



DV Hoist / Motor Controller

Instruction Manual

Models:

MCP4-DV-CEE.H16

MCP4-DV-CEE.SX19

version 1.0 since 3 February 2020

ATTENTION!

This instruction manual contains important information about the installation and the use of the equipment. Please read and follow these instructions carefully.

Always ensure that the power to the equipment is disconnected before opening the equipment or commencing any maintenance work.

1. General information

IMPORTANT INSTRUCTIONS!

All safety and operating instructions should be read before the equipment is installed or operated.

IMPORTANT SAFETY INFORMATION

The following general safety precautions have to be observed during all phases of operation, service, and the repair of this equipment. Failure to comply with these precautions or with specific warnings in this manual violates safety standards of design, manufacture, and the intended use of this equipment.

Do not operate in an explosive atmosphere!

Do not operate this equipment in the presence of flammable gases or fumes. Operation of any electrical instrument in such an environment constitutes a definite safety hazard.

Water, moisture, heat and humidity

Do not operate this equipment near water, in areas with wet floors or in high humidity atmosphere where condensation forms on the equipment. It should never be placed near or over a heat register or other source of heated air and it should not be installed or operated without proper ventilation.

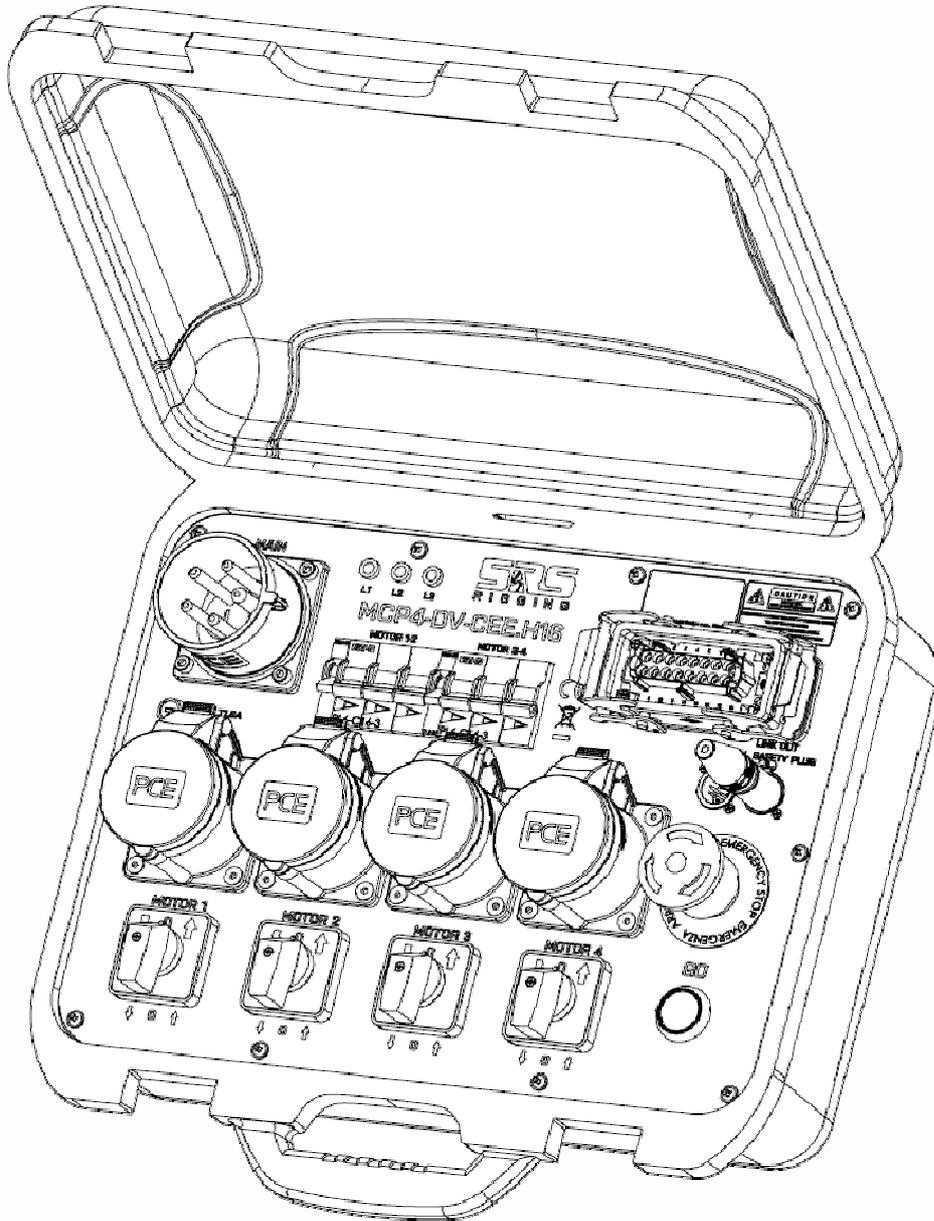
2. Functions and Control

Motor Controller is designed to control up to 4 electrically compatible direct voltage motors separately or simultaneously; controlled via cable remote controller MCP4-DV REMOTE.

Each device is equipped with MPA /Manual Phase Align/ module that allows changing the phases easily by rotating pins L2 and L3 on the main connector.

All electrical components carry their own individual CE and comply with European Directives. The components are housed in a robust steel 19" rack casing with powder coating. Unit complies with the CE according to the Certification of Conformity that is attached to this manual.

3. MCP4-DV-CEE.H16 CASE



EMERGENCY STOP:

Emergency is a RED button located in the middle of yellow circle. Emergency stop button turns the MCP4-DV controller to an inactive state and stays in it. To release it, rotate the emergency stop clockwise.

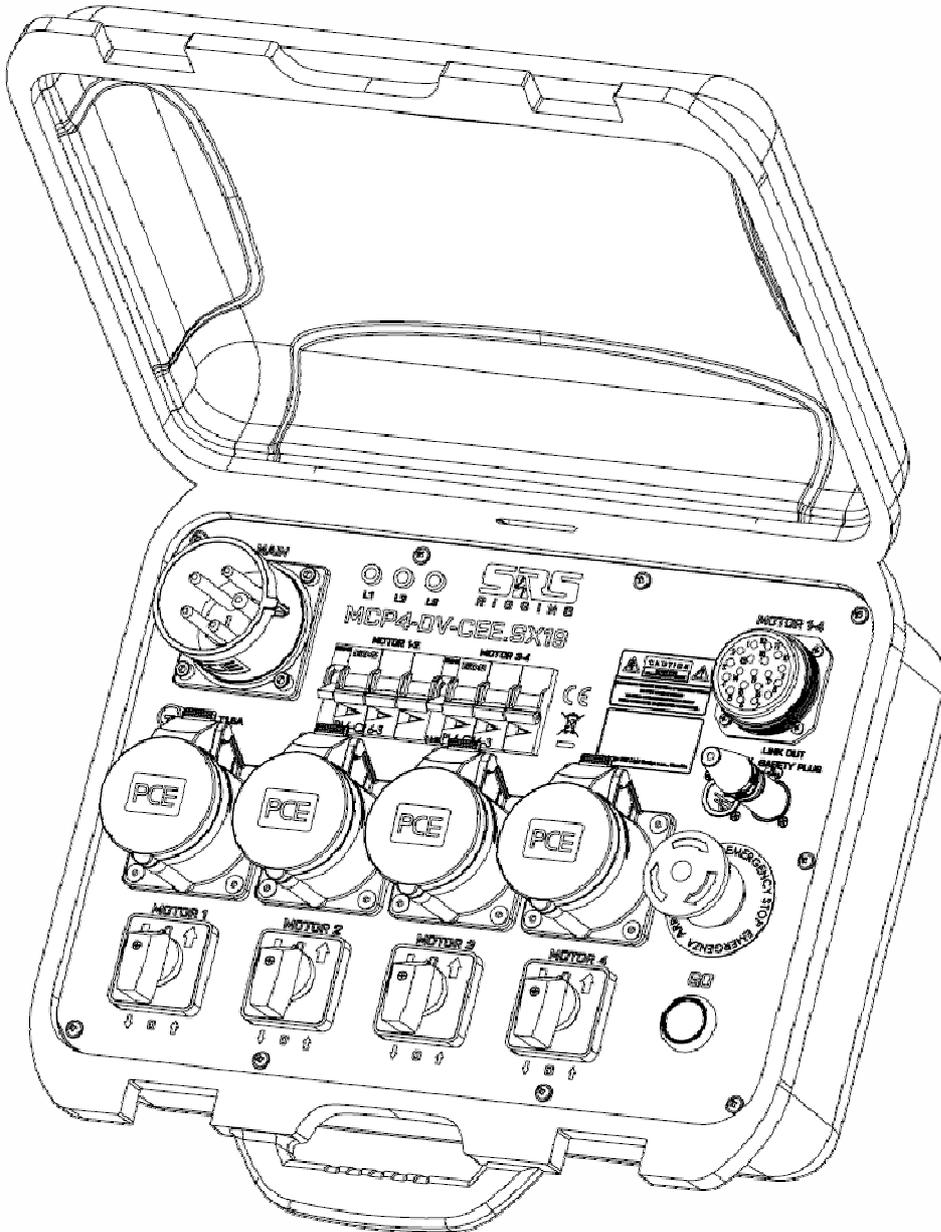
GO:

