Installation Manual
WeftMaster® CUT-iT Dornier

Document title: WeftMaster CUT-iT Dornier Installation Manual

Language version: English

Contents

Contents

1 General Information

1.1 About this Document

Read this Manual completely before putting the device into operation and keep available at all times.

> Clarify anything unclear or uncertainties concerning operation with the supplier!

1.2 Validity

This document is valid for:

WeftMaster CUT-iT Dornier

1.3 Design features

Various elements in this Manual have design features.

Design features
✓ Requirement
1. Action step
⇨ Intermediate result
⇨ Result
■ List
«Menu term»
Navigation path
Caption

Cross-reference [▶ 7]

2 Safety

2.1 Safety Information and Warnings

Safety information and warnings draw attention to hazards and are marked with symbols and signal words to express the danger level.

⚠	⚠ **DANGER**
	Indicates an immediate hazardous situation which will result in death or serious injury.

⚠	⚠ **WARNING**
	Indicates a potentially hazardous situation which could result in death or serious injury.

⚠	⚠ **CAUTION**
	Indicates a potentially hazardous situation which may result in minor oder moderate injury.

	NOTE
	Indicates a potentially hazardous situation which may result in damage to property.

2.1.1 Symbols used

Warning signs

General warning sign

Warning of electrical voltage

Warning of hot surfaces

Mandatory signs

Disable before maintenance or repair (interrupt power supply)

Create a ground connection before using

ESD sign

Electrostatically sensitive components

Disposal sign

Hazardous waste (separate collection of electrical and electronic equipment)

Information symbol

	This symbol draws attention to additional information for the operator.

2.2 Intended Use

The device is only intended to separate and melt selvedges of fusible textiles (synthetic or hybrid fabrics) on weaving machines, especially to separate and melt fabric selvedges or to separate fabrics into strips.

Any other use or use beyond the intended purpose is considered improper. Loepfe Brothers Ltd. is not liable for any resulting damage.

	The device is not suitable for non-fusible yarns, such as pure cotton, pure viscose or pure new wool!

2.3 Target group

The WeftMaster CUT-iT Dornier device may only be operated by authorized personnel. The authorized personnel is qualified when it completes the necessary training, knows the requirements and is authorized for the assigned task.

2.3.1 Authorized personnel

The WeftMaster CUT-iT Dornier manufacturer defines authorized personnel as follows:

- **«Operator»** and **«foreman»**
    - Qualified and trained to operate WeftMaster CUT-iT Dornier.
    - Has read and understood the safety regulations.
- **«Industrial electrician / installation technician»**
    - Qualified and trained for all safety checks and installation, maintenance and service guidelines.
    - Responsible for WeftMaster CUT-iT Dornier installation and maintenance.
    - Has read and understood the safety regulations.
- **«Service technician»**
    - Loepfe employee qualified and trained for maintenance and repair of the device or persons authorized with express permission from Loepfe Brothers Ltd.

2.4 General safety information

- The WeftMaster CUT-iT Dornier and the heat cutters may only be installed by an **«industrial electrician / installation technician»** or **«service technician»**.
- Read all the safety and installation instructions before installation or maintenance.
- Keep the complete documentation for later reference.
- Observe all warnings on the device and in the documentation of the weaving machine on which the device is installed or maintained.
- Disconnect the weaving machine on which the control unit is installed from the power network before installation or maintenance.
- An easily accessible switch identified as disconnecting equipment for the device must be installed in the fixed wiring of the main power circuit of theWeftMaster CUT-iT Dornier.
    - An (emergency) switch must be fitted in the main power circuit to disconnect the device in the case of an emergency or for service work. In most cases, the main switch of the weaving machine on which the control unit is fitted is used.
    - The power supply of the WeftMaster CUT-iT Dornier must be interrupted when the main switch of the weaving machine on which the control unit is installed is switched off.
- After installation, check all covers are closed and protective plates attached before the weaving machine is started.
- Any use of the device beyond the intended purpose (see Intended Use [▶ 9]) is considered to be improper use. In this case, the protection provided by the device cannot be guaranteed.

2.5 Safety Concept

This section describes the safety concept of the device for protection against hazards for persons and damage to property.

| 1 | **Emergency power off button** | Pressing the emergency power off button on the weaving machine interrupts operation of the weaving machine and the WeftMaster CUT-iT Dornier |

■ The device must be installed in such a way that the power supply is interrupted when the emergency power off button is pressed!

	⚠ **DANGER**
	Hazard due to electric shock
	Contact with live components and electrical connections leads to serious injuries or death.
	▶ Installation and maintenance must only be carried out by an **«industrial electrician / installation technician»** or **«service technician»**.
	▶ Switch off the main switch of the weaving machine on which the control unit is installed before opening, modifying or extending the system.
	▶ Disconnect the device from the power supply before maintenance or repair work.
	▶ Close all device covers before starting the system.

2.5.1 Fire prevention measures

	⚠ **WARNING**
⚠	**Risk of fire due to hot heat cutters** Disregarding the following measures leads to fire risks and therefore risk of injury. ▸ Installation, setting and operating the WeftMaster CUT-iT Dornier only by authorized personnel. ▸ Set running and idle temperatures of cutting wires as low as possible. ▸ Pay utmost attention when blowing-off and cleaning weaving machines with WeftMaster CUT-iT Dornier connected. ▸ Do not run weaving machines fitted with WeftMaster CUT-iT Dornier without supervision. ▸ Do not lay objects on or over the heat cutters. ▸ Have suitable fire extinguishers available in case of fire.

	⚠ **WARNING**
⚠	**Risk of fire due to short-circuit** Disregarding the following measures leads to fire risks due to short-circuit. Risk of injury due to fire risks. ▸ Fit heat cutters offset to each other to separate electroconductive yarns (e.g. Lurex). ▸ Only fit the heat cutters with the WeftMaster CUT-iT Dornier switched off.

