

# THE SMARTER CHOICE.

## ELECTROFUSION MACHINES

### CONTROL BOX COMPARISON TABLE

Features	SmartFuse 355	Polymatic Plus USB	PolyControl Plus V2
Fitting size	Up to 355mm	Up to 800mm (Sizes above 630mm require cool down time between welds)	All Sizes
Welds	Plasson Only (Able to weld other brands via SmartFuse App)	Any Brands	Any Brands
Weld Tip Size	4.7/4.0mm Universal	4.7/4.0mm Universal	4.7/4.0mm Universal
Bluetooth	Y	Y	Y
Plasson SmartFuse Mode (Automatic)	Y	Y	Y
Manual Input of Welding Time	N	Y	Y
Welding Voltage	40V	8-48V	8-48V
Output Current	110A Max (30 Nominal)	110A Max (40 Nominal)	110A Max (85 Nominal)
Data Recording	Y with App	Y	Y
Multilingual Display Messages	Y	Y	Y
Error Messages In Plain Text	Y	Y	Y
Adjustable Display Contrast	Y	Y	Y
Dynamic Process Supervision	Y	Y	Y
Auto Software Check	Y	Y	Y
Resistance Check	Y	Y	Y
Ramped Start	Y	Y	Y
Service Message	After 200 Hours or 12 Months	After 200 Hours or 12 Months	After 200 Hours or 12 Months
Barcode Reading Capability	Y with App	Y	Y
Fitting And Operator Traceability	Y with App	Y	Y
Earth Pin	15A	15A	15A
Active Cooling	N	N	Y

#### MINIMUM REQUIRED GENERATOR OUTPUT POWER

240 V, 50Hz, 1-PHASE.

FITTING DIAMETER	OUTPUT POWER
20-160mm	3.2 kW
180-500mm	4.5 kW (Mechanically Controlled) 5 KW (Electronically Controlled)
> 500mm	6.5 kW (Mechanically Controlled) 7.5 kW (Electronically Controlled)

#### EXTENSION

#### CONDUCTOR CROSS-SECTION

Up to 20m	3m x 1.5mm <sup>2</sup>
20m - 50m	3m x 2.5mm <sup>2</sup>

**\*Detailed specifications for each model available from Plasson.**

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FEATURES	POLYCODE 180	POLYCODE 400
<b>GENERAL</b>		
Output voltage (V)	8 to 48 AC	8 to 48 AC
Data recording	Yes	Yes
Power (60 % ON time) according to ISO 12176-2	1030 W (25.6 A)	2050 W (55.9 A)
Operating temperature range (°C)	-10 to +50	-10 to +50
International protection	IP54	IP54
Appliance class	1	1
Conformity	CE	CE
ISO 12176-2 Class - classification	P <sub>2</sub> 2 U S <sub>1</sub> V AK D X	P <sub>2</sub> 3 U S <sub>1</sub> V AK D X
<b>CASING/DISPLAY</b>		
Material	Steel plate with plastic casing	Steel plate with plastic frame
Display	4 × 20 Characters (alphanum.), background lighting	4×20 Characters (alphanum.), background lighting
<b>OUTPUT</b>		
Output voltage	8 to 48 AC	8 to 48 AC
Output current (max.)	54	110
Output current (t → ∞)	14 A	30 A
Output current (min.)	2 A	2 A
Energy adjustment	Temperature compensation	Temperature compensation
Welding cable length (m)	3	3, other lengths on request
Welding cable installation	Fixed	Fixed
Welding terminals (mm)	Universal terminal for 4.0 and 4.7	Universal terminal for 4.0 and 4.7
<b>INPUT OF WELDING PARAMETERS</b>		
Barcode with scanner	Yes	Yes
SmartFuse	Yes	Yes
Manual input of the barcode digits	Yes	Yes
Manual input of welding parameters	Yes	Yes
<b>INPUT/MAINS</b>		
Nominal voltage (tolerance) (190 to 300)	230 AC	230 AC
Nominal frequency (tolerance) Hz	50/60 (40 to 70)	50/60 (40 to 70)
Power factor cos $\phi$ (phase-angle control)	0.6 to 0.9	0.6 to 0.9
Nominal current A	9	16
Power consumption VA	2000	3680
Length of cord	5	4.5
Plug type	10amp NZ plug	15amp NZ plug

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### SMARTFUSE APP



The Plasson SmartFuse App, the Electrofusion Studio (EFS), provides the installer a series of steps to follow when installing an electrofusion fitting. Quality information and pictures gathered show that important steps in the electrofusion process have been carried out.

The app also has the ability to record the geolocation of the fitting.

The steps, or profile, can be customised so that the installer only collects the data deemed important by the control box owner. Various screens can be turned on, off or have optional input.

Once the weld is completed, all the data is transferred to a server with a click of a button and can be reviewed from a web browser on a tablet or computer.

#### Equipment

To use the app you simply need two things;

- A smartphone or tablet with either Android or iOS
- A Plasson (PF) control box with Bluetooth functionality

If you have purchased a Plasson (PF) control box in the last 5 years, it will be upgraded to have Bluetooth functionality FREE OF CHARGE with your next calibration.

