



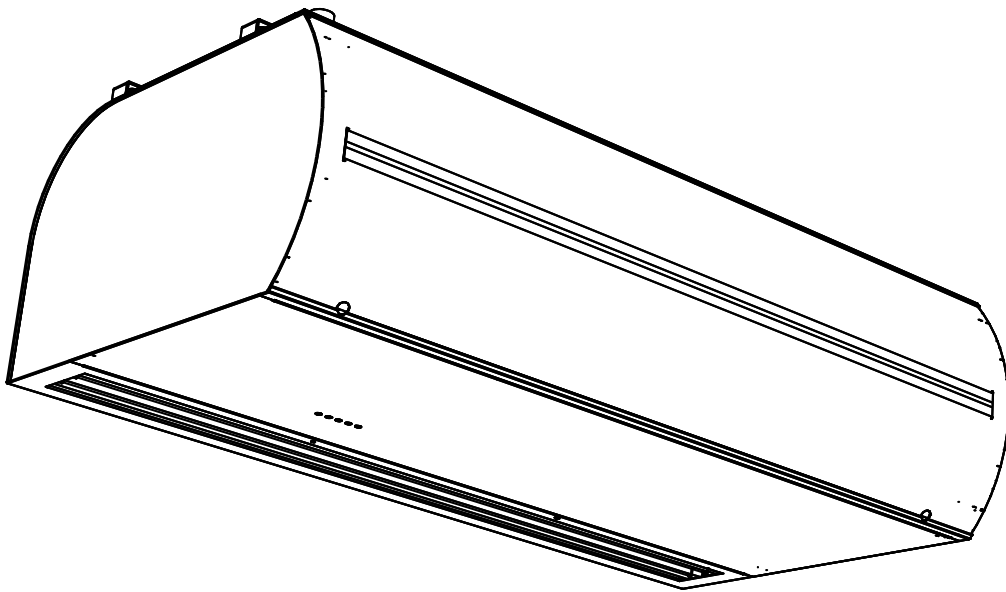
PARTNER  
IN VENTILATION  
2VV.CZ

EN

# STANDESSE EC

VCST4 EC






INSTALLATION



CE EAC

# 1. BEFORE YOU BEGIN

Meaning of symbols in the manual:

SYMBOL		MEANING
	<b>ATTENTION!</b>	Warning/caution
	<b>DO NOT OVERLOOK!</b>	Important instructions
	<b>YOU WILL NEED NOTE</b>	Practical tips and information
	<b>TECHNICAL INFORMATION</b>	More detailed technical information
	<b>LINK</b>	Refer to other parts/sections of the manual



Before installation, thoroughly read the section "Safe use of air curtains". It contains all instructions on the safe and correct use of the product.

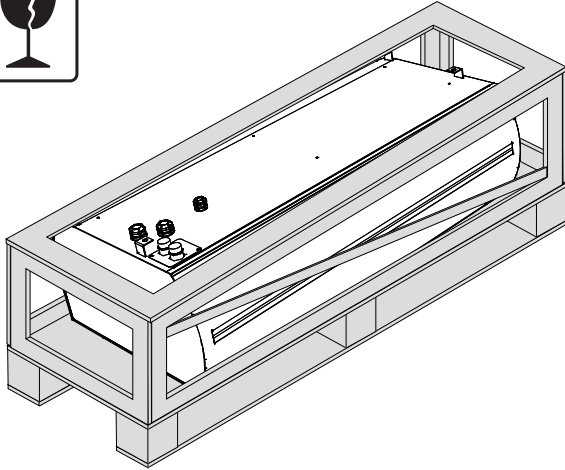
This manual contains important instructions to ensure correct installation of the air curtain. Before installation, read all of the following instructions thoroughly and then adhere to them! The manufacturer reserves the right to make changes, including to technical documentation without prior notice. Save this user manual for further use. The instructions in this manual are a part of the product.