2.5.2   Safety precautions when using heat cutters
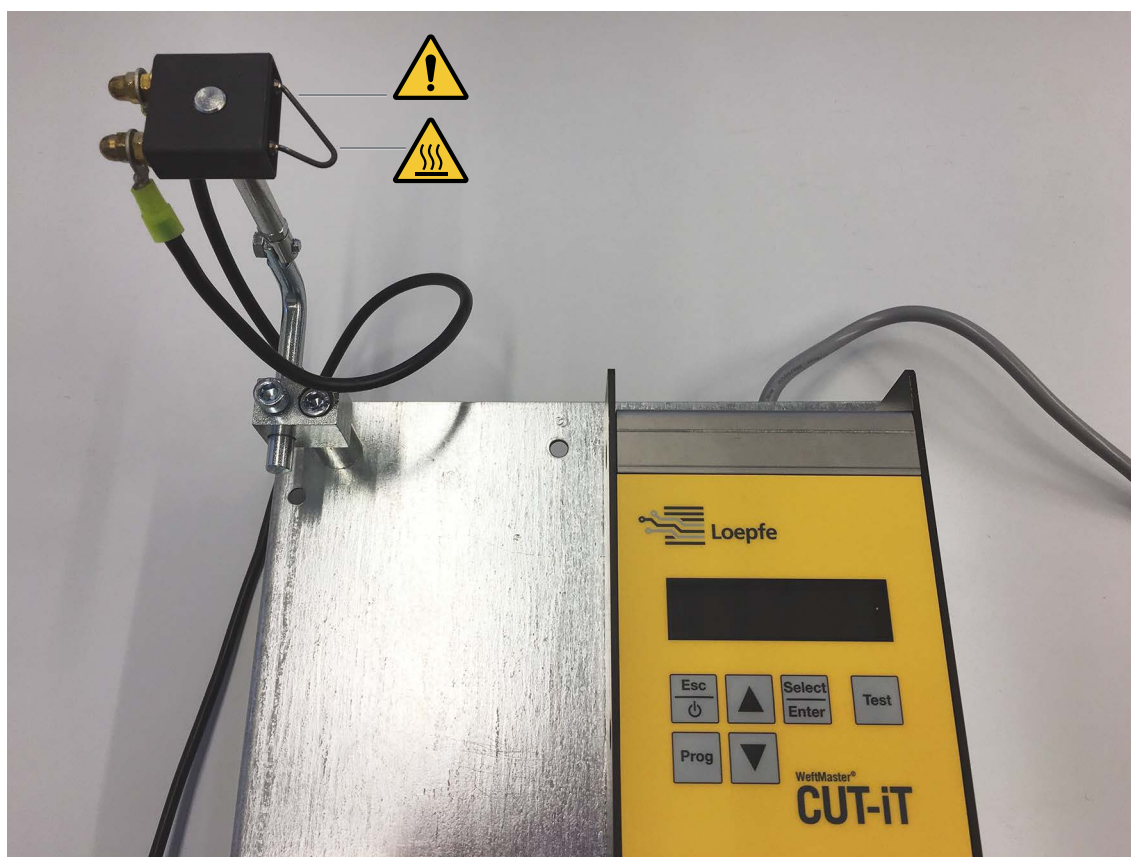
Control unit and heat cutter

	⚠ **WARNING**
⚠	**Risk of fire due to improper use** Risk of fire and therefore also risk of injury when using the WeftMaster CUT-iT Dornier on non-fusible yarns such as pure cotton, pure viscose or pure new wool. ▶ Only process fusible textiles (synthetic or hybrid fabrics).

	⚠ **CAUTION**
♨	**Risk of burns due to hot surfaces.** Touching hot cutting wires can cause serious burns. ▶ Never touch hot cutting wires at any time.

2.5.3   Electrostatic sensitive components

ESD symbol

Electrostatically sensitive components

	NOTE
	Hazard for electronic components due to electrostatic discharges.
	Incorrect handling of electronic components can cause damage that can lead to complete failure or sporadic malfunctions.
	▸ Take the general ESD protective measures during installation and maintenance of the product.
	▸ Only touch circuit boards on the edges.
	▸ Do not touch printed circuit board and connecting plug.
	▸ Lay removed components on an antistatic surface or in an antistatic shielding container.
	▸ Avoid contact between circuit boards and clothing.

3 Product and Function

3.1 Product description

The device is used to separate and melt selvedges of fusible textiles (synthetic or hybrid fabrics) on weaving machines, especially to separate and melt fabric selvedges or to separate fabrics into strips.

The device can be fitted with various heat cutters. Heat cutter selection depends on fabric material processing, material transport speed as well as filling and warp densities.

3.1.1 Control unit

The control unit controls the electrical current through the cutting wires of the heat cutter fitted on a weaving machine. The current strength depends on whether the weaving machine is running or idle.
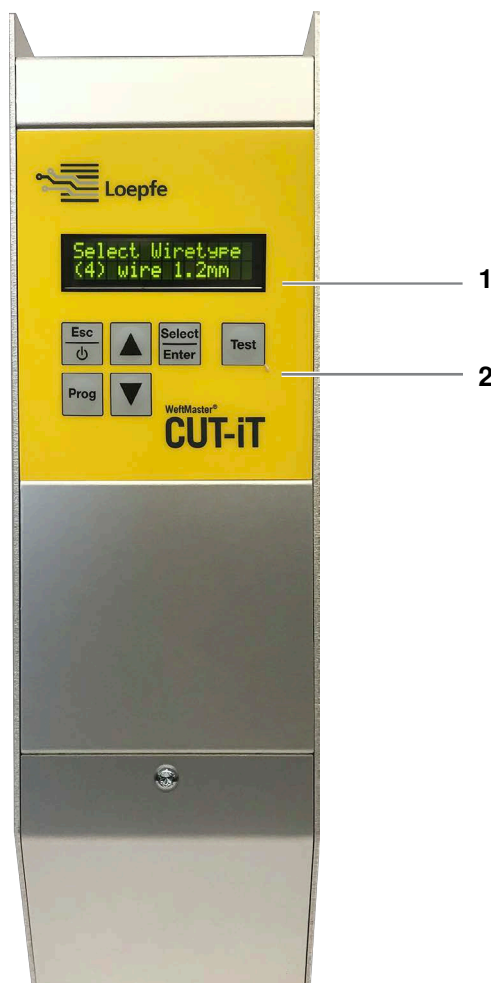
WeftMaster CUT-iT control unit

1	Display
2	Function buttons

The 4 different current flow modes

Mode	Description
Off mode	Output current is switched off.
	Display: **«POWER OFF»** (switched off)
Standby mode	Time in which the weaving machine is idle. Predefined current flows through the cutting wires during this time. This achieves an optimum output temperature for the machine to run.
	Display: **«Standby»**
Boost mode	Weaving machine starting phase. Predefined current flows through the cutting wires for a limited time. This current heats the cutting wires as quickly as possible to operating temperature.
	Display: **«Boost»** (startup current)
Run mode	Time in which the weaving machine is running. The predefined current flows through the cutting wires during this time.
	Display: **«Run»** (running current)

The WeftMaster CUT-iT stops the weaving machine in the following cases

- The power supply is interrupted.
- A system error is detected.
- No cutting wire is connected.
- A cutting wire is broken (defective).
- A connection cable is interrupted.
- WeftMaster CUT-iT Dornier restarts.

3.1.2 Heat cutter / cutting wire

1 to 4 heat cutters can be fitted per WeftMaster CUT-iT Dornier control unit at maximum heating output. A higher number of cutters reduces the performance per cutter.

- 6 different cutter specifications
- 3 cutting wire types are available in different wire sizes of ø 0.5 mm, 0.7 mm, 1.0 mm, 1.2 mm and 1.5 mm. The cutting wire types combined with the strengths can be found in the Spare Parts catalog.
- Heat cutter and cutting wire specification depend on the fabric material and speed, as well as filling and warp densities.