All tooling (cutting, peeling, rounding and alignment, wipes) to perform a quality weld are available through Plasson

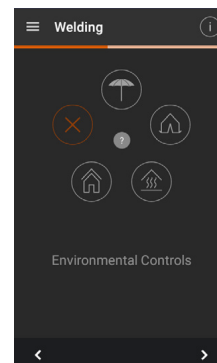


Take a picture of the pipes aligned and clamped.

ON

OFF

Optional

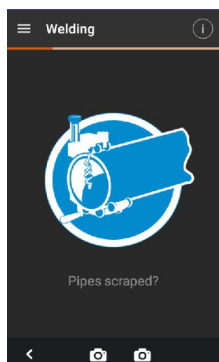


Touch either umbrella, tent, indoors or heating to record any environmental controls in place.

ON

OFF

Optional

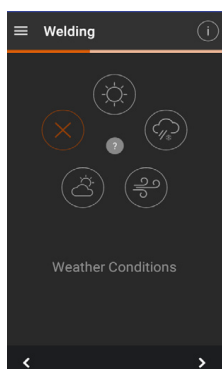


Take a picture/ pictures of the scraped pipe/pipes.

ON

OFF

Optional



Touch either sunny, cloudy, rainy or windy to record weather conditions.

ON

OFF

Optional

To know more detailed info.  
scan below QR Code



# ELECTROFUSION MACHINES

## PLASSON CONTROL BOX

### REQUIRED GENERATOR SPECIFICATIONS

Input voltage range	190-300V
Frequency	40-70V
Minimum output	15A at 240V - single phase

Must be able to drive inductive loads.  
 Must have phase cut control.  
 Mechanically regulated with brushes is the preferred system  
 Synchronized generator.  
 Minimum 6.5 kVA - Mechanically controlled  
 7.5 kVA - Electronically controlled

### MINIMUM REQUIRED GENERATOR OUTPUT POWER 240 V, 50HZ, 1-PHASE

DIAMETER	OUTPUT POWER
20-75mm	2 kW
90-160mm	3.2 kW
180-500mm	4.5 kVA (Mechanically controlled) 5 kVA (Mechanically controlled)
> 500mm	6.5 kVA (Mechanically controlled) 7.5 kVA (Mechanically controlled)

### POLYCODE 180



**PFPOLY180**

Working range 20-180mm

Suitable for PE, PP & PPR from 8-48v.

Built in memory of 1000 welds.

- Transport case
- 10 Amp Power Plug
- 4.0-4.7mm universal pins
- Scanner
- Plasson automatic detection (Smart Fuse system)
- Data recording (USB)
- Bluetooth / SmartFuse App
- Manual input of Barcode
- Slow Ramp start
- Dynamic monitoring of Plasson fittings

### POLYCODE 400



**PFPOLY400**

Working range 20-400mm

Suitable for PE, PP & PPR from 8-48v.

Built in memory of 1000 welds.

- Transport case
- 15 Amp Power Plug
- 4.0-4.7mm universal pins
- Scanner
- Plasson automatic detection (Smart Fuse system)
- Data recording (USB)
- Bluetooth / SmartFuse App
- Manual input of Barcode
- Slow Ramp start
- Dynamic monitoring of Plasson fittings

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#### SMARTFUSE 355



**PFSMARTFUSEUSB4.0**

Working range 20-355mm  
(Plasson fittings only)

For Plasson "SmartFuse" fittings only.

Built in memory of 500 welds.

Standard Composition:

- Transport case
- 4.0-4.7mm universal pins
- Plasson automatic detection (Smart Fuse system)
- Data recording (USB)
- Bluetooth / SmartFuse App
- Slow Ramp Start
- Dynamic monitoring of Plasson fittings

#### POLYMATIC PLUS (USB + BLUETOOTH)



**PFPOLYMATICPLUSBT/V3**

Working range 20-800mm

Suitable for PE, PP & PPR from 8-48v.

Built in memory of 1000 welds.

Standard Composition:

- Transport case
- 4.0-4.7mm universal pins
- Scanner
- Plasson automatic detection (Smart Fuse system)
- Data recording (USB)
- Bluetooth / SmartFuse App
- Manual input of time and voltage option.
- 15 amp Power Plug.
- Slow Ramp Start
- Dynamic monitoring of Plasson fittings

#### POLY CONTROL PLUS (USB + BLUETOOTH) V2.0



**POLYCONTROLPLUSV2-4.0**

Working range all sizes

Suitable for PE, PP & PPR from 8-48v.

Built in memory of 1000 welds.

Standard Composition:

- Transport case
- 4.0-4.7mm adaptor pins
- Bar Code pen
- Plasson automatic detection (Smart Fuse system)
- Data recording (USB)
- Bluetooth / SmartFuse App
- Manual input of time and voltage option
- 15 amp Power Plug.
- Slow Ramp Start
- Dynamic monitoring of Plasson fittings