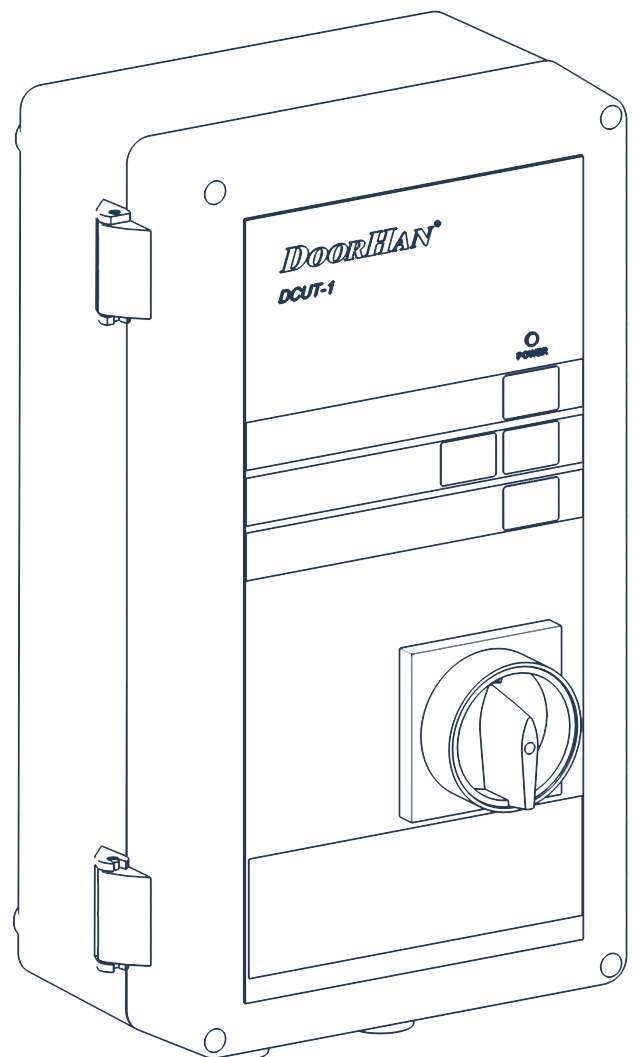


General Information	2
Safety Rules	2
Design	3
Installation	3
Electrical Connections	4
Control Unit Operation	5
Troubleshooting	6
Appendix	7

DCUT-1 Control Unit for Electro-Hydraulic Dock Leveler with Telescopic Lip



1. GENERAL INFORMATION

DCUT-1 control unit operates electro-hydraulic dock leveler with telescopic lip of DS/DSI/DSIM series.

The unit is equipped with an uncontrolled movement protection system, which is activated if the dock leveler was halted in the event of a potential emergency or if power supply failed.

This control unit does not require programming. After all the necessary connections, it is ready for operation.

The control unit works with DC coils only.

Table 1.1. Control units options

Options	DCUT-1
Automatic return to stored position by pressing the P button	
Supply voltage, 380-415 V/50-60 Hz	▪
External traffic light	
Internal traffic light	
Dock leveler lighting	
Leveler locking when door is closed (interlock)	▪
Door locking when leveler is open (interlock)	▪
Connection of additional safety devices	▪
Service indicator	
Menu screen (LCD display)	
Door control	
Inflatable dock shelter control	

Table 1.2. Control unit specifications

Parameters	Value
Supply voltage	380-415 V/50-60 Hz
Control voltage	24 VDC
Max. power of the hydraulic station	1,5 kW
Operating temperature	-20...+50 °C
Dimensions (W × H × D)	195 × 355 × 165 mm
Protection class	IP54

