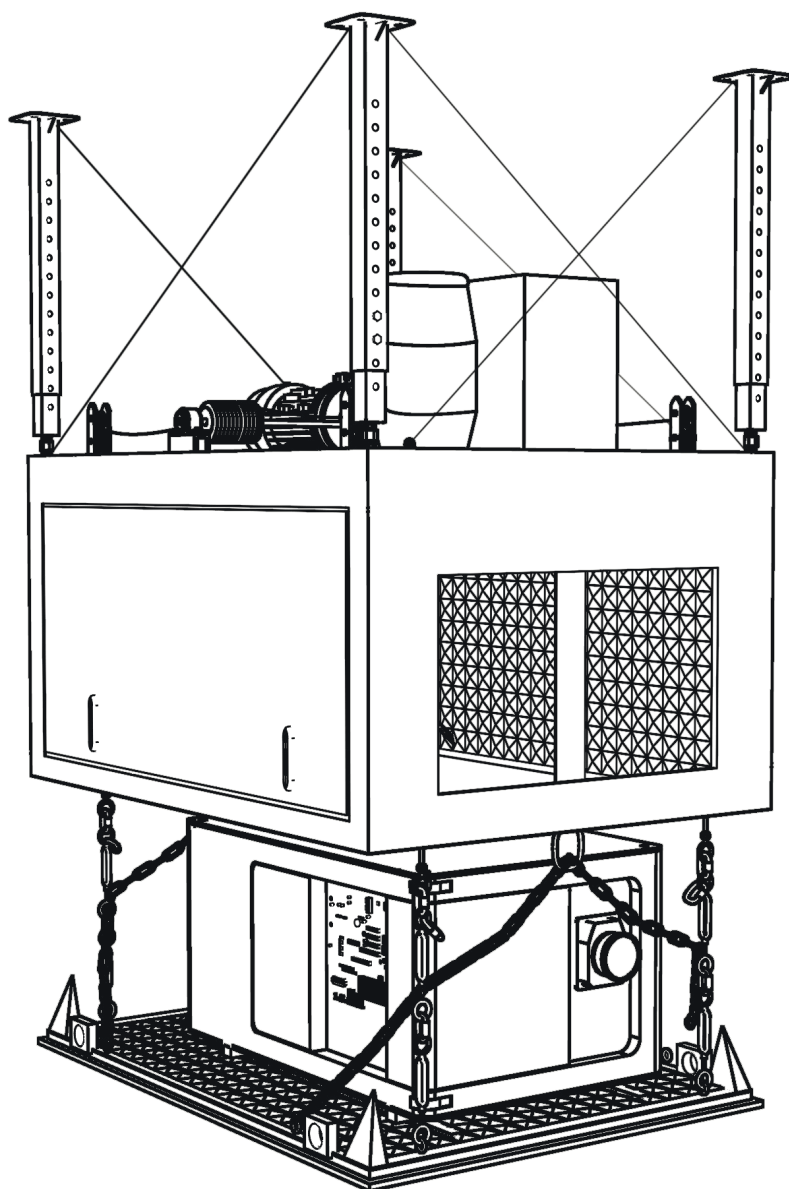


BOOTHLESS CINEMA SYSTEM

KINOLIFT^{PRO}

USER MANUAL



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GRAPHICAL SYMBOLS



Important information and precautions for safe work.



Useful information and recommendations.

1. INTRODUCTION

KINOLIFT^{PRO} is a perfect boothless cinema system designed for cinema halls with limited space and is aimed in hidden assembly of the projector into the ceiling.

The most significant features of our device are: easy assembly, automatic button control, an opportunity to set any platform height and convenient servicing.

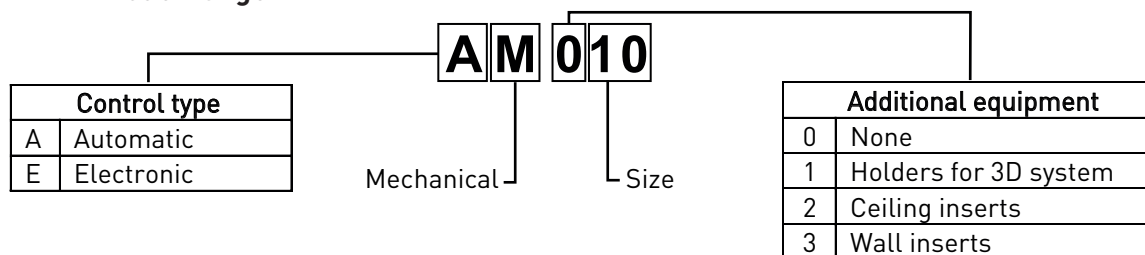
KINOLIFT^{PRO} has particular model range, which allows to use it with all popular projector models. We also have an option for customization according to special demands.

All components of our product are made of high-quality materials. We use E60 fire-resistant glass with the patented antiglare cover (97% light transmittance). The security system includes number of electric and mechanical devices.

KINOLIFT^{PRO} is designed according to Lifting Equipment Regulations and technical norms.