Heat cutter F Ceramic

- Heat cutter body made of ceramic
- Flat-pressed cutting wire; standard version ø 1 mm, covers the largest scope of applications; for fine, light fabrics ø 0.7 mm

Heat cutter R Ceramic (short)

- Heat cutter body made of ceramic
- Round cutting wire: Fabric runs parallel under the horizontal part of the wire and is already heated before separation

Heat cutter R Ceramic (long)

- Heat cutter body made of ceramic
- Round cutting wire; design covers a wide spectrum of height settings

Heat cutter FL Ceramic

- Heat cutter body made of ceramic
- Flat-pressed cutting wire; special heat cutter design for installation under the temple.

Heat cutter F Steel

- Heat cutter body made of steel
- Flat-pressed cutting wire

Heat cutter F Steel with foot

- Heat cutter body made of steel
- Flat-pressed cutting wire; the ceramic foot keeps the fabric better in position; a higher heat level is created in the ceramic foot slit so that a lower cutting wire temperature can be used; used for example for fabrics with high tension (Airbag, PP etc.)

3.2 Scope of Delivery

The following components are included in the scope of delivery:

- 1 control unit WeftMaster CUT-iT Dornier

Optional

- Heat cutters depending on suitability:
  - 1 heat cutter F Ceramic
  - 1 heat cutter R Ceramic (short)
  - 1 heat cutter R Ceramic (long)
  - 1 heat cutter FL Ceramic
  - 1 heat cutter F Steel
  - 1 heat cutter F Steel with foot
- Auxiliary parts according to Spare Parts catalog

4 Operation

4.1 Operating elements

Operating elements

1   Function buttons

4.2 Function buttons

Button	Press button	Press button for 3 seconds	With button pressed during startup
Esc ⏻	■ Switch device on ■ Exit without changing ■ Delete error message	Switch device off	
Select Enter	Confirm	Setting mode (set current strength for «**Run**»and «**Standby**»)	Changing system parameters
Prog	Select program		Define the cutting wire diameter.
▲	Scroll up	Display internal measured values	Specify Master/Slave addresses
▼	Scroll down	Reset program settings of selected program to standard values	■ Reset all program settings of all programs to standard values ■ Reset all system settings to standard values
Test	Test mode		Display contrast setting

4.3 Advanced functions

4.3.1 Changing system parameters

ℹ️	Only have this carried out by qualified personnel!

ℹ️	This setting can only be initialized during the startup phase!

ℹ️	Activating [Esc ⏻] when changing settings interrupts the process and Setting mode is exited without saving the changes.

✓ Device connected to power supply.

1. [Esc ⏻] Press.
   ⇨ Startup phase runs.

2. [Select Enter] Keep pressed during the startup phase.
   ⇨ Display: **«Parameter: 0»**

> Parameter: 0

3. [Select Enter] Release
   ⇨ Display: **«Parameter: 0 / value: 0»**

> Parameter: 0
> value: 0

4. [▲] Press to change value from **«0»** to **«1»** .

5. [Select Enter] Press to confirm setting.
   ⇨ Confirmed value blinks 3x.
   ⇨ Activation of program change confirmed.

6. [▲] [▼] Press to select desired parameter.
   ⇨ Display (e.g.): **«Parameter: 85»**

> Parameter: 85

7. [Select Enter] Press to confirm selected parameter.

⇨ Value of selected parameter is displayed.

⇨ Display (e.g.): **«Parameter: 85 / value: 1»**

Parameter: 85
value: 1

8. ▲ ▼ Press to select desired setting.

9. Select Enter Press to confirm setting.

⇨ Confirmed value blinks 3x.

⇨ Setting is saved.

10. Select Enter Press to exit Program Change mode.

⇨ WeftMaster CUT-iT Dornier returns to Standby mode.

Parameter list

All system settings can be seen in a list.

* These values are changed in the settings **«Tune-Standby»** or **«Tune-Run»** (see Instruction Manual, Setting the current strength 4.3.7)

Parameter list column description

Column	Column description
Parameter	Parameter number
Function	Function of corresponding parameter
Min. value	Minimum value that can be set
Max. value	Maximum value that can be set
One unit	Smallest changeable value of the corresponding unit
Standard value	Standard value of corresponding parameter
Unit	Unit of corresponding value
Description	Function description

Default system parameters

Parameter	Function	Min. value	Max. value	One unit	Standard value	Unit	Description
0	Setting mode	0		1	0		**«0»**: Change parameters de-activated. Parameters cannot be changed. **«1»**: Change parameters acti-vated. Parameters can be changed.

Cutting wire type 01 (0.5 mm)

Param-eter	Function	Min. value	Max. value	One unit	Value	Unit	Description
10	Min. standby current	0.0	2.0	0.1	0.0	A	Smallest adjustable value
11	Max. standby current	1.1	3.2	0.1	2.9	A	Largest adjustable value
12	Standard standby current	0.0	2.9	0.1	1.1	A	Standard value specified in program
13*	Min. running current	1.1	2.9	0.1	2.9	A	Smallest adjustable value
14	Max. running current	2.9	10.5	0.1	9.6	A	Largest adjustable value
15*	Standard running current	2.9	10.5	0.1	2.9	A	Standard value specified in program
16	Startup current	2.9	16.0	0.1	12.0	A	Fixed startup current
17	Min. startup time	0.1	1.3	0.1	0.2	s	Shortest adjustable time
18	Max. startup time	0.1	1.5	0.1	1.2	s	Longest adjustable time

Cutting wire type 02 (0.7 mm)

Param-eter	Function	Min. value	Max. value	One unit	Value	Unit	Description
20	Min. standby current	0.0	2.0	0.1	0.0	A	Smallest adjustable value
21	Max. standby current	1.1	5.5	0.1	5.0	A	Largest adjustable value
22	Standard standby current	0.0	5.0	0.1	1.1	A	Standard value specified in program
23*	Min. running current	1.1	5.0	0.1	5.0	A	Smallest adjustable value
24	Max. running current	5.0	15.4	0.1	14.0	A	Largest adjustable value
25*	Standard running current	5.0	15.4	0.1	5.0	A	Standard value specified in program
26	Start-up current	5.0	24.2	0.1	18.6	A	Fixed startup current
27	Min. startup time	0.1	1.3	0.1	0.2	s	Shortest adjustable time
28	Max. startup time	0.1	1.5	0.1	1.2	s	Longest adjustable time

Cutting wire type 03 (1.0 mm)

Param-eter	Function	Min. value	Max. value	One unit	Value	Unit	Description
30	Min. standby current	0.0	2.0	0.1	0.0	A	Smallest adjustable value
31	Max. standby current	1.1	7.7	0.1	7.0	A	Largest adjustable value
32	Standard standby current	0.0	7.0	0.1	1.1	A	Standard value specified in program
33*	Min. running current	1.1	7.0	0.1	7.0	A	Smallest adjustable value
34	Max. running current	7.0	19.8	0.1	18.0	A	Largest adjustable value
35*	Standard running current	7.0	19.8	0.1	7.0	A	Standard value specified in program
36	Start-up current	7.0	40.0	0.1	30.8	A	Fixed startup current
37	Min. startup time	0.1	1.3	0.1	0.2	s	Shortest adjustable time
38	Max. startup time	0.1	2.0	0.1	1.3	s	Longest adjustable time