2. SAFETY RULES

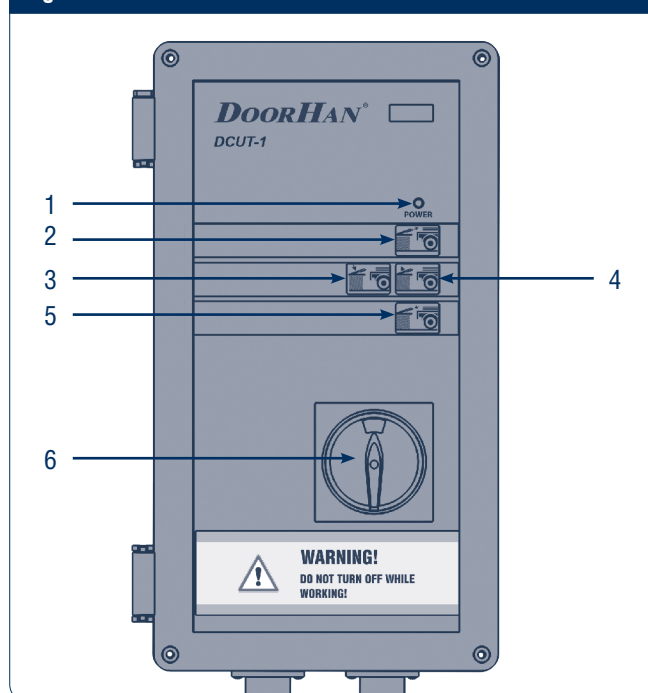
⚠ WARNING!

Carefully follow all the instructions specified herein. Failure to do so could cause equipment damage and/or personal injury!

- Use the control unit only for its intended purpose, any other use is prohibited.
- The manufacturer assumes no liability for damage or injury to persons or property which occur as a result of failure to observe safety rules specified herein or incorrect use of the control panel.
- Only trained personnel should install, operate or service this equipment.
- Correct operation of the control unit can only be guaranteed if the supply voltage complies with the specified in the instructions.
- Prior to first actuation of the control unit, make sure that all electrical connections are securely fastened and insulated, safety devices are installed and ready for use.

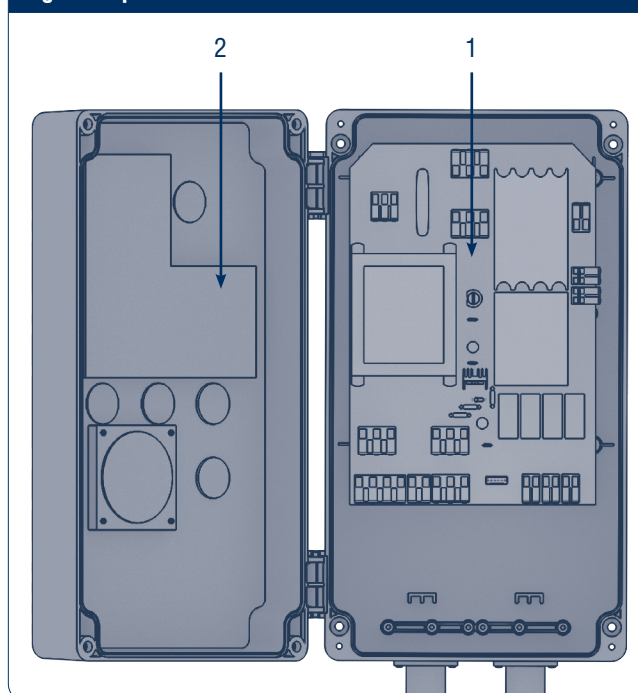
3. DESIGN

Fig. 3.1. Closed view



1. Power indicator
2. LIP OUT button
3. Dock leveler LOWER button
4. Dock leveler RAISE button
5. LIP IN button
6. Main power switch

