitting barcode and to set automatically the welding parameters according to the ISO 13950. The laser technology of the scanner enhances the reading quality in case of severe light reflections or contrasts. It is also possible to enter manually both the welding parameters (tension/time) and the welding barcode digits.
- Traceability: ISO 12176-3 Operator traceability; ISO 12176-4 Fitting/ pipe traceability
- In-built GPS device (on request)

STANDARD COMPOSITION



90° Universal
connectors
4.0-4.7mm



Laser Scanner



Manual scraper



Carrying case

ON REQUEST



Software
Ritmo Transfer

TECHNICAL FEATURES (additional details on pag 8)

PLUS

**HIGH
PERFORMANCE**

**PDF WELDING
REPORT**

**RESISTANT AGAINST
GENERATOR POWER
SURGES**

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

** Power at 60% Duty Cycle

Model	ELEKTRA XL
Working range *	20 ÷ 1600 mm
Materials	PE, PP, PP-R
Welding output voltage	8 ÷ 48 V or 8 ÷ 80 V
Power supply	230 V ± 15% Single Phase 50/60 Hz
Absorbed power **	3500 W (230 V)
Max. output current	120 A (230 V)
60% Duty Cycle output ISO 12176-2	95 A
Operating mode	ISO 13950 welding barcode Manual (barcode digits, tension/time)
Connections	USB port for the pen drive and for the ESC-POS printer
Memory	4000 welding report
Ambient temperature	-20° ÷ 50° C;
T° probe precision	± 1° C
Traceability	ISO 12176-3 ISO 12176-4
Protection degree	IP 54
Languages	20
Overall dimensions, machine body	246 x 390 x 240 mm
Overall dimensions, carrying case	290 x 445 x 295 mm
Weight machine body	6,75 Kg
Weight, machine body + welding and power supply cable + laser scanner	9,4 Kg
Recommended generator to cover the complete working range	6,5 ÷ 7 kVA



RITMO S.p.A.

Servicecentrum Nederland:

APRECO B.V.
Plantijnweg 16
4104 BB Culemborg

+31 (0) 345 533661
info@apreco.nl
www.apreco.nl