2. GENERAL DESCRIPTION

2.1. Model range

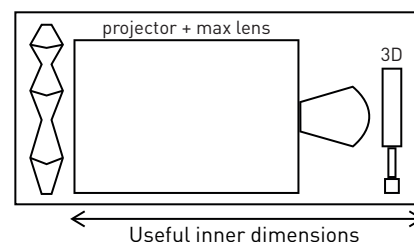


2.2. Projector compatibility

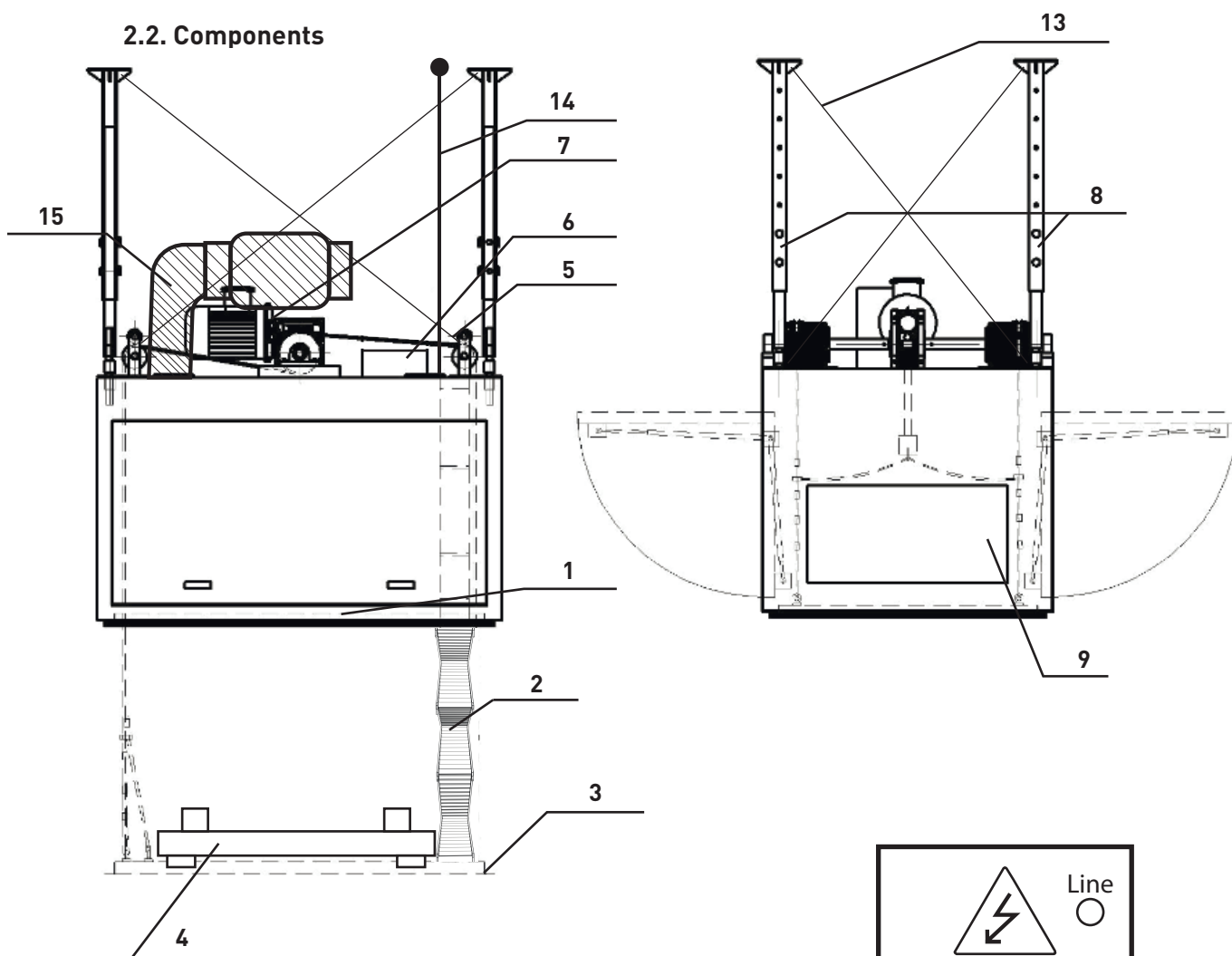
Model	Overall dimensions (HxWxL)	Useful inner dimensions (HxWxL)	Assembly dimensions (HxWxL)	Projector compatibility
AM005 EM005	840x1000x1400	540x800x950	1240x1000x1400	Barco DP2K-6E, Christie CP2208, Christie CP2215, NEC NC900, NEC NC1000
AM010 EM010	840x1000x1700	540x800x1250	1240x1000x1700	Barco DP2K-8S, Barco DP2K-10S, NEC NC1200, NEC NC2000, NEC NC1201, NEC NC1100
AM020 EM020	900x1000x1900	630x800x1450	1350x1000x1900	Barco DP2K-15C, Barco DP2K-20C, Christie CP2220, Christie CP2230
AM050 EM050	1000x1100x2100	730x900x1650	1450x1100x2100	Barco DP2K-19B, Barco DP2K-23B, Barco DP2K-32B



Projector compatibility is given considering max lens size and 3D polarization module.