## Statement of compliance

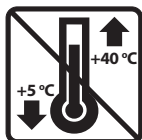
You will find the details at the [www.2vv.cz](http://www.2vv.cz) website

## 2. UNPACKING

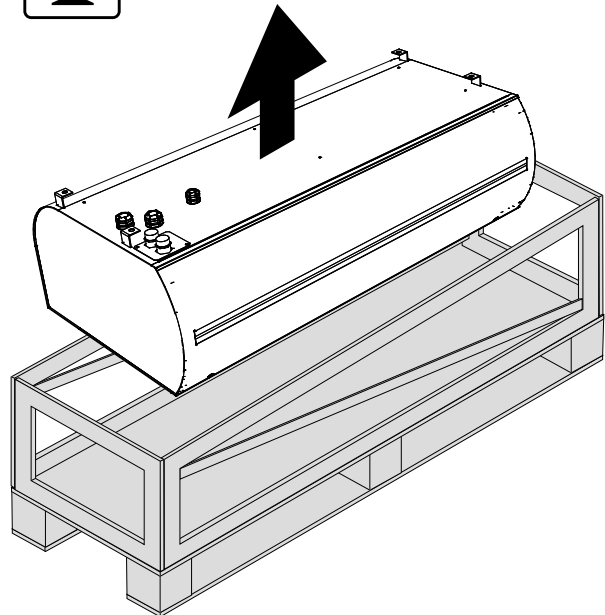
### 2.1 CHECK THE SHIPMENT



- After delivery, immediately check to see if the packaged product is damaged. If the packaging is damaged contact the delivery service. If the complaint is not filed in time, your claim may not be valid later.
- Check to see if it is the same product you ordered. If there are any discrepancies, do not unpack the curtain, and immediately report the defect to the supplier.
- After unpacking, check to see if the curtain and other parts are in order. If you have any doubts, contact the supplier.
- Never install a damaged air curtain!
- If you do not unpack the curtain immediately after delivery, it must be stored in a dry indoor environment with an ambient temperature between **+5 °C and +40 °C**