Fig. 3.2. Open view

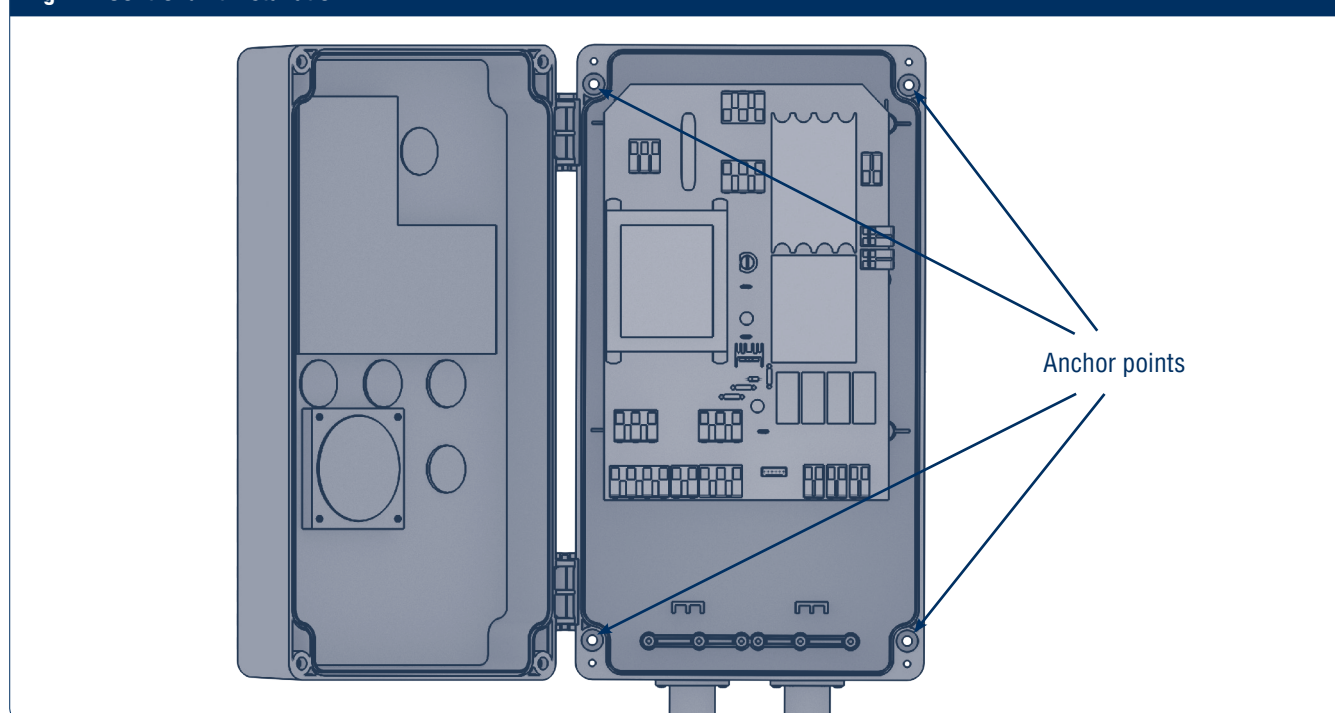


1. Main board
2. Control board

4. INSTALLATION

Mount the control unit so the distance between control unit bottom and dock floor is approximately 1–1,5 m. Choose the fasteners corresponding to the type of wall.

Fig. 4.1. Control unit installation



5. ELECTRICAL CONNECTIONS

⚠ WARNING!

Before performing electrical connection of the control unit disconnect all electric power and ensure it won't be supplied during the work.