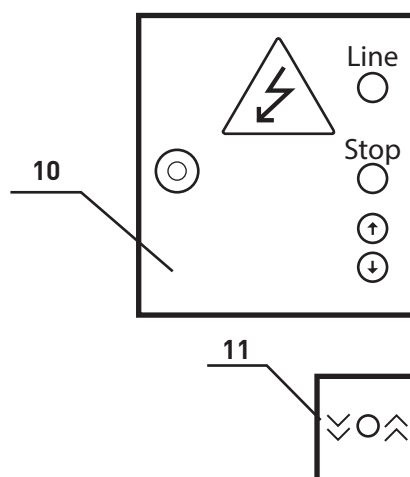


2.2. Components



	Title	Quantity
1	Case	1 pc.
2	Cable duct	1 pc.
3	Lifting platform	1 pc.
4	Projector installation system	1 pc.
5	Lifting system	1 set
6	Terminal-block cabinet	1 pc.
7	Drive	1 pc.
8	Ceiling fasteners	4 pcs
9	Projection window	1 pc.
10	Control switchboard	1 pc.
11	Control button	1 pc.
12	Keys*	2 pcs
13	Distance wire ropes	8 pcs
14	Safety wire ropes	4 pcs
15	Ventilation system	1 set

*keys are inside the control switchboard



Components may vary depending on chosen model. Please contact us for more details

3. TECHNICAL SPECIFICATION

	AM005 EM005	AM010 EM010	AM020 EM020	AM050 EM050
Power consumption	220 V	220 V	220 V	220 V
Weight	200 kg	240 kg	260 kg	280 kg
Noise rate	>35 dB	>35 dB	>35 dB	>35 dB
Operation speed	2-3 m/min	2-3 m/min	2-3 m/min	2-3 m/min
Ascent height*	2,5-8 m	2,5-8 m	2,5-8 m	2,5-8 m
Max load	200 kg	200 kg	200 kg	200 kg
Ventilation (connection diameter)	150 mm	150 mm	200 mm	200 mm
Glass	400x800 mm	400x800 mm	400x800 mm	400x800 mm
Control type	manual	manual	manual	manual

*3-8m per order in advance

4. ASSEMBLY GUIDELINE

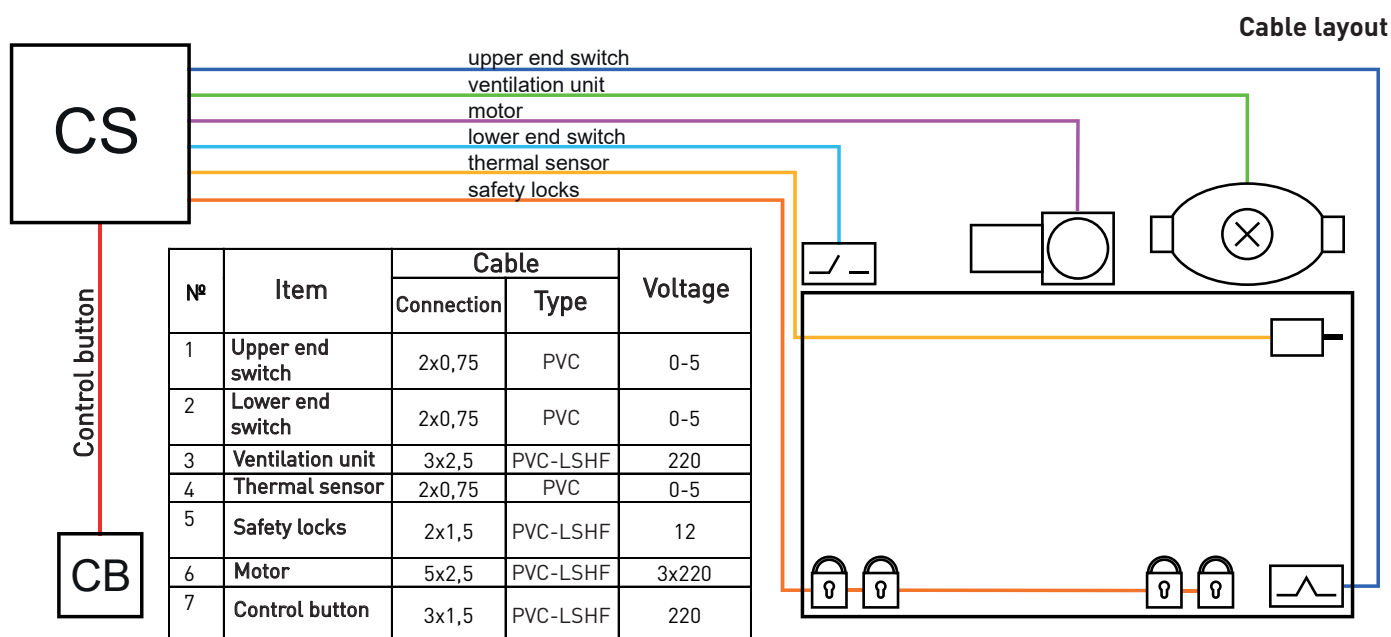
4.1. Preparation



All works should be performed by qualified personnel only. Preparation stage influences assembly and operation of the equipment.

Please follow preparation algorithm below:

1. Assembly of the ceiling inserts.
2. Ventilation system preparation.
3. Main control box location should be chosen.
4. Lay the service lines (cables).



Responsibility for preparatory works rests fully with the customer, all the above mentioned works are performed during construction works.

4.2. Step-by-step assembly



All works should be performed by qualified personnel only. Improper assembly may result in equipment breakdown.

Please follow algorithm below for safe assembly:

1. Equipment unpacking

Please unpack the equipment under the assembly site.