When active, the green pushbutton turns the selected channels of Hoist Control system ON. Once the GO button is released, the energizing of the hoists is turned off.

LINK:

For link of several controllers use 4pin MC-x-LINK cable. Safety breach needs to be connected in last controller of chain. See schematics for more details.

4. MCP4-DV-CEE.SX19 CASE



EMERGENCY STOP:

Emergency is a RED button located in the middle of yellow circle. Emergency stop button turns the MCP4-DV controller to an inactive state and stays in it. To release it, rotate the emergency stop clockwise.

GO:

When active, the green pushbutton turns the selected channels of Hoist Control system ON. Once the GO button is released, the energizing of the hoists is turned off.

LINK:

For link of several controllers use 4pin MC-x-LINK cable. Safety breach needs to be connected in last controller of chain. See schematics for more details.

5. Operation

The Motors/Hoists connected to the MCP4-DV controller can be activated individually or simultaneously using the GO button located on the front panel, via cable remote or by linked controller. The selection of the hoists that are controlled is made by switches located on front panel.

Several MCP4-DV controllers can be linked together to create bigger systems.

5.1 How to start

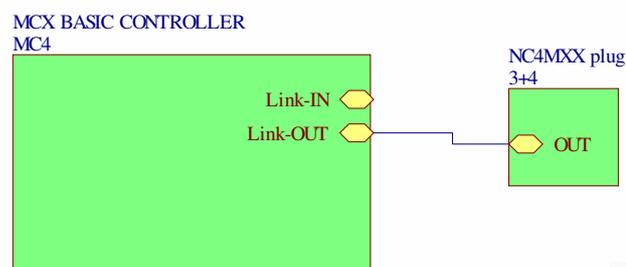
- Connect the CEE32A/5p plug to the AC400V power supply.
- If the main is connected. The L1, L2, L3 indication lights will be on
- If there is 123 align, all outputs will work normally.
- If there is 132 align, the outputs will work reversely. In order to switch the align of phases to 123 via plug rotation circuit inside mains plug
- Connect the plugs of the electric hoists to the sockets of the CEE16A/4p or CEE16A/5p /*on request/
- Check if all emergency STOP buttons /on device and all other linked devices in system/ are released and there is presence of security plug/breach with short circuit in between pins 3 and 4 on last unit in system.

5.2 To Move a Single/Several Motor(s):

- Set the UP/DOWN switch for each motor to the desired direction.
- Hold the GO button until all motors are moved the desired height and release.