Cutting wire type 04 (1.2 mm)

Param-eter	Function	Min. value	Max. value	One unit	Value	Unit	Description
40	Min. standby current	0.0	2.0	0.1	0.0	A	Smallest adjustable value
41	Max. standby current	1.1	9.7	0.1	8.8	A	Largest adjustable value
42	Standard standby current	0.0	8.8	0.1	1.1	A	Standard value specified in program
43*	Min. running current	1.1	8.8	0.1	8.8	A	Smallest adjustable value
44	Max. running current	8.8	25.8	0.1	23.5	A	Largest adjustable value
45*	Standard running current	8.8	25.8	0.1	8.8	A	Standard value specified in program
46	Start-up current	8.8	52.4	0.1	40.3	A	Fixed startup current
47	Min. startup time	0.1	1.9	0.1	0.2	s	Shortest adjustable time
48	Max. startup time	0.1	2.0	0.1	1.3	s	Longest adjustable time

Cutting wire type 05 (1.5 mm)

Param-eter	Function	Min. value	Max. value	One unit	Value	Unit	Description
50	Min. standby current	0.0	2.0	0.1	0.0	A	Smallest adjustable value
51	Max. standby current	1.1	11.0	0.1	10.0	A	Largest adjustable value
52	Standard standby current	0.0	10.0	0.1	1.1	A	Standard value specified in program
53*	Min. running current	1.1	10.0	0.1	10.0	A	Smallest adjustable value
54	Max. running current	10.0	27.0	0.1	27.0	A	Largest adjustable value
55*	Standard running current	10.0	27.0	0.1	10.0	A	Standard value specified in program
56	Startup current	10.0	80.0	0.1	70.7	A	Fixed startup current
57	Min. startup time	0.1	1.9	0.1	0.2	s	Shortest adjustable time
58	Max. startup time	0.1	2.0	0.1	1.9	s	Longest adjustable time

Cutting wire type 06 (xx mm)

Param-eter	Function	Min. value	Max. value	One unit	Value	Unit	Description
60	Min. standby current	0.0	2.0	0.1	0.0	A	Smallest adjustable value
61	Max. standby current	1.1	11.0	0.1	10.0	A	Largest adjustable value
62	Standard standby current	0.0	10.0	0.1	1.1	A	Standard value specified in program
63*	Min. running current	1.1	10.0	0.1	10.0	A	Smallest adjustable value
64	Max. running current	10.0	27.0	0.1	27.0	A	Largest adjustable value
65*	Standard running current	10.0	27.0	0.1	10.0	A	Standard value specified in program
66	Start-up current	10.0	80.0	0.1	70.7	A	Fixed startup current
67	Min. startup time	0.1	1.9	0.1	0.2	s	Shortest adjustable time
68	Max. startup time	0.1	2.0	0.1	1.9	s	Longest adjustable time

Cutting wire type 07 (xx mm)

Param-eter	Function	Min. value	Max. value	One unit	Value	Unit	Description
70	Min. standby current	0.0	27.0	0.1	0.0	A	Smallest adjustable value
71	Max. standby current	1.1	27.0	0.1	10.0	A	Largest adjustable value
72	Standard standby current	0.0	27.0	0.1	1.1	A	Standard value specified in program
73*	Min. running current	1.0	10.0	0.1	2.0	A	Smallest adjustable value
74	Max. running current	1.0	40.0	0.1	27.0	A	Largest adjustable value
75*	Standard running current	1.0	40.0	0.1	10.0	A	Standard value specified in program
76	Startup current	1.1	80.0	0.1	15.0	A	Fixed startup current
77	Min. startup time	0.1	5.0	0.1	0.2	s	Shortest adjustable time
78	Max. startup time	0.1	5.0	0.1	0.5	s	Longest adjustable time

Other settings

Param- eter	Other settings	Min. value	Max. value	One unit	Value	Unit	Description
80	Current correction control	10	99	1	75	%	
81	Voltage threshold, no heat cutter	0.0	15.0	0.1	10.0	V	
82	Output voltage hysteresis	0.1	15.0	0.1	0.2	V	
83	Minimum input voltage	0.0	20.0	0.1	19.0	V	
84	Minimum input voltage deviation	0.0	30.0	0.1	2.0	V	
85	Maximum time, test button	0.1	1.0	0.1	1.0	Min	
86	Minimum standby time	0.0	9.9	0.1	0	s	
87	Minimum standby time during start interruption	0.0	9.9	0.1	0	s	
88	Minimum run time during start interruption	0.0	9.9	0.1	0	s	
89	Maximum start count within 2 minutes	0	99	1	8		
90	Maximum circuit board temperature	0	99.9	1	85	°C	
91	Spectrum width	0	1	1	0		1 = activated 0 = deactivated
92	LCD display contrast	1	100	1	85	%	
93	Serial output value	0	2	1	0		
94	Relay type	0	1	1	0		

4.3.2   Resetting program settings and system parameters to standard values

[i]	Only have this carried out by qualified personnel!

[i]	Activating [Esc ⏻] when changing settings interrupts the process and Setting mode is exited without saving the changes.

Resetting program settings of selected program

[i]	This function overwrites all current program settings with the standard values and must be set again!

✓ The weaving machine is idle.

✓ WeftMaster CUT-iT Dornier is in **«Standby mode»**

1. [▼]   Press for 3 seconds.
   ⇨ Display: **«Default: P:X»** Standard values of selected program.

```
Default: P: X
```

2. [Select Enter]   Press to overwrite the program values of the selected program with standard values.
⇨ The settings of the corresponding program are reset to standard values.

Resetting all program and system settings

[i]	This function overwrites all current program and system parameters with the standard values and must be set again!

[i]	This setting can only be initialized during the startup phase!

✓ Device connected to 24 V DC-SELV supply.

1. [Esc ⏻]   Press.
   ⇨ Startup phase runs.

2. [▼]   Keep pressed during the startup phase.
   ⇨ Display: **«Default: All»**Standard values of all settings

```
Default: All
```

3. **Select Enter** Press to overwrite all settings with standard values.

  ⇨ Display: **«Execute»**

Execute
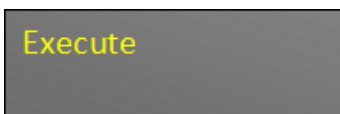
  ⇨ All settings are reset to the standard values.