Fig. 5.1. Electrical connections diagram

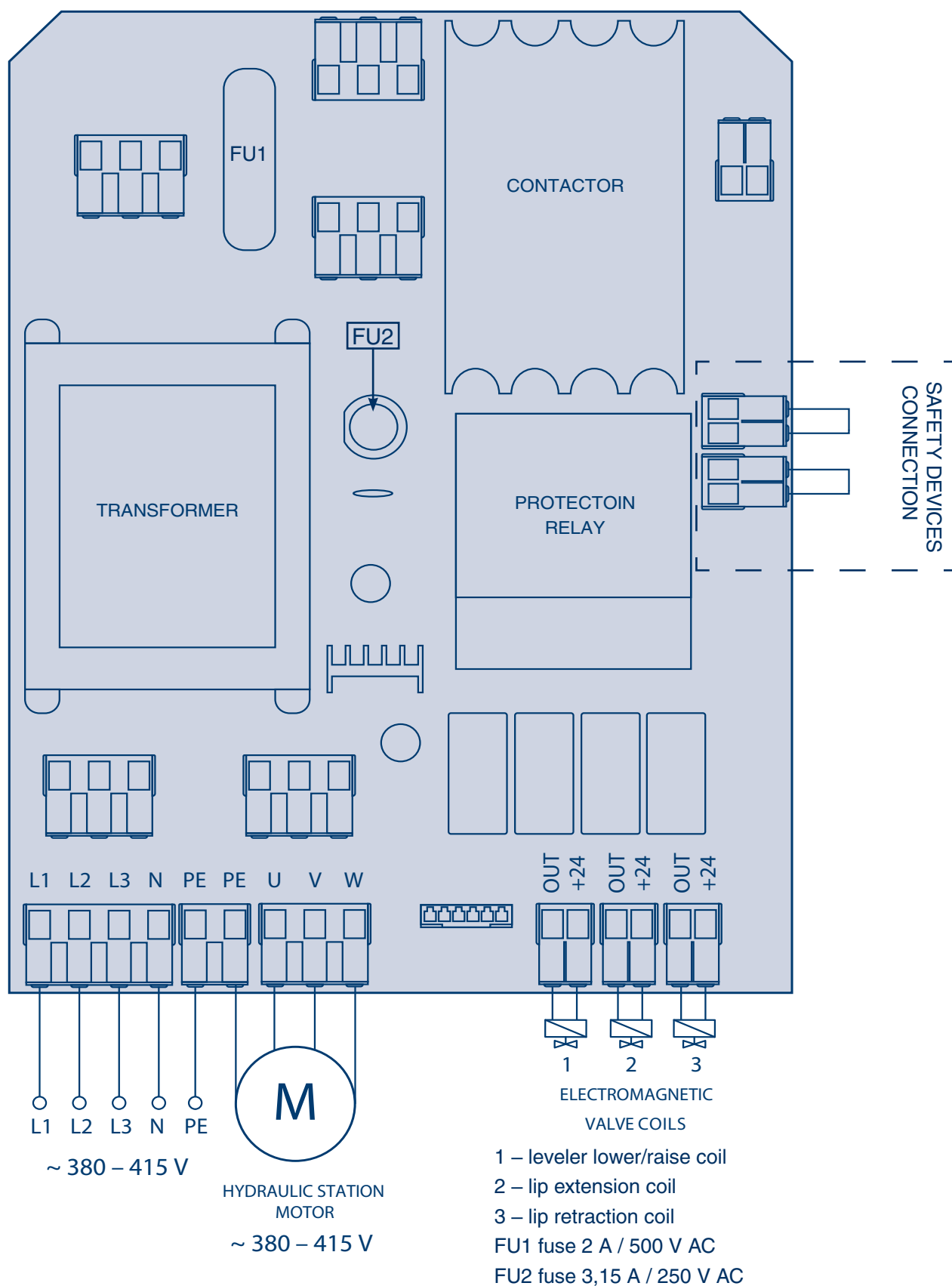
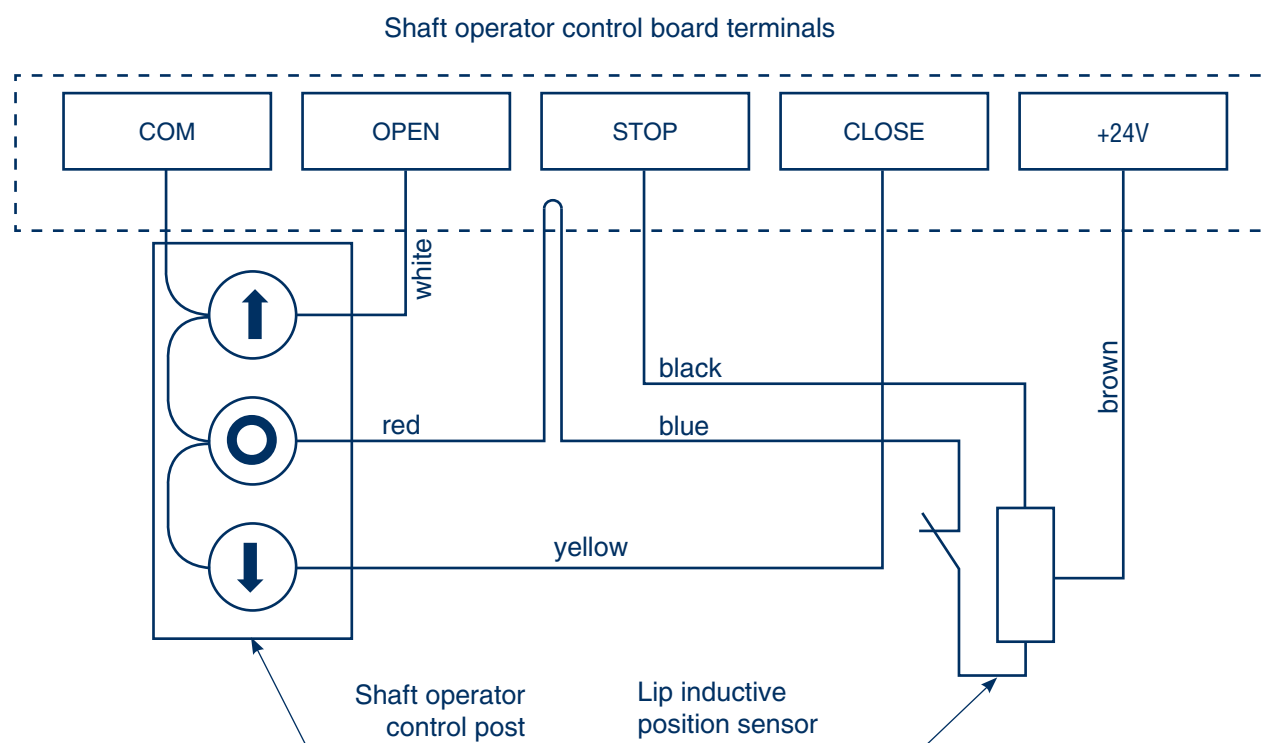