**Please check equipment completeness before assembly!
Only components mentioned in this user manual should be used for assembly works.**

2. Power supply connection

Requirements:

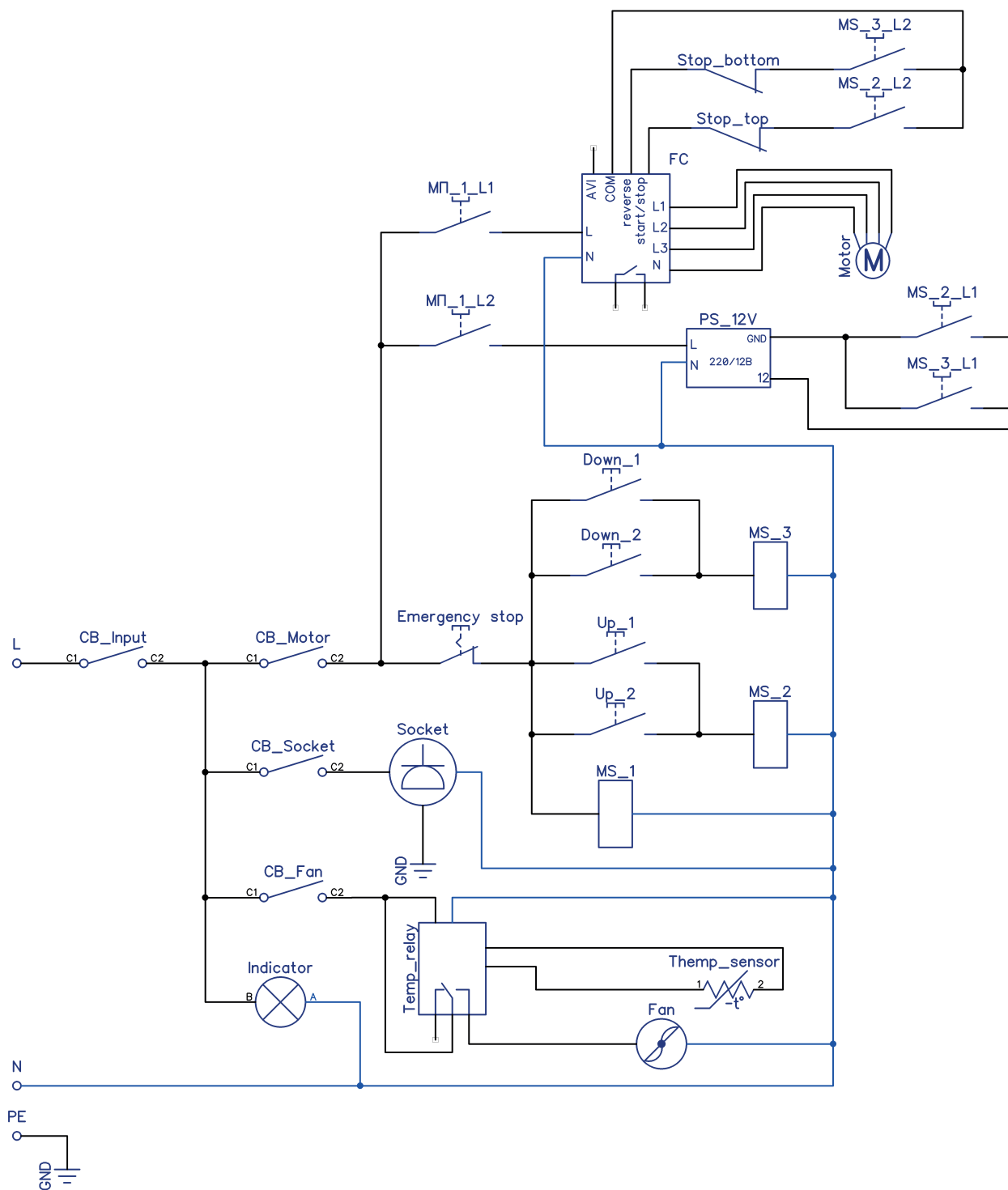
- Single phase of AC system is required - 220-240V, 50 Hz.
- All wiring should conform to all standards of that region (country) where equipment assembly is made.
- Assembly should be made by qualified personnel.
- All switches of the boothless solution and projector should be set to OFF position during connection to power supply networks.

Please connect Control Switchboard (CS) and Control Button (CB) according to layouts.