  ⇨ WeftMaster CUT-iT Dornier restarts.
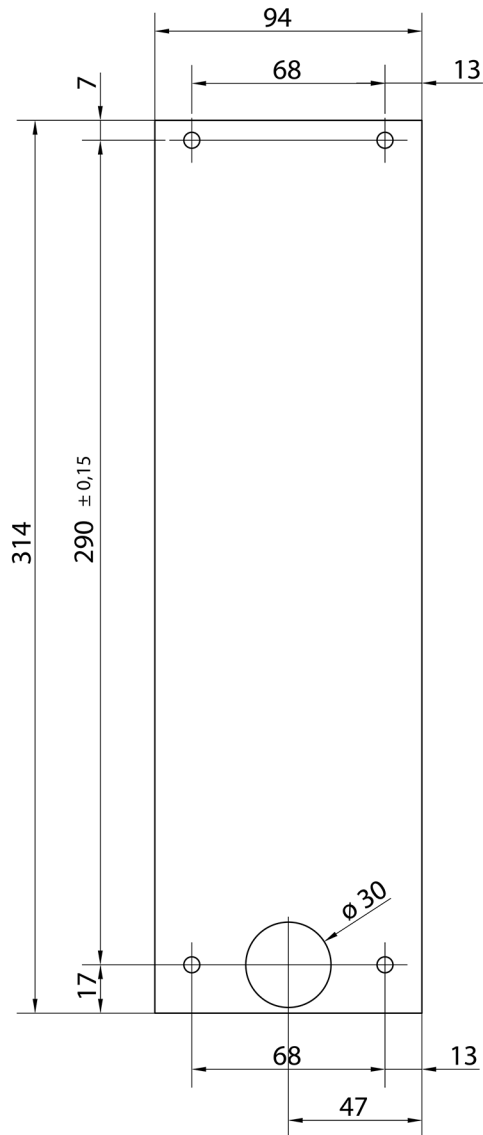
4.3.3 Hardware reset

  ✓ Device connected to power supply.

1. **▲** **▼** Press at the same time for 5 seconds to reset the hardware.

  ⇨ The hardware is reset.

5 Installation

5.1 Safety Information

	⚠ **DANGER**
	Hazard due to electric shock
	Contact with live components and electrical connections leads to serious injuries or death.
	▶ Installation and maintenance must only be carried out by an «**industrial electrician / installation technician**» or «**service technician**».
	▶ Switch off the main switch of the weaving machine on which the control unit is installed before opening, modifying or extending the system.
	▶ Disconnect the device from the power supply before maintenance or repair work.
	▶ Close all device covers before starting the system.

	⚠ **WARNING**
	Risk of injury in case of insufficient qualification!
	Improper handling can result in considerable personal injury.
	▶ Installation and maintenance must be performed only by qualified authorized personnel.

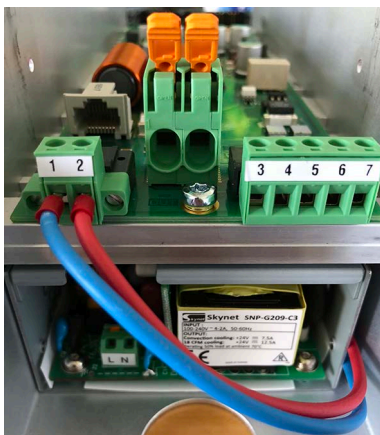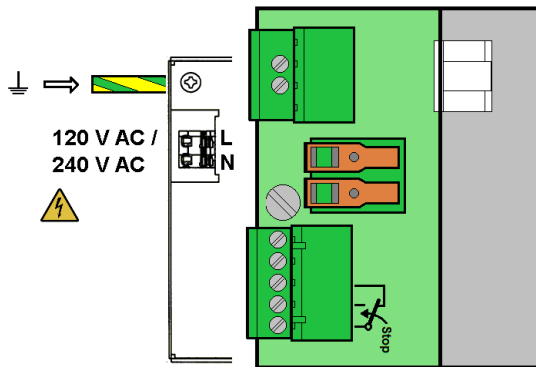|	**NOTE**
	Damage to property in case of insufficient qualification!
	Improper handling can result in damage to property.
	▶ Installation and maintenance must be performed only by qualified specialized personnel.

5.2   Position of control unit mounting holes
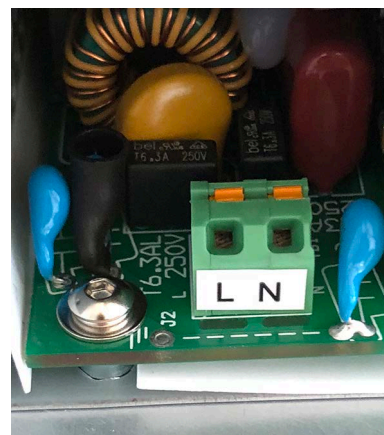

Position of mounting holes

5.3   Wiring

	⚠ **DANGER**
	Hazard due to electric shock Contact with live components and electrical connections leads to serious injuries or death. ✓ When the emergency power off button is pressed, the power supply MUST be interrupted. ▸ An easily accessible disconnecting device must be installed in the fixed wiring.

5.3.1   120 V AC / 240 V AC power supply

	⚠ **DANGER**
	Hazard due to electric shock Contact with live components and electrical connections leads to serious injuries or death. ▸ Before connecting the 120 V AC / 240 V AC supply, switch off the main switch of the weaving machine to which the control unit is installed.

Connections CUT-iT Dornier


Main connection terminals 120 V AC / 240 V AC

5.3.2 120 V AC / 240 V AC wiring

| ⚠ **DANGER** |
|---|
| **Hazard due to electric shock** |
| Contact with live components and electrical connections leads to serious injuries or death. |
| ▶ Before connecting the 120 V AC / 240 V AC supply, switch off the main switch of the weaving machine to which the control unit is installed. |

✓ The 120 V AC / 240 V AC wires have a cross-section of at least 0.75 mm.

1. Connect the 24 V DC-SELV supply to the safety grounding.
2. Strip 120 V AC / 240 V AC wire 6 mm.
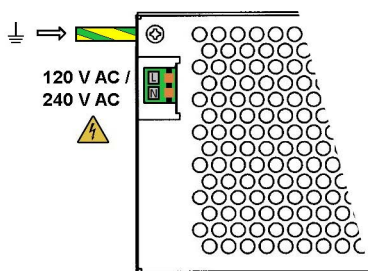3. Plug 120 V AC / 240 V AC wire into main connector.
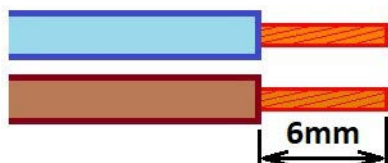
Wire cross section at least 0.75 mm and 6 mm stripped

| ℹ	▪ The stripped wires must be fully inserted into the connector.
	▪ Make sure all wires are inserted into the connector.
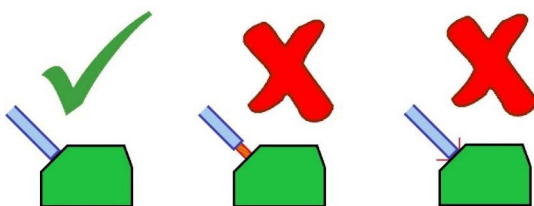
*Correct assembly of the stripped wires*

120 V AC / 240 V AC power supply

5.3.3   Connecting the heat cutters

Use a 6 mm² cable for the connection.