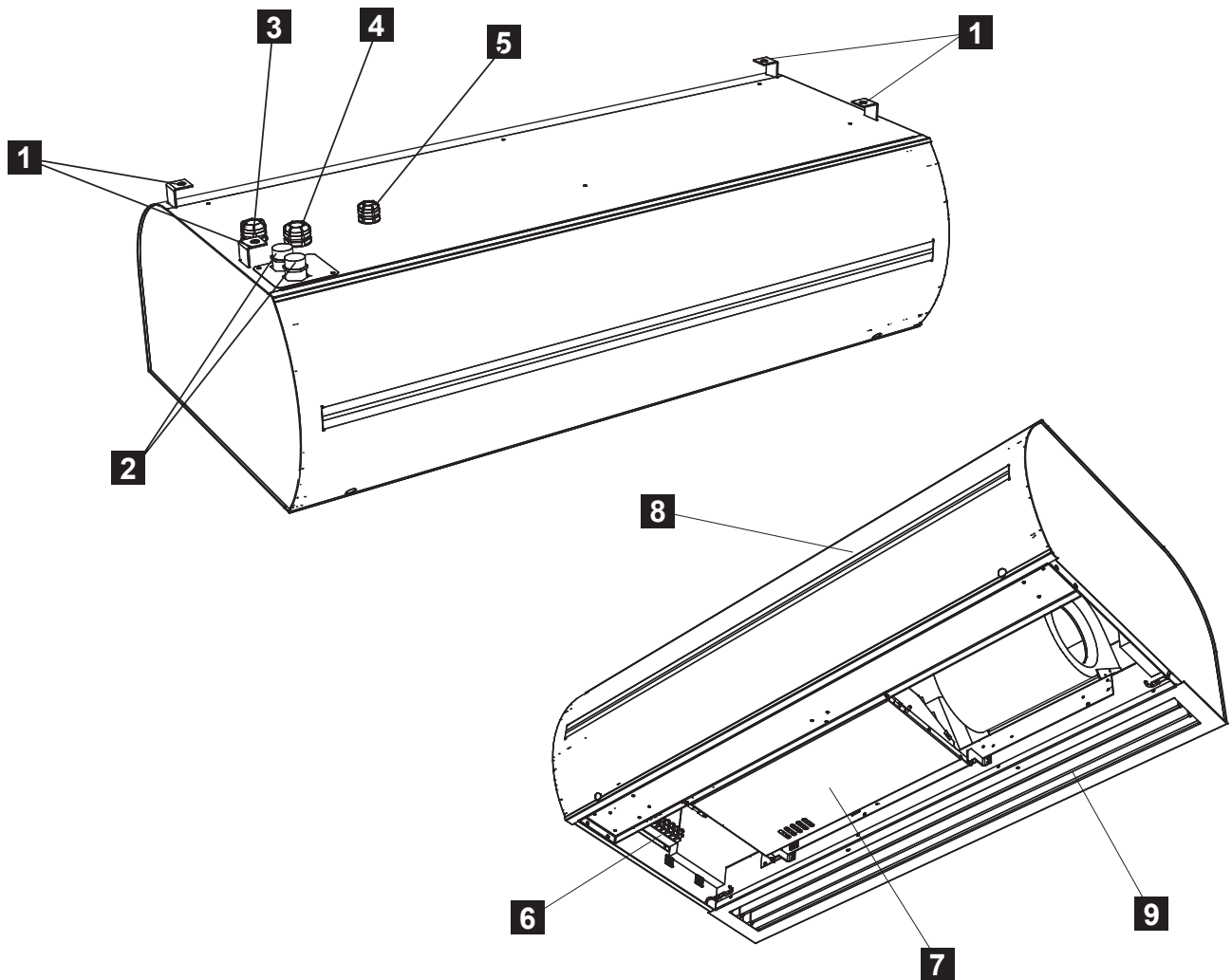
### 2.2 UNPACK THE AIR CURTAIN



- If the curtain has been transported at temperatures below 0° C, it will be necessary to let it sit for at least 2 hours under normal operating conditions after unpacking, without turning it on. This will allow the air curtain's interior temperature to stabilise.

	<p>All used packaging materials are environmentally friendly and may be reused or recycled. Take an active part in environmental protection and see that packaging materials are correctly disposed of or repurposed.</p>	
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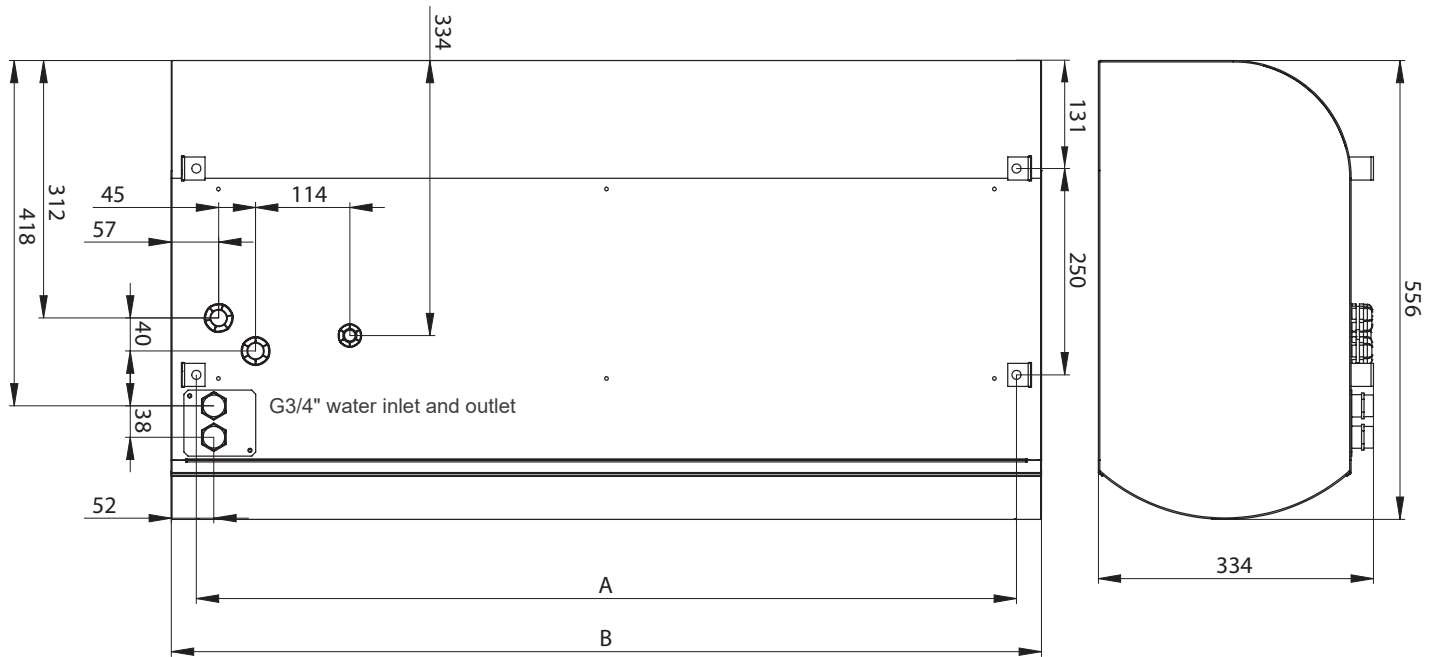
### 3. MAIN PARTS