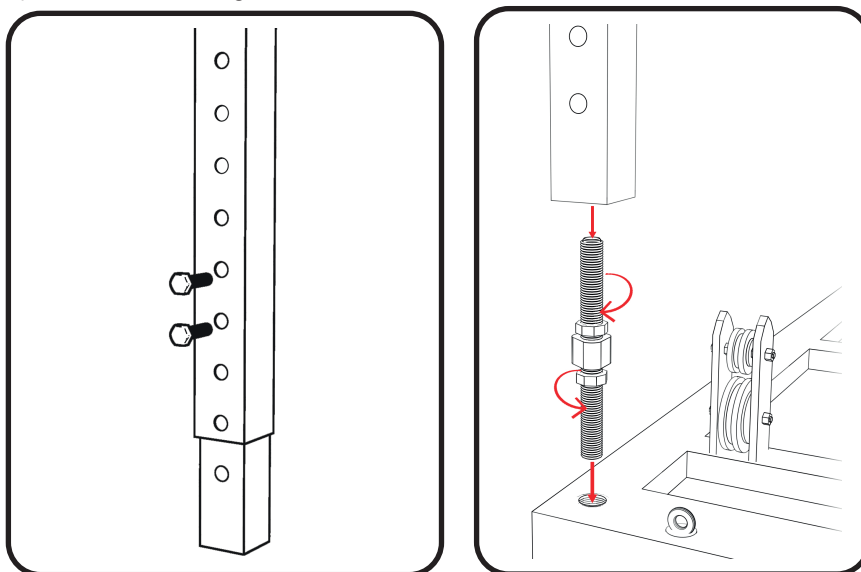
Cable termination layout

Connector title	Terminal number in CS	Terminal number in boothless system	Connector type
CS supply 220V L	L		PVC-LSHF power cable 3x2,5 mm ²
CS supply 220V N	N		
CS supply 220V PE	PE		
Motor supply U	1	X1	PVC-LSHF 5x2,5 mm ²
Motor supply V	2	X2	
Motor supply W	3	X3	
Ventilation L	4	X4	PVC-LSHF 3x2,5 mm ²
Lower end switch OUT	5	X5	PVC 2x0,75 mm ²
Lower end switch IN	6	X6	
Upper end switch OUT	7	X7	PVC 2x0,75 mm ²
Upper end switch IN	8	X8	
Lock +12 V	9	X9	PVC-LSHF 2x1,5 mm ²
Lock GND	10	X10	
Thermal sensor +	11	X11	PVC 2x0,75 mm ²
Thermal sensor -	12	X12	
N	13	X13	
N	14	X14	
N	15	X15	
N	16		
N	17		
N	18		
N	19		
PE	20	X20	
PE	21	X21	
PE	22	X22	
PE	23		
Control button L	24		PVC-LSHF 3x2,5 mm ²
Control button UP	25		
Control button DOWN	26		

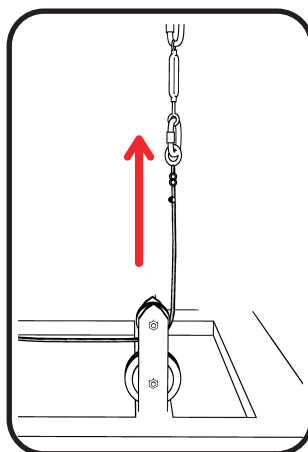
Electric circuit diagram



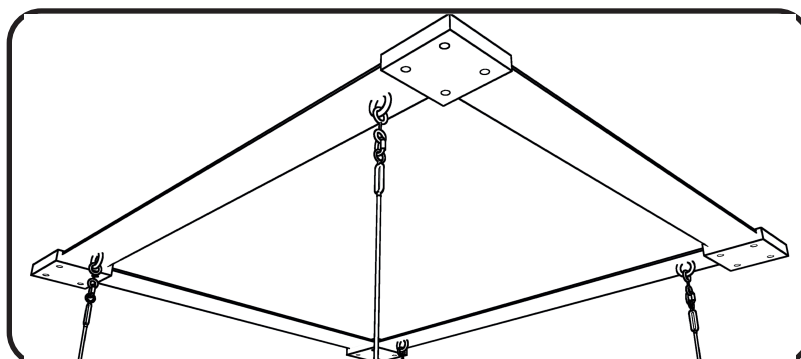
3. Assembly the main ceiling fasteners to the case.



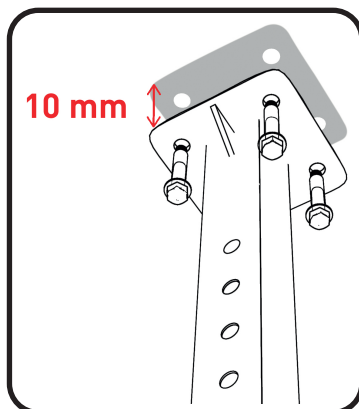
4. Disconnect the wire ropes from the case and uncoil them using CB.



5. Connect the wires to the ceiling inserts.

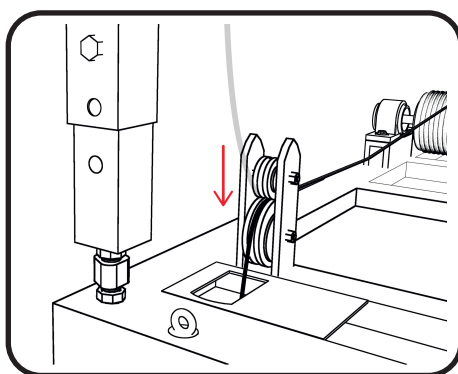


6. Start ascent of the mechanism up to the ceiling, leaving a small gap between the ceiling inserts and fasteners.

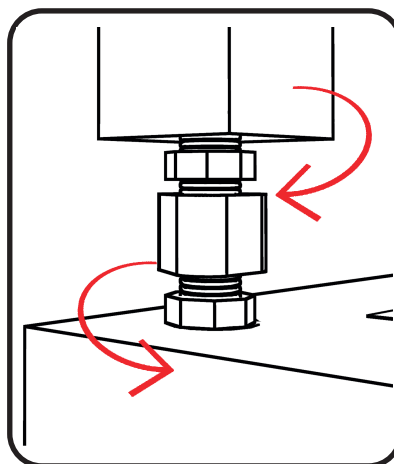
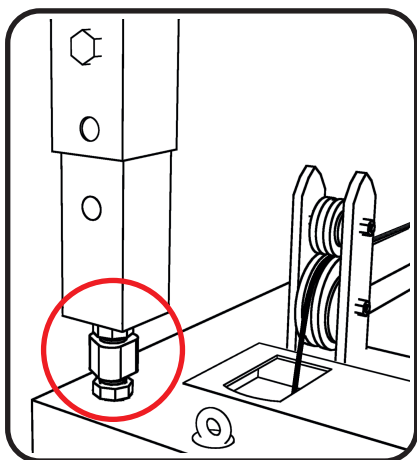