Fig. 5.2. Connection scheme for lip inductive position sensor*



* Connection scheme refers to DoorHan operators of Shaft series only.

6. CONTROL UNIT OPERATION

6.1. TO RAISE THE LEVELER

1. Park the transport vehicle with an open body in front of the leveler so that it is positioned squarely against dock bumpers.
2. Chock the vehicle wheels to prevent accidental departure.
3. Turn the main power switch ON to operate the leveler.
4. Make sure the power led on the control unit is lit, then press the leveler control button.
5. Keep the button pressed until the leveler platform is fully raised and the lip is extended. Then release the button and wait till the leveler platform lowers on the vehicle bed. The lip should have a minimum of 100 mm overlap on the vehicle bed surface.

⚠ WARNING!

Keep the main power switch ON till the platform stops working and returns to the stored position!

6.2. TO STORE THE LEVELER

When loading or unloading is finished resume the stored position of the dock leveler immediately. Press and hold the RAISE button till the platform is well above vehicle bed. Then press and hold the LIP IN button and wait until

the lip retracts completely. Then press the LOWER button and wait the platform to resume the stored position. After that turn the main power switch OFF.

6.3. EMERGENCY STOP

Should any emergency arise halt the dock leveler in place by turning the main power switch OFF.

⚠ WARNING!

To resume operations turn the main power switch ON and press RAISE button shortly.

7. TROUBLESHOOTING

Table 7.1. Possible faults, their causes and solutions

Symptom	Possible cause	Solution
Platform won't rise (pump does not rotate)	No supply voltage	Check the electrical wires and the voltage in the socket
	Faulty power switch	Replace main power switch
	Blown fuse	Replace fuse (FU1, FU2)
	Faulty contactor	Replace main board
	No power to the contactor coil	Replace main board
	No jumper on terminals for safety devices	Set the jumper
	Platform lock switch open	Check the switch
	Platform does not respond to pressing the control button	Replace control board
Platform won't rise (pump rotates)	Incorrect phasing	Swap any two phases in the control unit
Platform won't lower	No power to electromagnetic valve coil	Check wiring from control unit to coil 1. Check coil 1 voltage (24 VDC)
		Replace main board
	Faulty electromagnetic valve coil or valve	Replace coil or valve (see Owner's Manual for Electrohydraulic Dock Leveler with Telescopic Lip of DS, DSI Series)
Lip won't extend	No power to electromagnetic valve coil	Check wiring from control unit to coil 2. Check coil 2 voltage (24 VDC)
		Replace main board
	Faulty electromagnetic valve coil or valve	Replace coil or valve (see Owner's Manual for Electrohydraulic Dock Leveler with Telescopic Lip of DS, DSI Series)
Lip won't retract	No power to electromagnetic valve coil	Check wiring from control unit to coil 3. Check coil 3 voltage (24 VDC)
		Replace main board
	Faulty electromagnetic valve coil or valve	Replace coil or valve (see Owner's Manual for Electrohydraulic Dock Leveler with Telescopic Lip of DS, DSI Series)

