

# Control Box

## CF11

CF11 control box series can drive up to 2 motors synchronously. The built-in switching power supply makes the control box very thin and easy to install. It can be divided into CF11D and CF11S versions according to functions.

The feature of CF11D is to control the 2-motor lifting desk and support the anti-pinch function to ensure safety during use.

The CF11S is characterized by the synchronization of two actuators for general applications, which is widely compatible with Moteck's standard actuators.



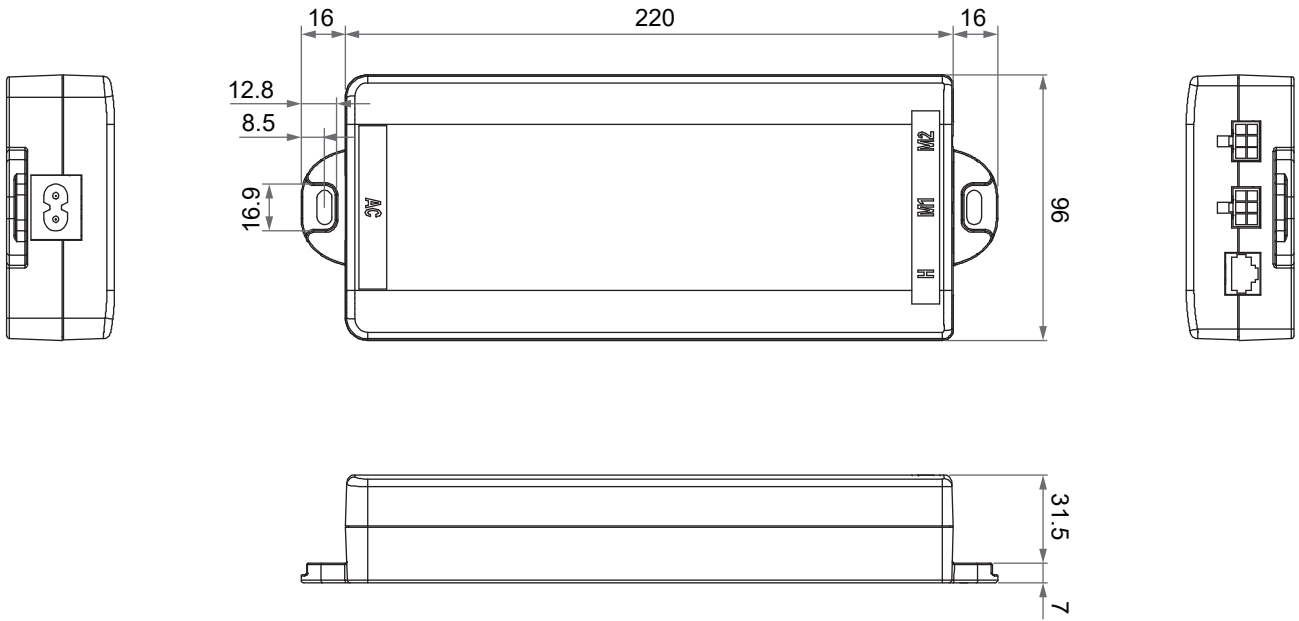
### Features

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- Main applications: Lifting desk (CF11D), general applications (CF11S)
- Input: 100 ~ 240V AC, 50/60Hz (SMPS)
- Output voltage: 32V DC
- Output rated current: 6A in total
- Power supply: Internal SMPS, 32V DC/4A (128W)
- Max. number of motors: 2 channels (synchronization)
- Max. number of controls: 1 channel
- Over-current protection function
- Duty cycle: 10%, max. 2 min. continuous operation in 20 min.
- Electric shock protection level: Class II
- Color: Black
- Power cord: Refer to AC Power Cord
- Position memory function
- Soft start / stop function
- Anti-pinch function (CF11D only)