5.3 Controller normal operation:

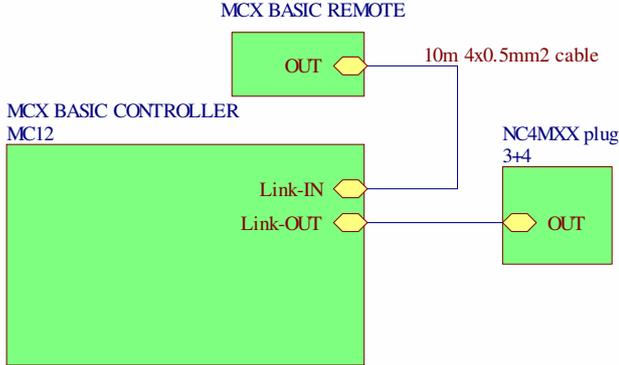
In this mode, the controller is operated by GO and E-STOP buttons located on the front panel.



During operation, the NC4MXX plug must be connected to the last controller in chain

5.4 Controller with remote operation:

In this mode, the controller is operated by GO and E-STOP buttons located either on the front panel or on the MCP4-DV REMOTE.

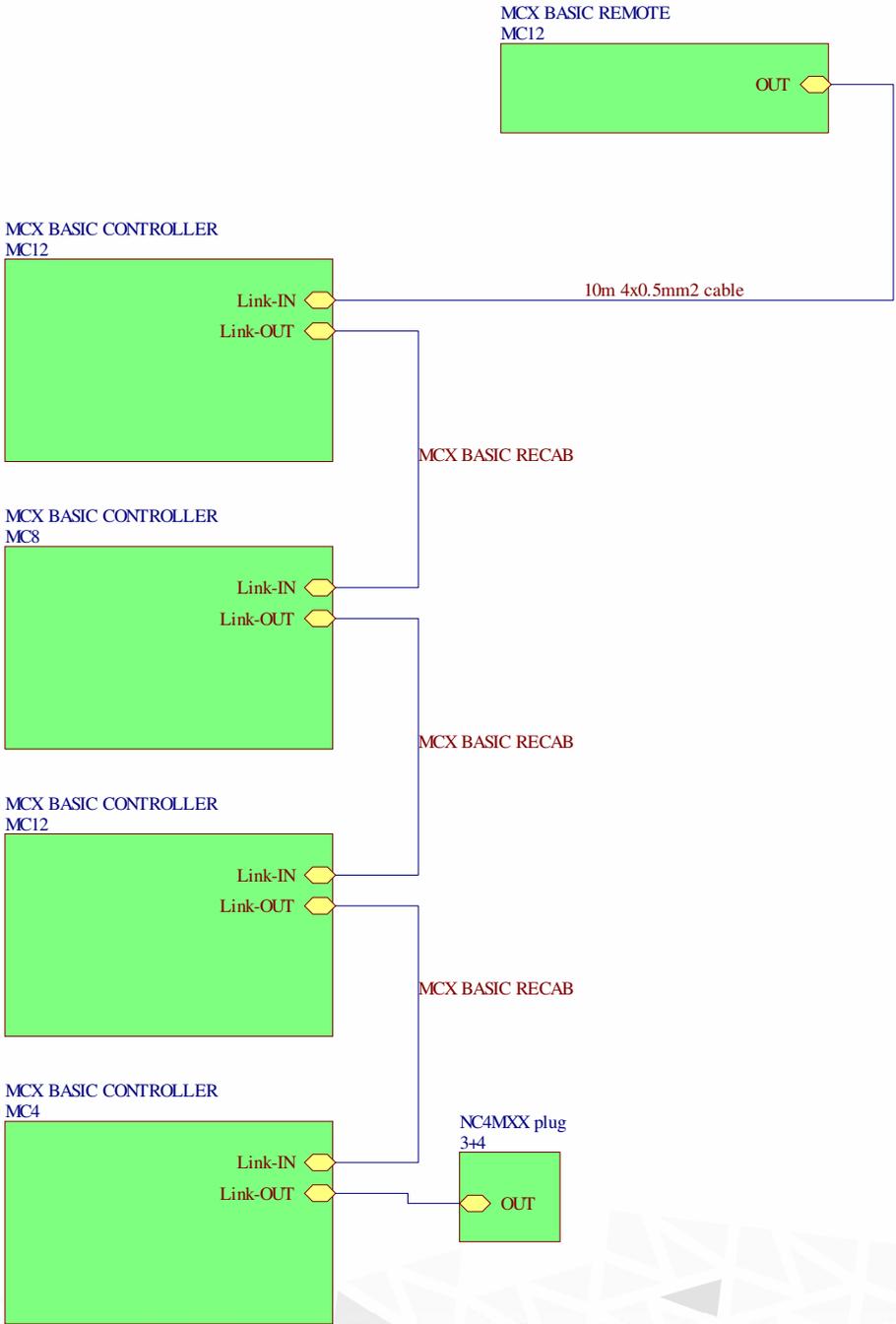


During operation, the NC4MXX plug must be connected to the last controller in chain

5.5 Controller link operation:

In this mode, all linked controllers are operated by any GO and E-STOP button located either on the front panel or on the MCP4-DV REMOTE.

Don't forget to plug the NC4MXX plug to the last controller in chain.