■ Avoid large wiring loops. Lay wires together (parallel).

✓ The weaving machine is stopped.

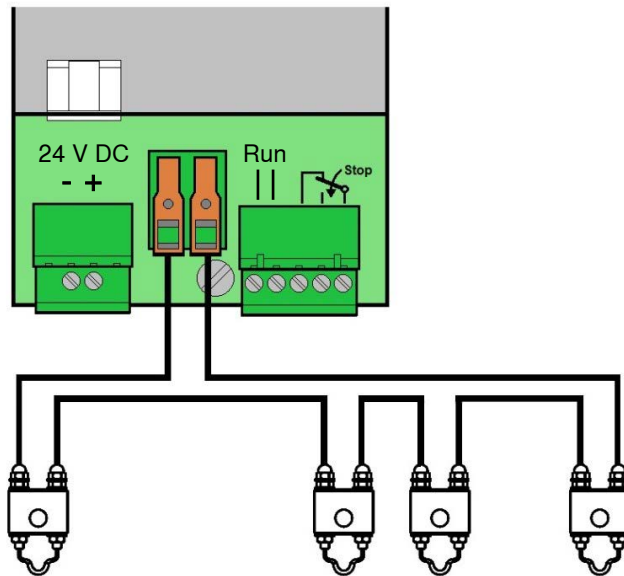✓ The device is disconnected from the power circuit.

1. Connect the connection leads of the heat cutters to the connection terminals of the WeftMaster CUT-iT Dornier.
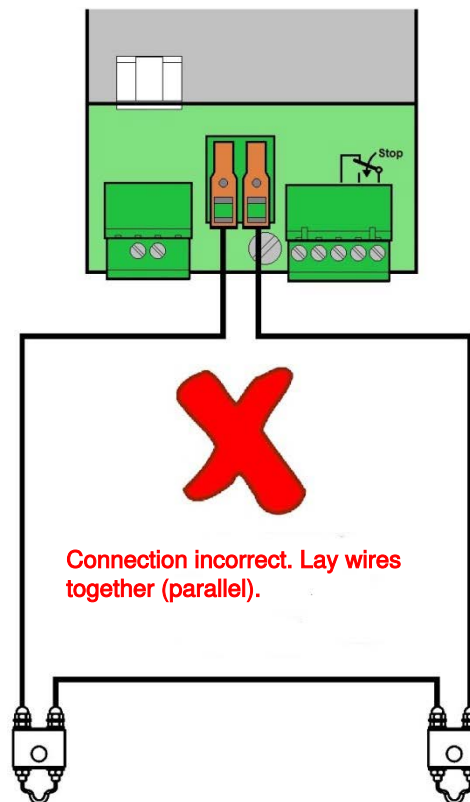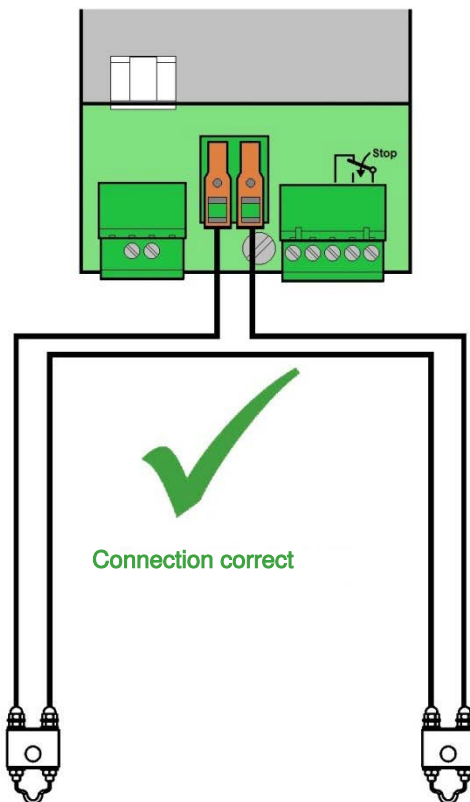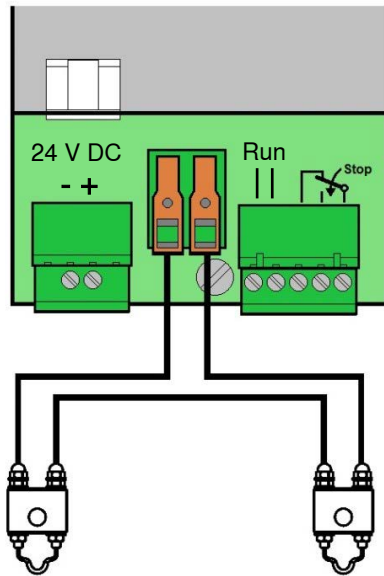
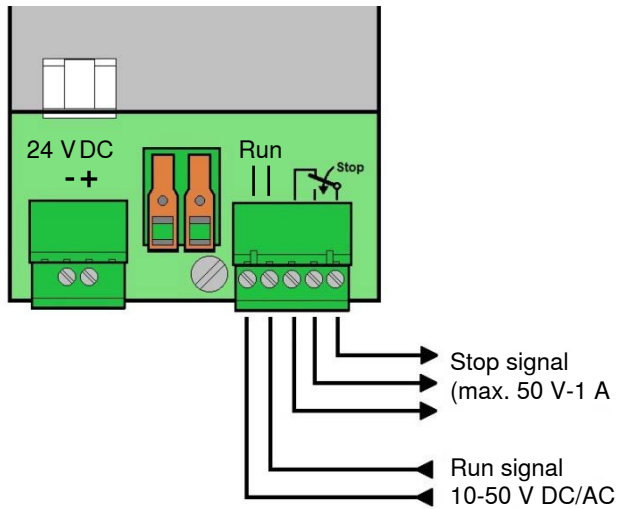

Lay wires together (parallel).

Up to maximum 4 heat cutters can be connected per control unit.

1. Switch additional heat cutters in series (mandatory).

5.3.4 Control unit / weaving machine connection

1. Connect run and stop signals to the WeftMaster CUT-iT Dornier control unit.

Control unit / weaving machine connection

5.4 Specifying the heat cutter type

|	Only have this carried out by qualified personnel!

|	This setting can only be initialized during the startup phase!

	Choosing the wrong type of cutting wire can lead to burning of the affected wires!

|	Activating [Esc] when changing settings interrupts the process and Setting mode is exited without saving the changes.

✓ Device connected to power supply.

1. [Esc] Press.
   ⇨ Startup phase runs.

2. [Prog] Keep pressed during the startup phase.
   ⇨ Display: **«Select wire type»**

```
Select wire type
(1) Wire 0.5mm
```

3. ▲ ▼ Press to select desired setting.