7. Adjust the fasteners to the insert using bolts.

8. Disconnect and settle down the wire ropes.

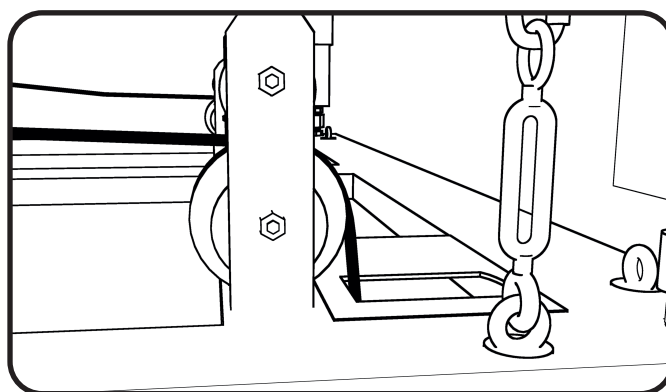
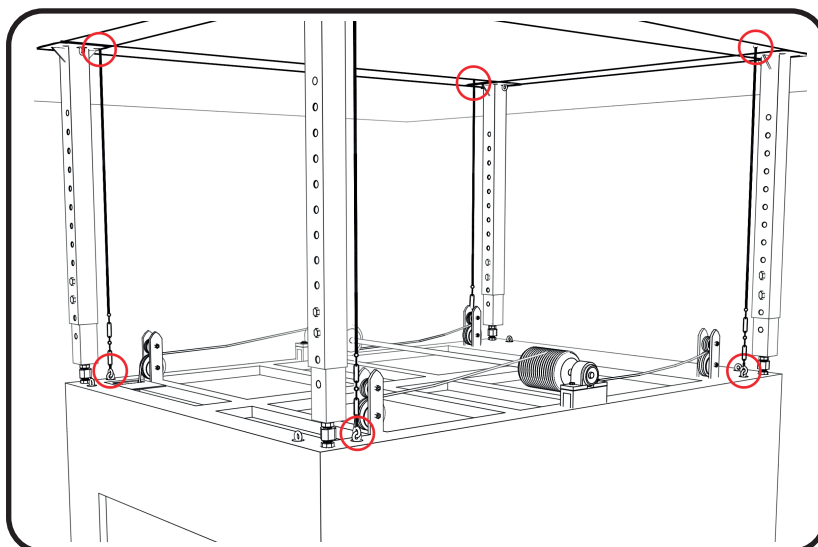


9. Adjust the system at the selected height using bolts and level.



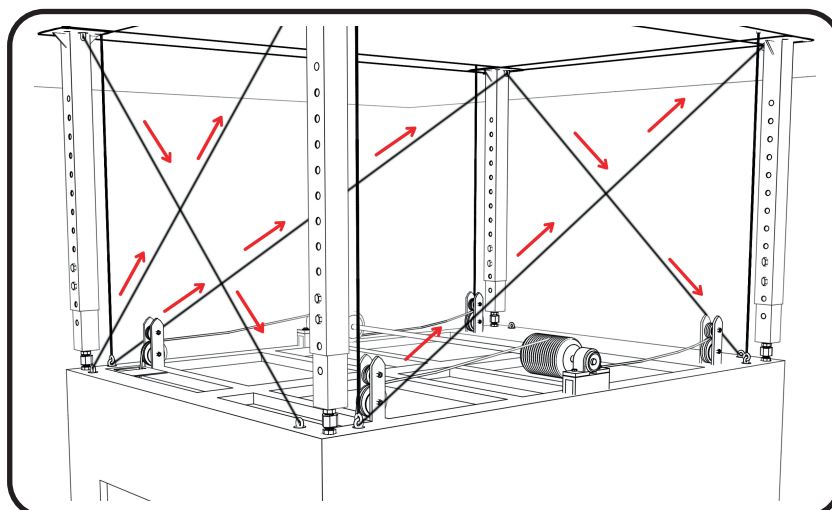
Leveling is very important. It influences the quality of the assembly and further operation.

10. Fasten the safety wire ropes.

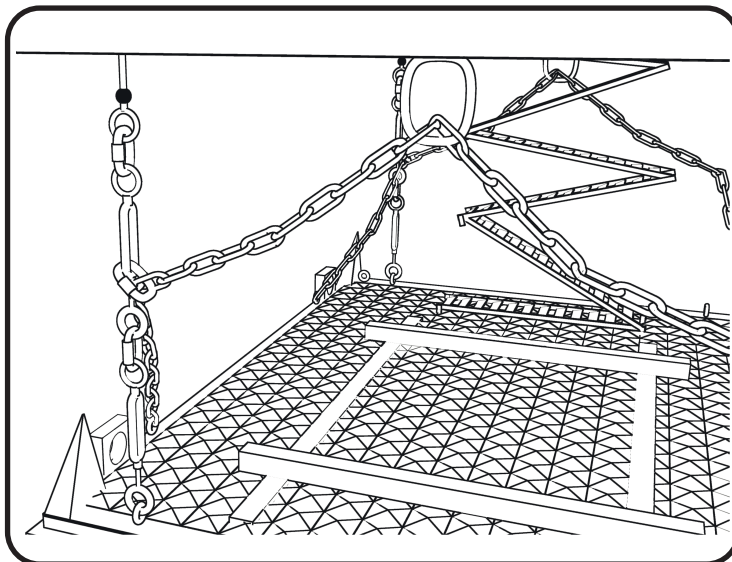


The system can't be used without fastened safety wire ropes.