During operation, the NC4MXX plug must be connected to the last controller in chain

6. Description of connectors

6.1 LINK in/out connector

Lines 3 and 4 are normally closed – NC, by default for normal operation. Due to this, it is necessary to fit the safety breach /MXX connector/ to the link OUT connector with the short circuit between pins 3 and 4 for normal operation.

This breach must be connected to the last controller in system if the controllers are linked.

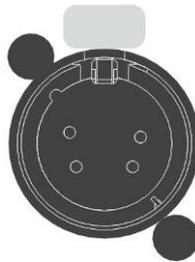
Neutrik NC4FXX

Pin 1. Remote go in

Pin 2. Remote go out

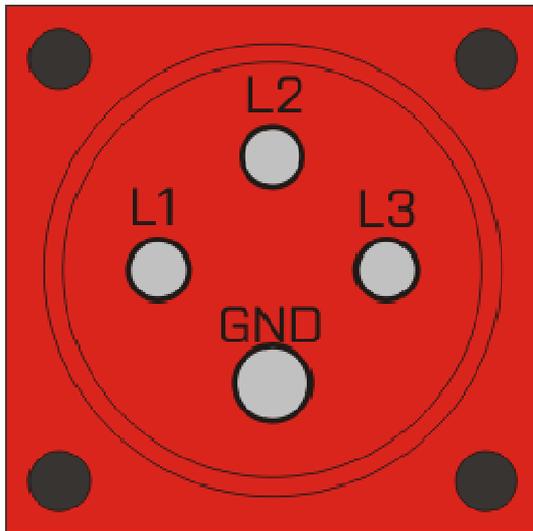
Pin 3. Safety in

Pin 4. Safety out



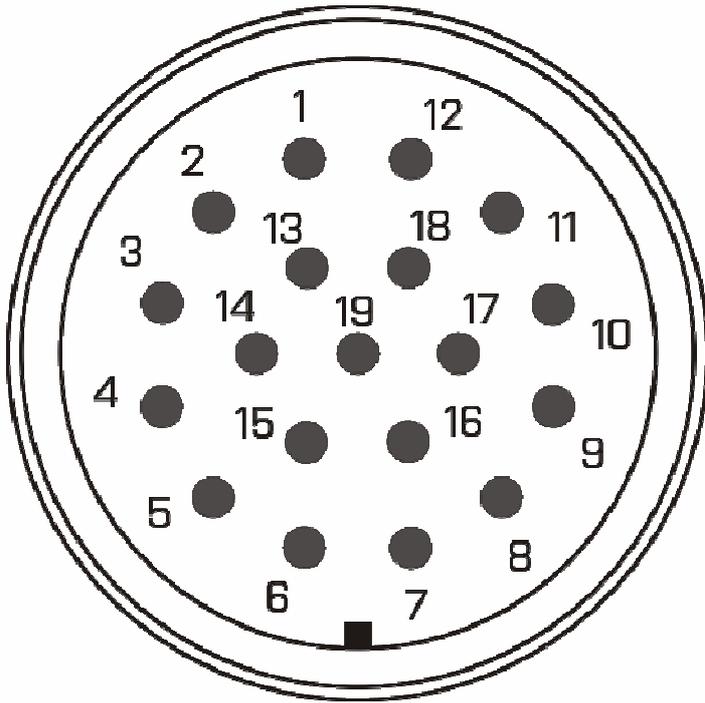
6.2 CEE16/4p motor/hoist connector

To change the direction of movement, the rotation from 123 to 132 is required. In an inactive state, this connector is without power.