4. [Select Enter] Press to confirm desired setting.

```
Are you sure?
```

5. [Select Enter] Press to confirm desired setting.

⇨ The heat cutter type is specified.

⇨ WeftMaster CUT-iT Dornier restarts.

5.5 Master/Slave function

When several WeftMaster CUT-iT Dornier devices are connected together, the Master/Slave function is used and a Master/Slave address set on each unit.

The Master unit controls all Slave units.

■ The Slave devices follow the current setting and mode of the Master.

■ When a Master or a Slave unit detects an error, all units are set to this Error mode and the Master stops the weaving machine.

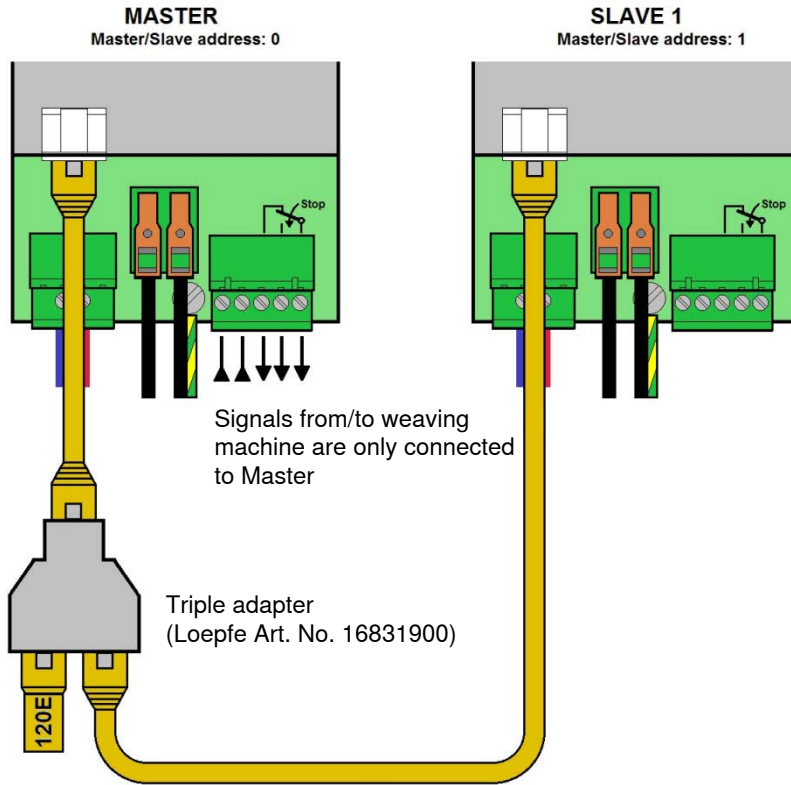The Master unit has address «0», the Slave units have consecutive higher addresses.

■ Address Master unit = «0»

■ Address 1st Slave-unit = «1»

■ Address 2nd Slave-unit = «2»
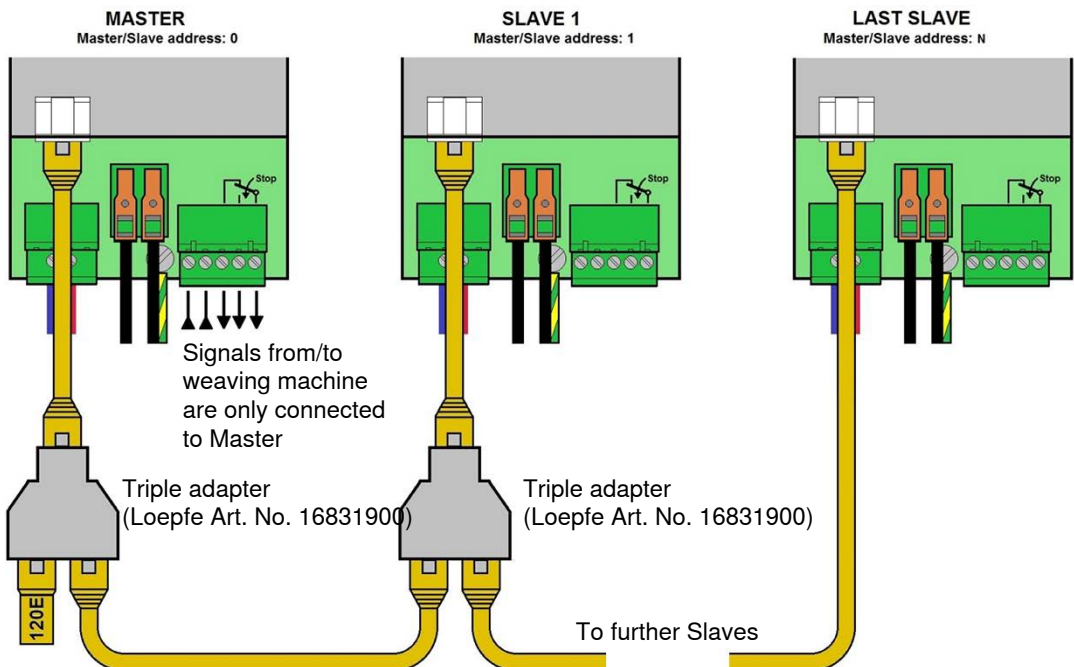
■ etc. up to

■ Address 32nd Slave-unit = «32»

Maximum 32 Slave units can be connected.

> Not all functions are available for Slave units (missing functions such as Select program, Set current strength must be carried out on the Master).

MASTER
Master/Slave address: 0

SLAVE 1
Master/Slave address: 1

Signals from/to weaving
machine are only connected
to Master

Triple adapter
(Loepfe Art. No. 16831900)

120E

Master and 1 Slave (CAN Bus terminating resistor with 120 Ohm connected via triple adapter to Master)

MASTER
Master/Slave address: 0

SLAVE 1
Master/Slave address: 1

LAST SLAVE
Master/Slave address: N

Signals from/to
weaving machine
are only connected
to Master

Triple adapter
(Loepfe Art. No. 16831900)

Triple adapter
(Loepfe Art. No. 16831900)

120E

To further Slaves

Master and several Slaves (CAN Bus terminating resistor with 120 Ohm connected via triple adapter to Master)

5.6 Specifying Master/Slave addresses

|	Only have this carried out by qualified personnel!

	This setting can only be initialized during the startup phase!

	Activating [Esc ⏻] when changing settings interrupts the process and Setting mode is exited without saving the changes.

5.6.1 Specifying the Master address (without Slave)

✓ Device connected to 24 V DC-SELV supply.

1. [Esc ⏻] Press.
   ⇨ Startup phase runs.

2. [▲] Keep pressed during the startup phase.
   ⇨ Display: **«Select Address, Add: 0»**

```
Select Address
Add: 0
```

⇨ Bus address = 0: WeftMaster CUT-iT Dornier configured as Master.

3. [Select Enter] Press to confirm address (Master).

```
Number Slaves
#: 0
```

4. [▲] [▼] Press to set number of Slaves to 0.