11. Fasten the distance wire ropes to make the whole construction stable.



12. Settle down the wire ropes and fasten the lifting platform together with safety chains. Fasten the safety belts.

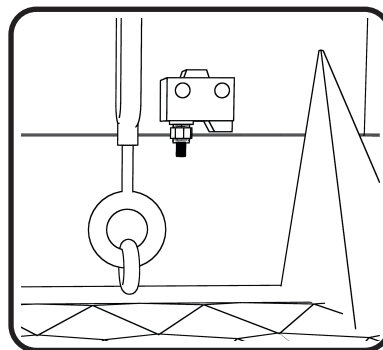
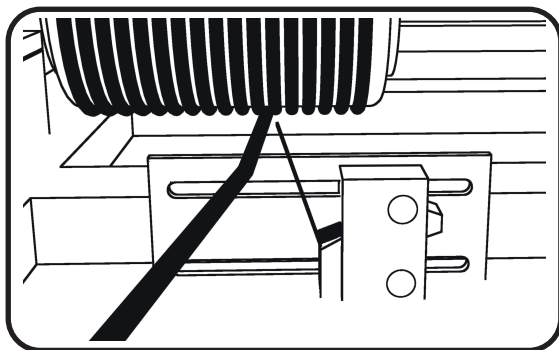


13. Lift the platform on the height of 5-7 cm from the case using screw coupling and level it.



***Platform must not be empty during the first ascent.
Wire ropes must be uncoiled and coiled under the load.***

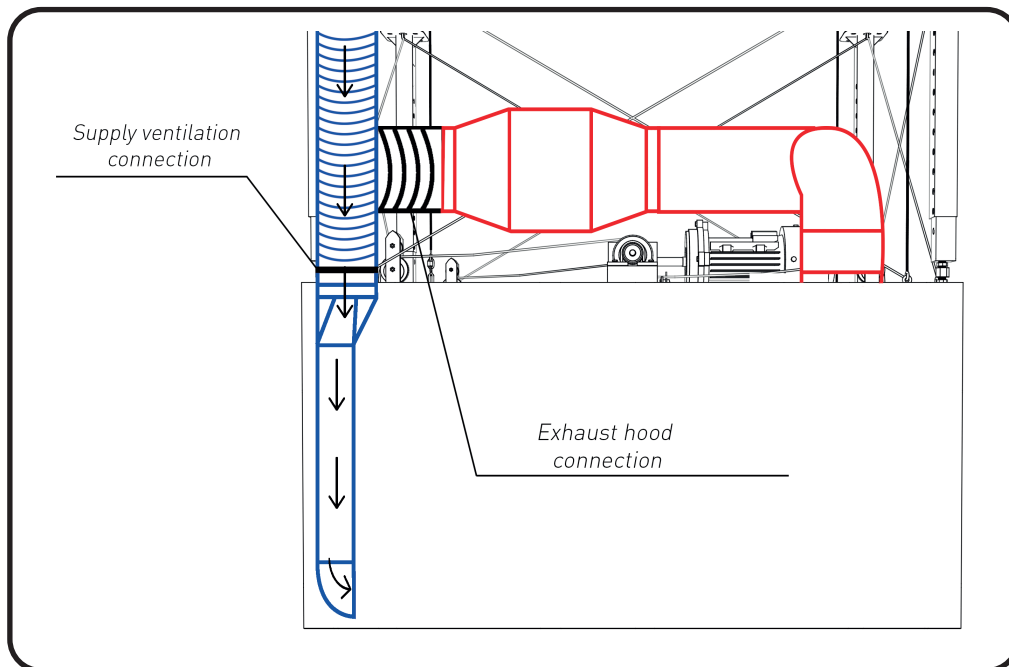
14. Adjust the end switches in upper and lower positions.



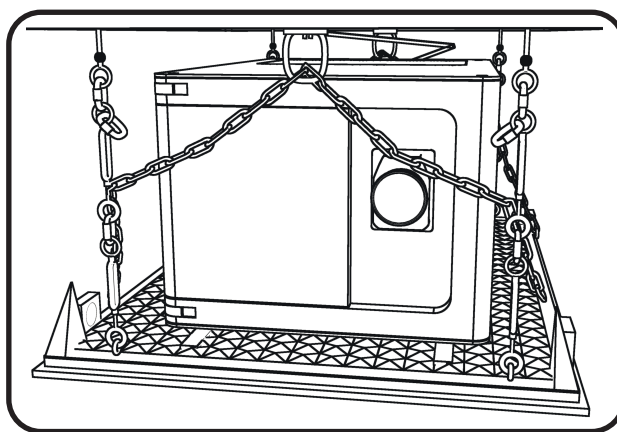
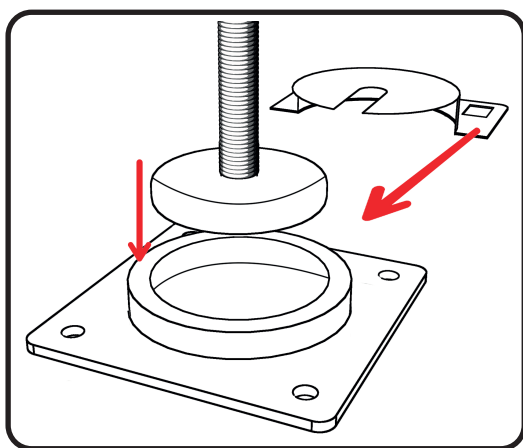
15. Please check the work of the mechanism and end switches in both positions.