On request, unit can be equipped with CEE16/5p connector. In this case the NEUTRAL on output connector is not connected.

944072 Socapex 19 pin, SRS standard type

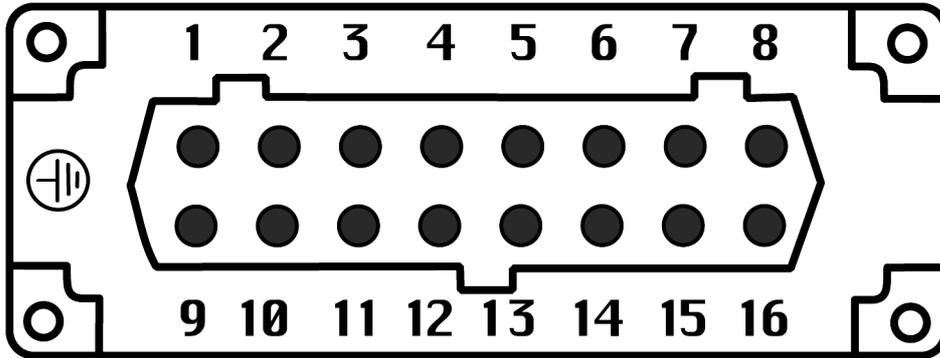


Motor 1-4	
Pin	Wire
1	L1 Motor 1
2	L2 Motor 1
3	L3 Motor 1
4	L1 Motor 2
5	L2 Motor 2
6	L3 Motor 2
7	L1 Motor 3
8	L2 Motor 3
9	L3 Motor 3
10	L1 Motor 4
11	L2 Motor 4
12	L3 Motor 4
13	GND
14	GND
15	GND
16	GND
17	GND
18	GND
19	GND

Motor 5-8	
Pin	Wire
1	L1 Motor 5
2	L2 Motor 5
3	L3 Motor 5
4	L1 Motor 6
5	L2 Motor 6
6	L3 Motor 6
7	L1 Motor 7
8	L2 Motor 7
9	L3 Motor 7
10	L1 Motor 8
11	L2 Motor 8
12	L3 Motor 8
13	GND
14	GND
15	GND
16	GND
17	GND
18	GND
19	GND

Motor 9-12	
Pin	Wire
1	L1 Motor 9
2	L2 Motor 9
3	L3 Motor 9
4	L1 Motor 10
5	L2 Motor 10
6	L3 Motor 10
7	L1 Motor 11
8	L2 Motor 11
9	L3 Motor 11
10	L1 Motor 12
11	L2 Motor 12
12	L3 Motor 12
13	GND
14	GND
15	GND
16	GND
17	GND
18	GND
19	GND

944113 Harting 16 pin, SRS standard wiring

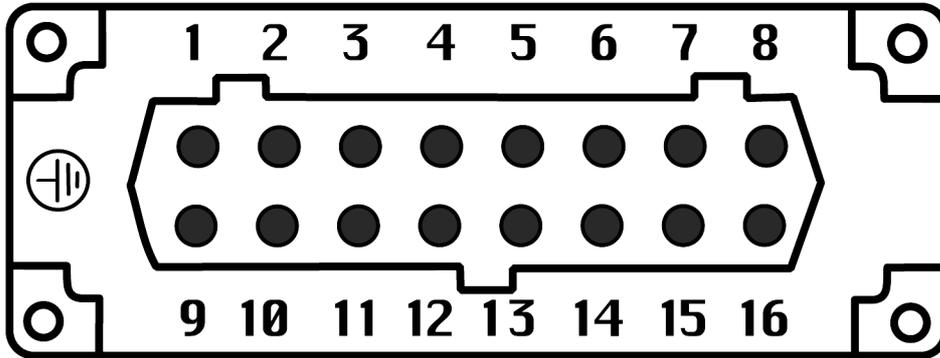


Motor 1-4	
Pin	Wire
1	L1 Motor 1
2	L2 Motor 1
3	L3 Motor 1
4	L1 Motor 2
5	L2 Motor 2
6	L3 Motor 2
7	L1 Motor 3
8	L2 Motor 3
9	L3 Motor 3
10	L1 Motor 4
11	L2 Motor 4
12	L3 Motor 4
13	GND
14	GND
15	GND
16	GND
GND	GND