5. [Select Enter] Press to confirm number of Slaves.

⇨ The number of Slaves is specified (0 Slaves).

⇨ WeftMaster CUT-iT Dornier restarts.

```
Starting UP
```

5.6.2 Specifying the Master address (with Slave)

✓ Device connected to 24 V DC-SELV supply.

1. `Esc ⏻` Press.
   ⇨ Startup phase runs.

2. `▲` Keep pressed during the startup phase.
   ⇨ Display: **«Select Address, Add: 0»**

```
Select Address
Add: 0
```

⇨ Bus address = 0: WeftMaster CUT-iT Dornier configured as Master.

3. `Select Enter` Press to confirm address (Master).

```
Number Slaves
#: 0
```

4. `▲` `▼` Press to specify number of Slaves (max. 32).

```
Number Slaves
#: 3
```

5. `Select Enter` Press to confirm number of Slaves.
⇨ The number of Slaves is specified (example: 3 Slaves).
⇨ WeftMaster CUT-iT Dornier restarts.

```
Starting UP
```

5.6.3   Specifying Slave addresses

<table>
<tr>
<td>ⓘ</td>
<td>

Specify Slave adresses in consecutive sequence!

- Slave 1 = Add: 1
- Slave 2 = Add: 2
- Slave 3 = Add: 3
- Slave 4 = Add: 4 and so forth ...

</td>
</tr>
</table>

✓ Device connected to 24 V DC-SELV supply.

1. [Esc ⏻] Press.
   ⇨ Startup phase runs.

2. [▲] Keep pressed during the startup phase.
   ⇨ Display: **«Select Address, Add: 0»**

```
Select Address
Add: 0
```

3. [▲] [▼] Press to confirm address (Slave).
4. Start Slave numbering with 1.
   ⇨ Bus address = 0: WeftMaster CUT-iT Dornier is configured as Slave (e.g. Add: 1)

```
Select Address
Add: 1
```

5. [Select Enter] Press to confirm address (Slave).

```
Number Slaves
#: 0
```

6. [▲] [▼] Press to specify desired number of Slaves (max. 32).

```
Number Slaves
#: 3
```

7. [Select Enter] Press to confirm number of Slaves.
   ⇨ The number of Slaves is specified (example: 3 Slaves).
   ⇨ WeftMaster CUT-iT Dornier restarts.

```
Starting UP
```

To configure further Slaves:

1. Repeat procedure **«Specify Slave addresses»** (Add: 2, 3, 4 etc.)

⇨ All connected Slaves are configured.

6 Service

6.1 LEDs
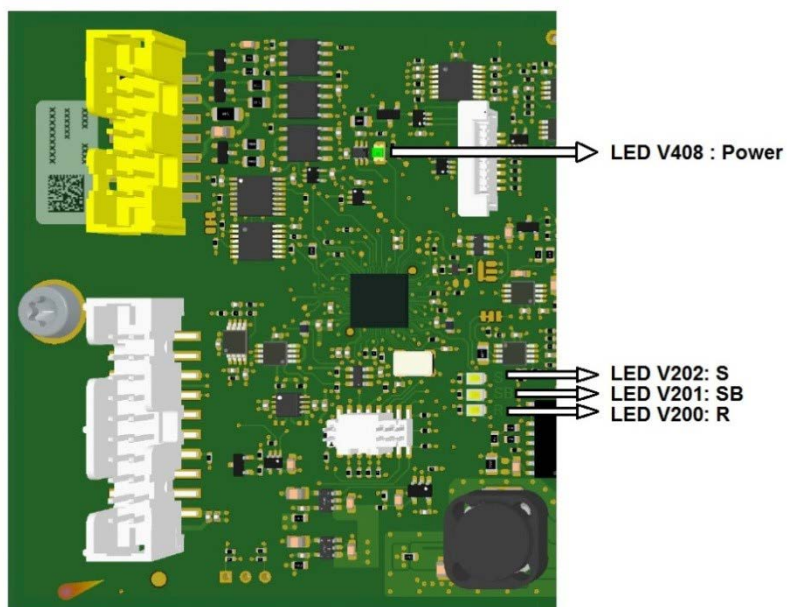
LED	Name	Functionality	Current mode			
V408	Power	Lights up when all internal power supply systems are in order				
V202	System (heart beat)	Blinks during normal function of the CPU				
			«Off»	«Standby»	«Run»	«Boost»
V201	Standby		On	On	Off	Off
V200	Run		On	Off	On	Off

6.2   Fuses
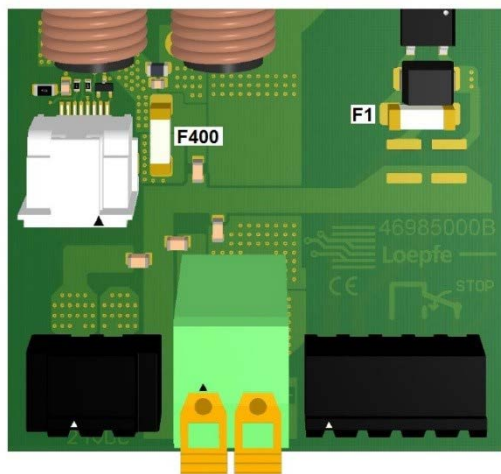
Fuse	Property	Type	Loepfe Article Number
F1	T1AL-250V	Littelfuse 0443.001DRLC	81367900
F400	T15AH-250V	Littelfuse 0463015.ER	81234900

6.3   Spare parts list

Description	Loepfe Article Number
CUT-iT Dornier control unit	47053000

7 Technical Data

7.1 Specifications

Physical sizes	
Dimensions	314 mm (L) x 94 mm (W) x 96 mm (H)
Weight	2.2 kg
Power supply	
Voltage	120 V AC / 240 V AC
Power input	Maximum 170 VA during operation Maximum 470 VA during startup for max. 2.5 s
Power output	
Maximum output current	27 A DC continuous
Highest output current value	80 A DC during startup for max. 2.5 s
Maximum output voltage	10 V DC
Maximum output performance	120 W DC continuous
Highest output performance value	320 W during startup for max. 2.5 s
Run signal	
Voltage to detect run signal	10 V AC / DC ... 50 V AC / DC SELV
Maximum run signal current consumption	2 mA AC / DC
Relay contacts	
Maximum contact voltage	50 V AC / DC SELV
Maximum contact current	1 A AC / DC
Minimum contact current	10 mA AC / DC
Ambient	
Ambient temperature	0–50 °C
Relative air humidity	10–90 % non-condensing
Certification	
Safety	EN61010-1
EMC (Electromagnetic Compatibility)	EN61326-1

8 Disposal

8.1 Hazardous waste

Electronic components

Waste electrical and electronic equipment and batteries must not be disposed of with household waste.

If you ever need to dispose of this product, please note the following:

- Recycle product at designated facilities.
- Check with local authorities or the dealer for waste disposal regulations.