



## Technical Data Sheet

### Digimatic Data

### Digimatic Time Data

Electrofusion Control Unit with optional Bluetooth capability



### Scope of application

The electrofusion control units of type Digimatic Data are solely meant for the welding of thermoplastic pipes (e.g. made of PE-HD, PE80, PE100 or PP) when used with electrofusion fittings that have an input voltage of less than 48 V. These devices are conforming to the standards DVS 2208-1 and ISO 12176-2, of which the applicable standards for the electrofusion fittings to be used are derived from.

# Input of welding parameters

The electrofusion control units of the Digimatic type have the following welding data input options:

## SmartFuse-System



By reading out the reference resistor in one of the connector pins of the SmartFuse-fitting the control unit automatically determines the welding parameters for the fitting.

## Manual input of welding voltage and -time



(Digimatic Data only)

If no barcode is available, it is possible to enter the fusion parameters provided by the fitting manufacturer (like voltage and time) manually.

## Manual input of welding voltage and -time



(Digimatic Time Data only)

If no barcode is available, it is possible to enter the welding time, provided by the fitting manufacturer, manually. The welding voltage is preset to 40 V in the version Digimatic Time.

## Bluetooth functionality

The electrofusion control units of type Digimatic can be equipped with an optionally available USB Bluetooth dongle. That makes it possible to control and record the welding procedure with the PFS app "ElectroFusion Studio".

The app for smartphones and tablets is available for Android in the Google Play Store and for iOS in the Apple App Store. When using Bluetooth, the electrofusion control unit can only be used together with this app.



### Attention!

To be able to use the app with the electrofusion control unit it is mandatory to have a registered account. Please ask your distributor.

# Range of fitting dimensions

The range of fitting dimensions for which an electrofusion control unit can be used depends essentially on the power consumption of the used fittings. Since the power consumption of the fittings is different for different fitting manufacturers, it is not possible to provide a general rule which covers all the possible fitting dimensions. When in doubt, each fitting size must be checked separately.



**Attention!**

For electrofusion control units of type Digimatic when all welding work is performed successively, such that the control unit has pauses in welding that correspond to the preparation time of the next fitting, the following rule applies.

The duration of the pause after each weld must be at least equal to the preparation time for the next welding joint. When you allow only shorter pauses, the electrofusion control unit is put under heavy load and can therefore heat up so much, even when welding smaller fittings, that a longer pause must be allowed for cooling down.

Usage for dimensions **from 20 to 355 mm** without limitation.

When working with dimensions from **400 mm** on, longer cool-down times must be provided for because otherwise the device might show the "Device too hot" error message. In this case, it is necessary to let the electrofusion control unit cool down before putting it to use again.



**Attention!**

Before processing fittings in this dimension range, you have to check that the welding current demand of the fitting does not continuously exceed the output current of the device and that the maximum output current is not exceeded.

The statements made above are made under the assumption that the ambient temperature is 20 °C.

## Scope of delivery



**Note**

The Digimatic is available in different variants. The scope of delivery differs, depending on the ordered variant. Errata and technical modifications reserved!

	Digimatic Data		Enclosed
	1 ×	Instruction manual	DE005
	1 ×	USB stick	5_5001_512
	1 ×	Bluetooth dongle	2_5100_006
	1 ×	Accessory bag	1_2800_002
	1 ×	Transport box	1_2800_072

	Digimatic Time Data		Enclosed
	1 ×	Instruction manual	DE005
	1 ×	USB stick	5_5001_512
	1 ×	Bluetooth dongle	2_5100_006
	1 ×	Accessory bag	1_2800_002
	1 ×	Transport box	1_2800_072

A Flightcase is available as alternative to the transport box.