Motor 5-8	
Pin	Wire
1	L1 Motor 5
2	L2 Motor 5
3	L3 Motor 5
4	L1 Motor 6
5	L2 Motor 6
6	L3 Motor 6
7	L1 Motor 7
8	L2 Motor 7
9	L3 Motor 7
10	L1 Motor 8
11	L2 Motor 8
12	L3 Motor 8
13	GND
14	GND
15	GND
16	GND
GND	GND

Motor 9-12	
Pin	Wire
1	L1 Motor 9
2	L2 Motor 9
3	L3 Motor 9
4	L1 Motor 10
5	L2 Motor 10
6	L3 Motor 10
7	L1 Motor 11
8	L2 Motor 11
9	L3 Motor 11
10	L1 Motor 12
11	L2 Motor 12
12	L3 Motor 12
13	GND
14	GND
15	GND
16	GND
GND	GND

944062 Harting 16 pin, PROLYTE wiring



Motor 1-4	
Pin	Wire
1	L1 Motor 1
2	L2 Motor 1
3	L3 Motor 1
4	GND
5	L1 Motor 2
6	L2 Motor 2
7	L3 Motor 2
8	GND
9	L1 Motor 3
10	L2 Motor 3
11	L3 Motor 3
12	GND
13	L1 Motor 4
14	L2 Motor 4
15	L3 Motor 4
16	GND

Motor 5-8	
Pin	Wire
1	L1 Motor 5
2	L2 Motor 5
3	L3 Motor 5
4	GND
5	L1 Motor 6
6	L2 Motor 6
7	L3 Motor 6
8	GND
9	L1 Motor 7
10	L2 Motor 7
11	L3 Motor 7
12	GND
13	L1 Motor 8
14	L2 Motor 8
15	L3 Motor 8
16	GND

Motor 9-12	
Pin	Wire
1	L1 Motor 9
2	L2 Motor 9
3	L3 Motor 9
4	GND
5	L1 Motor 10
6	L2 Motor 10
7	L3 Motor 10
8	GND
9	L1 Motor 11
10	L2 Motor 11
11	L3 Motor 11
12	GND
13	L1 Motor 12
14	L2 Motor 12
15	L3 Motor 12
16	GND