## Dimensions

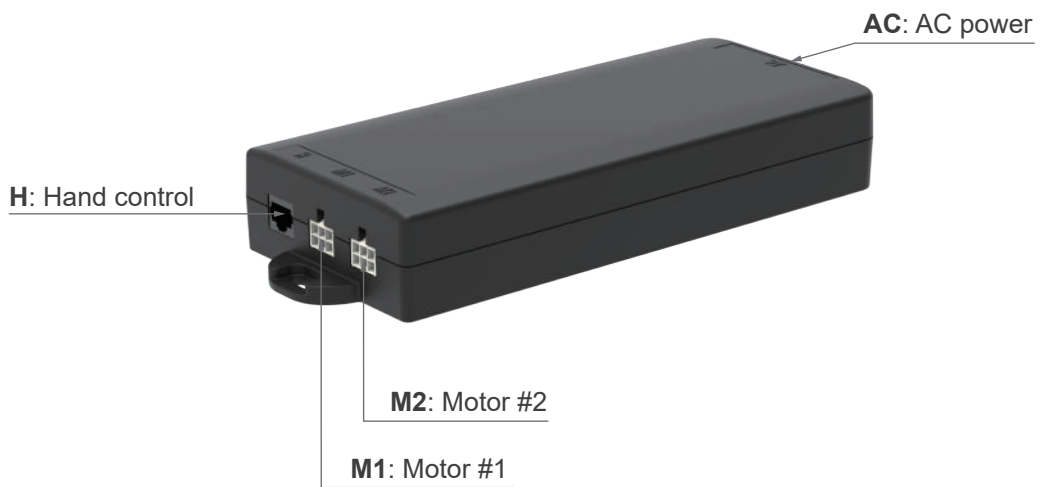
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Unit: mm

## I/O Introduction

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## Compatibility

### • CF11D Control Box

Product	Model	Compatible requirement
<b>Motor</b>	Lifting column: DLC2	<ul style="list-style-type: none"> <li>• With dual Hall effect sensors for positioning</li> <li>• With Moteck L3-type minifit 6-pin plug</li> </ul>
	Gear motor: DKM3, DKM4-LF	
	Actuator: DKL2, DKL3	
<b>Hand control</b>	DKP3, DP07, DP08	<ul style="list-style-type: none"> <li>• Moteck S2 control category</li> <li>• With Moteck E2-type RJ 10-pin plug</li> </ul>
	DKP4, DP05, DP11	<ul style="list-style-type: none"> <li>• Moteck P2 control category</li> <li>• With Moteck E2-type RJ 10-pin plug</li> </ul>

### • CF11S Control Box

Product	Model	Compatible requirement
<b>Actuator</b>	BD61, BD62, FD40, FD60, FD61, GD70	<ul style="list-style-type: none"> <li>• With dual Hall effect sensors for positioning</li> <li>• With Moteck L3-type minifit 6-pin plug</li> </ul>
<b>Hand control</b>	HDU, HM, HR, HT, HTF, DKP4, DP05, DP11	<ul style="list-style-type: none"> <li>• Moteck P2 control category</li> <li>• With Moteck E2-type RJ 10-pin plug</li> </ul>

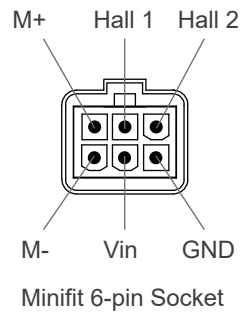


notice

To be compatible with CF11D/CF11S, the dual Hall effect feedback of the actuators must belong to the "A" phase type defined by MOTECK.

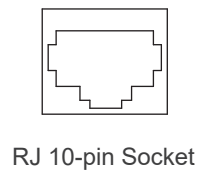
## Socket

### • Motor socket for Moteck L3-type minifit plug


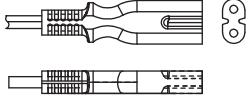
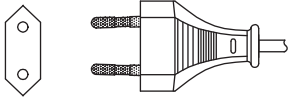
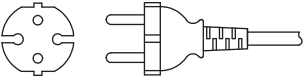
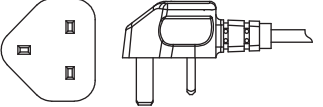


**Note:** Connect M+ to “Vdc +” & M- to “Vdc -“ of DC power to extend the motor.  
Switch the polarity of DC input to retract it.