# Technical data

Digimatic Data			
<b>General</b>			
Output voltage Digimatic Data	[V]	8 to 48 AC	
Output voltage Digimatic Time Data	[V]	40 AC (preset)	
Data recording		Yes	
Power (60 % ON time) according to ISO 12176-2		2050 W (55.9 A)	
Operating temperature range	[°C]	-10 to +50	
International protection		IP54	
Appliance class		1	
Conformity		CE	
ISO 12176-2 Class - classification Digimatic Digimatic Time		P <sub>2</sub> 3 U S <sub>1</sub> V AK D X	
<b>Input of welding parameters</b>			
SmartFuse Manual input of the welding parameters (U <sub>OUT</sub> : 8 to 48 V, t <sub>WELD</sub> : 0 to 9999 s) Digimatic Data			
Manual input of the welding parameters (U <sub>OUT</sub> : 40 V (fixed setting), t <sub>WELD</sub> : 0 to 9999 s) Digimatic Time Data			
Input/Mains		<b>230 V devices</b>	110 V devices
Nominal voltage (tolerance)	[V]	230 AC (190 to 300)	110 AC (90 to 150)
Nominal frequency (tolerance)	[Hz]	50/60 (40 to 70)	50/60 (40 to 70)
Power factor cos $\rho$		0.6 to 0.9 (phase-angle control)	0.6 to 0.9 (phase-angle control)
Nominal current	[A]	16	40
Power consumption	[VA]	3680	3680
Length of cord	[m]	4.5	On request
Plug type		Euro Schuko plug	On request
<b>Output</b>			
Output voltage Digimatic Data	[V]	8 to 48 AC	
Output voltage Digimatic Time Data	[V]	40	
Output current (max.)		110	
Output current (t → ∞)	[A]	30	
Output current (min.)	[A]	2	
Energy adjustment		None	
Welding cable length	[m]	5, other lengths on request	
Welding cable installation		Fixed, optional detachable	
Welding terminals	[mm]	4.0 (optional 4.7 or universal terminals for 4.0 und 4.7)	
<b>Monitoring functions</b>			
Input		Voltage, current, frequency	
Output		Voltage, current, resistance, contact, short circuit	
Other		System, Working Temperature, Service	
Error messages		Plain Text, Acoustic Signal	
<b>Casing/Display</b>			
Material		Steel plate with plastic frame	
Display		4×20 Characters (alphanum.), background lighting	

Dimensions, weights and packaging			
Product dimensions L×W×H	[mm]	400×300×260	
Product weight (incl. welding cable)	[kg]	17	
Packaging type		Flightcase	Wooden box
Packaging material		Aluminiumframe with composite wood	Wood
Packaging dimensions L×W×H	[mm]	470×380×370	440×340×310
Packaging weight	[kg]	7.5	3.6
Transport weight	[kg]	25	21

The given technical information is valid for the standard setup of the electrofusion control unit. Depending on the ordered setup there may be variations.

## Data recording Digimatic

The electrofusion control units of the Digimatic Data type and its variants feature logging of data from approx. 1000 welds.

Digimatic Data Digimatic Time Data		
<b>Data recording</b>		
Number of reports		Approx. 1000
Interface		USB stick
Data format		PDF, CSV
<b>Recorded data</b>		
General data		Time, date, report number, ambient temperature, welder name, job number max. 40-digits (alphanumerical)
Fusion data		Voltage, current, energy, nominal and actual welding time, mode, resistance, error messages with 10 voltage and current values
Fitting data		No
Device data		Serial number, inventory number, date of last service, working hours, system configuration
Worker code		No
<b>Additional functions</b>		
Output options		Whole memory, selectable by job number
Job code input/selection		Manual, internal list of job numbers for selection
Input of position data / free text		40 characters, per joint

The given technical information is valid for the standard setup of the electrofusion control unit. Depending on the ordered setup there may be variations.

## Technical file according to ISO 12176-2

Digimatic Data		Digimatic Time Data																	
<b>Classification</b>																			
Device type		Digimatic Data																	
Classification		P <sub>2</sub> 3 U S <sub>1</sub> V AK D X																	
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<b>Duty cycle according to ISO 12176-2 at 30 %, 60 % and 100 %, Test time t = 60 minutes</b>																			
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<b>Additional Information</b>																			
Soft Start	At least 3 seconds (ramp)																		
Ambient temperature compensation	By manual input																		
Fitting temperature compensation	No																		
Data recording Digimatic Data Digimatic Time Data	Yes																		
Bluetooth dongle	Bluetooth LE																		

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