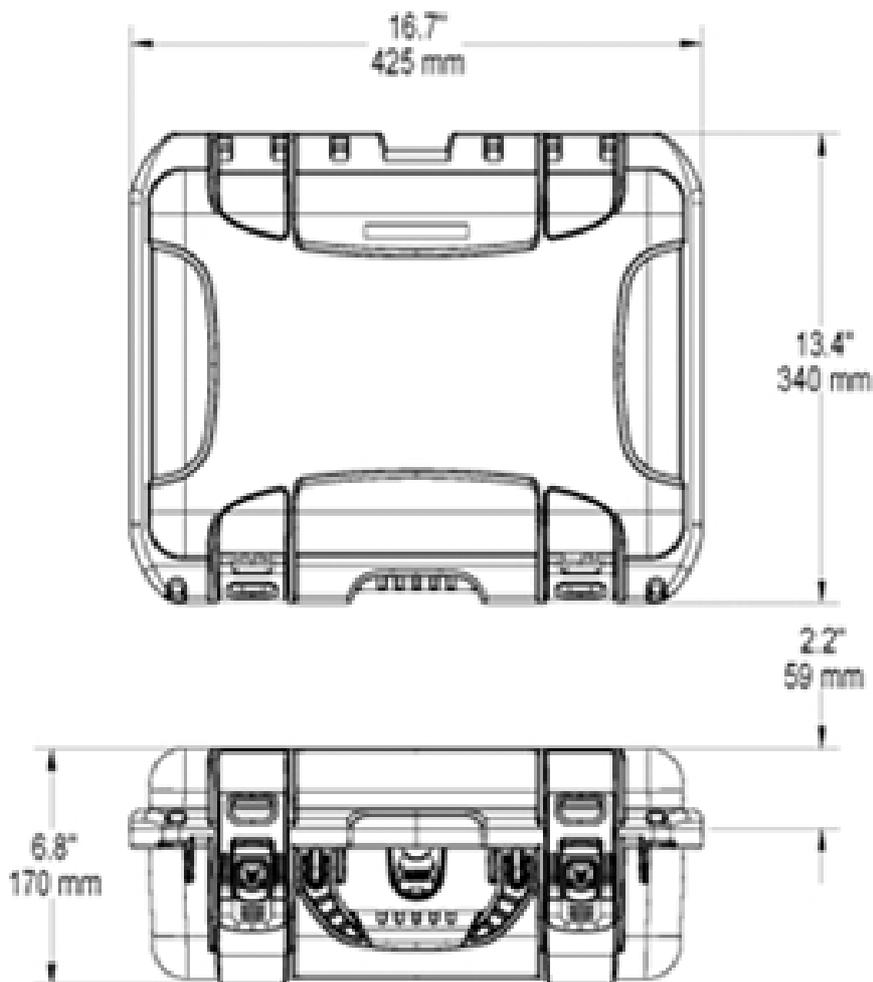
6.3 Protection and Safety:

- Input CEE32/5p
- 2x MCB C16A overcurrent protection
- Each two hoist are protected by single MCB C16A/3p
- MPA – Manual Phase Align
- Mains contactor

Warning: Controller don't have life protection by RCD 30mA protection so it need be connected to protected socket by RCD 30mA. This is duty of user of the hoist controller according local regulations.

6.4 Dimensions /W x D x H/ & Weight

MCP4-DV-CEE+H16xSX19: Plastic case: 340 x 425 x 170 mm, weight: 7.7kg



7. Warranty

MCP4-DV hoist controller is covered by a 2-year manufacturer's warranty. For extended warranty conditions, please contact the manufacturer at sales@srslight.com.

The guarantee covers the original factory installed components of the controller and their correct functioning.

The warranty voids if any part or replacement component is installed or modified without authorization from the manufacturer and/or the internal circuit is tampered or modified and/or the controller is operated outside of normal using conditions – electrical power supply is not conform or there is connection error or mechanical damage of controller, including overload and improper use.

The manufacturer always helps with the repair of each unit.



DECLARATION OF CONFORMITY

According to the specification of Machinery Directive 2006/42/CE, Annex II A:

Name of producer: SRS Group s.r.o.
Address of producer: Rybníčná 38/B
821 07 Bratislava
Slovakia

Declares that the product

Name of product: **MCP4**
Type: **MCP4-DV-CEE.SX19**
MCP4-DV-CEE.H16
Year of construction: **2017**

Corresponds with the following harmonized standards:

Safety: EN 60065
EN 60950
EN 60204-1
EN 13850
EN 12100-2
EMC: EN55103-1, resp. EN55103-2

And is in compliance with following requirements:

Machinery directive: 2006/42/CE
Low Voltage directive: 2014/35/CE
Electromagnetic compatibility directive: 2014/30/CE

Bratislava, 27 June 2017

SRS
GROUP
SRS Group s.r.o.
Rybníčná 38/B
821 07 Bratislava
Slovak Republic
SK2022726629
IČO: 44520433
DIČ: 2022726629

SRS Group s.r.o.





Copyright 2017 SRS Group, s.r.o. | Specifications subject to change without notice.
Document: MCP4-DV-CEE+H16.SX19_en_manual_M135.doc | Version 1.0 | Actual as of: 3
February 2020



SRS Group s.r.o.

Rybnicna 38/B | 831 07 Bratislava | Slovakia

Phone: +421 2 32 661 800

Email: sales@srs-group.com | www.srs-group.com