16. Connect and adjust the ventilation system.

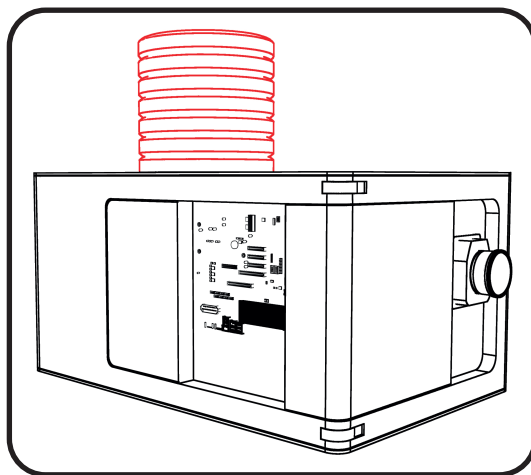
16.1. Connect the supply and exhaust ventilation.



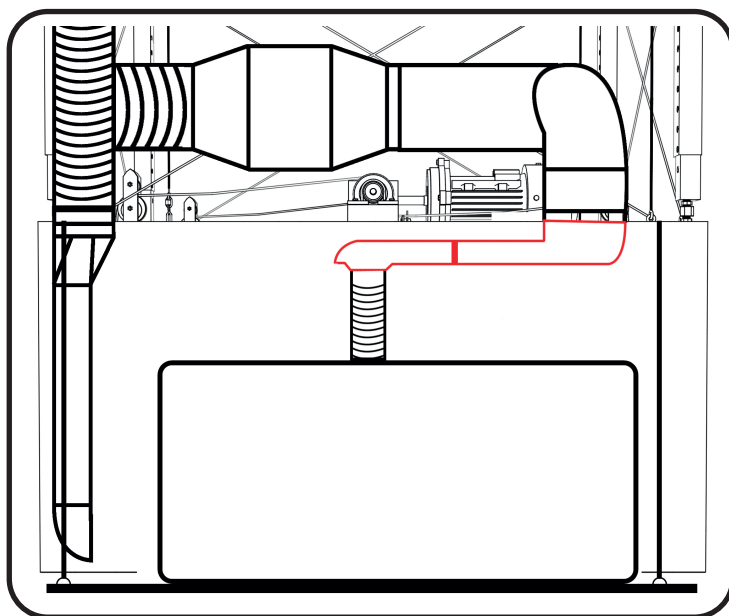
16.2. Put the projector into the fasteners of the platform.



16.3. Put the fluted adapter onto the exhaust hood flange of the projector and fasten using the clamp.



16.4. Lift the platform on the height of 5-10 cm from the case. Adjust and fasten the exhaust communications, center the exhaust flange with fluted adapter on the projector.



Leveling before the initial run is very important. Please check it and take necessary measures for leveling the system (using this manual).



Setting into operation must be done after with the permission of safety engineer.

KINOLIFT^{PRO} IS READY FOR OPEARTION!

5. OPERATION GUIDELINE

The system is ready for operation after assembly and power supply connection. It is possible to control the lifting mechanism using CS or CB. You require 2 keys (located in CS).



Disable the stop button in CS before you start. Insert the key and turn it clockwise - distinct click means the button is disabled.

CS operation:

1. Descent and ascent is performed by UP and DOWN buttons.
2. Press STOP button again when you are done.



CB operation:

1. Insert the key.
2. Turn the key clockwise and hold it in this position to make an ascent.
3. Descent is performed by turning the key counter-clockwise.



Movement starts in 3 seconds after the button is pressed for appropriate work of the safety locks.



Press STOP button in emergency case.

6. SAFETY PRECAUTIONS



Please keep the safe distance during the work with the system! Please make sure, that there is no one in 3m radius during ascent\descent of the device in order to avoid accidents!!!



De-energize the motor in case it need to be serviced!



***During the lifting:
Do not hold the lifting platform with hands!
Do not touch the wire cable!***



Make service inspection of the system at least once a year. Check integrity of the lifting system and its fastenings for damages.



Check the system for any malfunctions during technical inspection of the projector. In case any malfunctions are detected, do not use the system until it is maintained.

7. PRODUCT SUPPORT

Our customer service provides technical support as to the following questions:

- inquiries concerning given user manual;
- spare parts' supply;
- maintenance procedures;
- complex repair.

In any case, you need to refer system serial number, specified on the identification label, and shipping invoice.



Keep this user manual during whole exploitation term of the system.



Manufacturer reserves the right to make changes in technical documentation, including the user manual, without prior notice of the end user.

8. WARRANTY

Warranty term is a period during which the manufacturer assume liabilities as to charge-free repair or replacement of certain product.

Warranty term starts from date of transfer of goods to the buyer if other wasn't discussed.

KINOPROKAT company provides 36-month warranty.



Warranty doesn't cover cases of damage, misuse of the system or its unauthorized repair!



Warranty isn't applied to:

- Independent modification of the system and/or replacement of the components that are not discussed with the manufacturer;***
- Inappropriate use by the end user.***

We strongly recommend to report us about any disputable cases or questions as to setup and servicing!