1. Suspension holders
2. Water coil connection  $\frac{3}{4}$ "
3. Power supply cable plug
4. Control cable plug (BASIC control module) or cable plug for water coil regulator (COMFORT,SUPERIOR control modules)
5. Pit for capillary TV1/1
6. Power supply connectors and fusse location
7. Control modul socket
8. Inlet face cover
9. Outlet grid

## 4. DIMENSIONS

### Air curtain dimensions



Type	Spacing of installation holes A [mm]	Width B [mm]
VCST4x-10x-x..	994	1054
VCST4x-15x-x..	1494	1554
VCST4x-20x-x..	1994	2054
VCST4x-25x-x..	2394	2454

## 5. TECHNICAL PARAMETERS

Type	Max. height doors [m]	Air output [m <sup>3</sup> /h]	Noise* [dB(A)]	Heater output [kW]	Heater power supply [V/A]	Fan power supply [V/A]	Weight [kg]
VCST4B-10S-	4	1900	53,2	-	-	230/2,4	38
VCST4B-15S-		2800	54,3	-	-	230/3,4	53
VCST4B-20S-		3800	54,6	-	-	230/4,4	68
VCST4B-25S-		4700	57,7	-	-	230/5,4	83
VCST4B-10E-		1900	53,2	9,4	400/13,6	230/2,4	42
VCST4B-15E-		2800	54,3	15	400/21,7	230/3,4	57
VCST4B-20E-		3800	56,3	19	400/27,5	230/4,4	73
VCST4B-25E-		4700	57,7	24,5	400/35,4	230/5,4	89
VCST4B-10V-		1850	53,0	24,1**	-	230/2,4	38
VCST4B-15V-		2700	54,6	35,1**	-	230/3,4	53
VCST4B-20V-		3700	55,7	49,4**	-	230/4,4	68
VCST4B-25V-		4500	56,8	61,0**	-	230/5,4	83
VCST4C-10S-		5	2550	55,7	-	-	230/3,3
VCST4C-15S-	3650		56,8	-	-	230/4,5	57
VCST4C-20S-	4650		57,8	-	-	230/5,3	71
VCST4C-25S-	6400		59,0	-	-	230/7,2	89
VCST4C-10E-	2550		55,7	9,4	400/13,6	230/3,3	47
VCST4C-15E-	3650		56,8	15,0	400/16,7	230/4,5	61
VCST4C-20E-	4650		57,8	19,0	400/27,5	230/5,3	77
VCST4C-25E-	6400		59,0	24,5	400/35,4	230/7,2	101
VCST4C-10V2-	2450		56,6	28,5**	-	230/3,3	49
VCST4C-15V2-	3500		56,9	41,0**	-	230/4,5	63
VCST4C-20V2-	4450		57,5	55,8**	-	230/5,3	79
VCST4C-25V2-	5900		58,2	72,0**	-	230/7,2	99
VCST4C-15V3-	3450		56,9	15,4**	-	230/4,5	67
VCST4C-20V3-	4450		57,5	19,8**	-	230/5,3	83
VCST4C-25V3-	5850		58,2	25,9**	-	230/7,2	103



The distance at which the average velocity of the air current flow drops to 3m/s. For optimal conditions and maximum performance of the equipment.