### • Hand control socket for Moteck E2-type RJ plug



### • AC Power cord

Plug type (plug in the wall)	Code		Connector type (plug in the control box)
	2000mm straight	3000mm straight	
US 2-Pin Plug 	<b>A2</b>	<b>A3</b>	IEC 60320 C7 type connector 
EU 2-Pin Plug 	<b>C2</b>	<b>C3</b>	
EU CEE 7/17(VDE) 2-Pin Plug 	<b>N/A</b>	<b>V3</b>	
UK 3-Pin Plug 	<b>N/A</b>	<b>G3</b>	

## Operating Guide

### • Auto Stroke Learning

After installing the entire system correctly, you need to perform Auto Stroke Learning before you start using it. Please follow the steps of button control or touch control.

- CF11D with Key control (Take DP08 hand control as an example)

Step 1: Make sure that the power supply is connected and there are no obstacles in the moving path of the lifting table.

Step 2: The hand control displays **SEt**, press **▲** and **S** buttons at the same time for 2 seconds, **SEt** flashes and starts automatic learning.

The lifting table will automatically move to the lowest position, move to the highest position, and then return to the lowest position to complete automatic learning.

- CF11D with Touch control (Take DP07 hand control as an example)

Step 1: Make sure that the power supply is connected and there are no obstacles in the moving path of the lifting table.

Step 2: The touch hand control displays **S**, touch **S** to enter learning mode.

Step 3: Touch **▲** and **S** buttons at the same time until **-S-** is displayed, **SEt** flashes and starts automatic learning. The lifting table will automatically move to the lowest position, move to the highest position, and then return to the lowest position to complete automatic learning.

- CF11S with DKP4 Hand Control

Step 1: Make sure that the power supply is connected and there are no obstacles in the stroke.

Step 2: Press **▲** and **▼** buttons at the same time for 2 seconds, and starts automatic learning. The actuator will automatically move to the lowest position, move to the highest position, and then return to the lowest position to complete automatic learning.

*Remarks: If the process of Auto stroke learning is interrupted, you need to perform auto learning again.*

### • Calibrating the Height (CF11D only)

When the height display is blinking, it means the height display needs to be recalibrated.

The possible causes are as follows:

- Sudden power interruption during lifting movement
- When the system detects an error in the table height. Please follow the steps below.

Step 1: Make sure there are no obstacles in the moving path of the lifting table

Step 2: While the height display is blinking, press button **▼**, and the lifting table will automatically move to the lowest position to complete the calibration.

### • Error Code Summary

Error Code	Information	Recommended Disposition
<b>H0t</b>	Overheat-System detects the action exceeding the rated duty cycle and prevents it from overheating.	Stop operating until error code is called off automatically.
<b>E 16</b>	<b>Block:</b> System detects a sudden resistance like pinch during moving.	Check carefully to ensure nothing blocked the way before continue operating. Remove it if found.
<b>E01</b>	<b>Overload:</b> System detects excessive weight arrangement not following the rated capacity.	Do not exceed the max. load of actuator.



For more information about the Hand control operation guide, please refer to the corresponding product data sheet, which can be downloaded from the MOTECK website.

## Ordering Key

**CF11 S - 32 - C - 2 - C3**

<b>Function version</b>	<b>D:</b> For lifting desk application <b>S:</b> For general application
<b>Output voltage</b>	<b>32:</b> 32V DC
<b>Power supply</b>	<b>C:</b> Internal SMPS, 32V DC/4A (128W)
<b>Number of motor</b>	<b>2:</b> 2 channels
<b>AC Power cord</b> (Refer to Page 4)	<b>A2:</b> US 2-Pin plug, 2000mm straight <b>A3:</b> US 2-Pin plug, 3000mm straight <b>C2:</b> EU 2-Pin plug, 2000mm straight <b>C3:</b> EU 2-Pin plug, 3000mm straight <b>V3:</b> CEE 7/17(VDE) 2-Pin plug, 3000mm straight <b>G3:</b> UK 3-Pin plug, 3000mm straight <b>00:</b> Without AC Power cord

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