APPENDIX. RECOMMENDED SPARE PARTS

Fig. 1. Control unit design

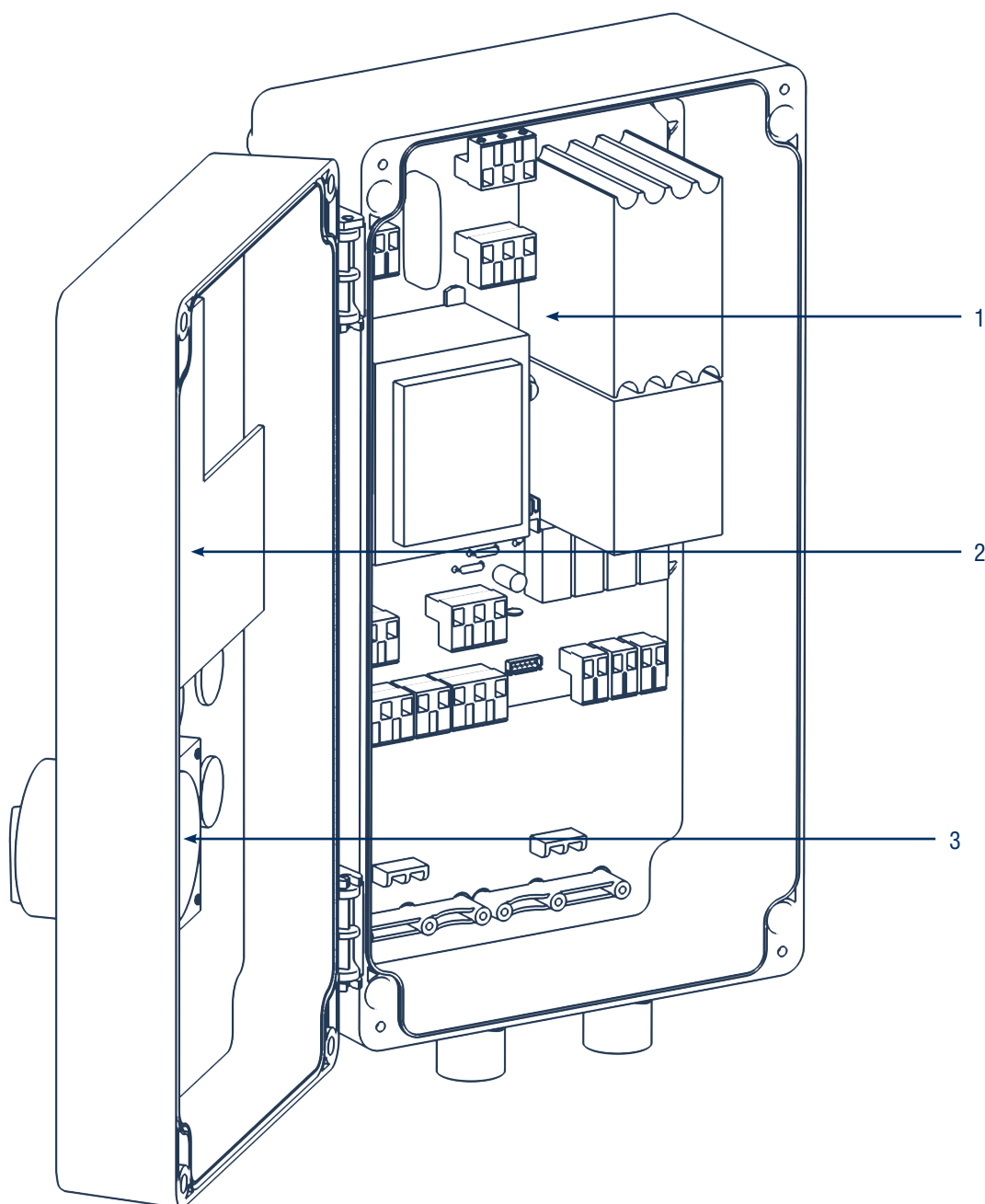


Table 1. Control unit spare parts

#	Part name	Part number
1	DCUT-1 main board	PCB_DCUT1-M/V.1.2
2	DCUT-1 control board	PCB_DCUT1-BT/V.1.0
3	Switch assembly	DCU007

Table 2. Connecting cables to the dock leveler control unit*

#	Part name	Length	Part number
-	Connecting cable for DCUT-1, 2, 3 control units	7 m	DKTL02-2
-	Connecting cable for DCUT-1, 2, 3 control units	10,5 m	DKTL02-3

* Cables are connected to hydraulic stations and supplied with the dock levelers.

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