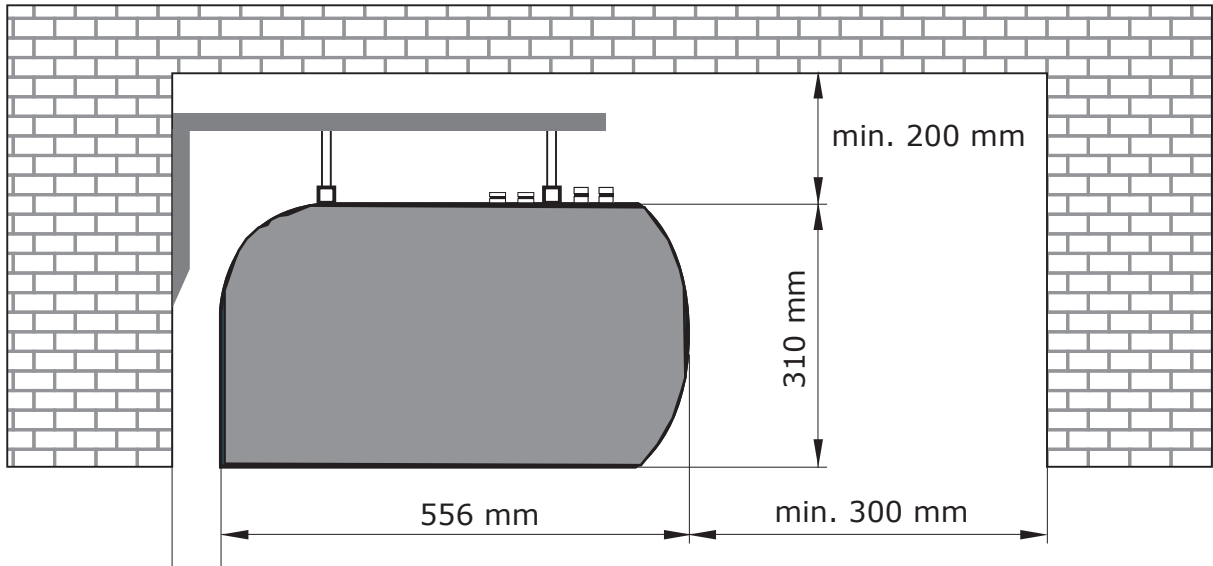
\* Acoustic pressure at a distance of 3 m from the curtain.

\*\* With water temperature gradient of 90°/70° C and temperature of suctioned air at +18°C

## 6. INSTALLATION

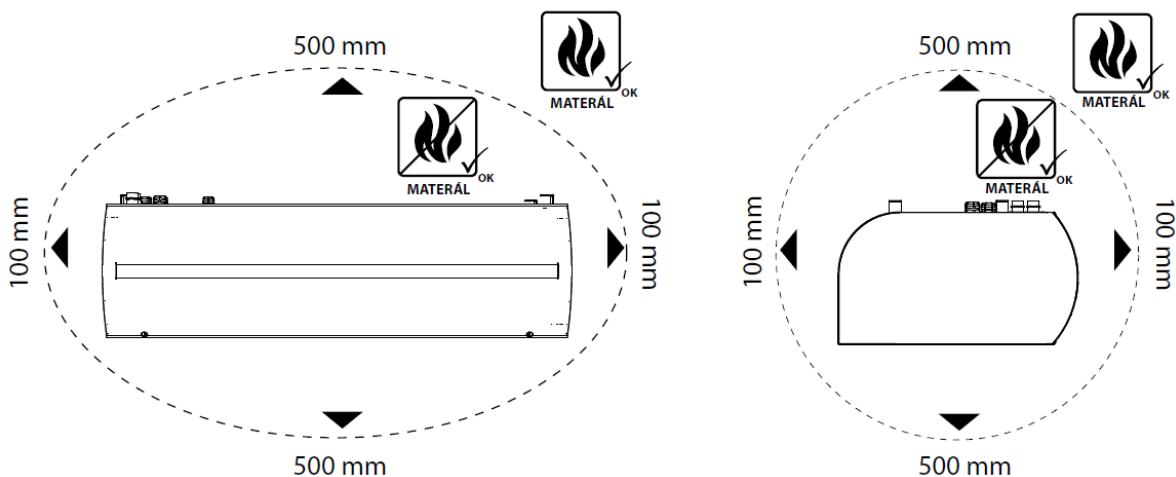
### 5.1 CHOOSE THE INSTALLATION SITE AND INSTALL THE AIR CURTAIN

#### 5.1-1 Built up dimensions



- The air curtain must be installed only in a horizontal position!
- The curtain can be installed over the door opening. All separation distances for flammable materials and safe use of air curtain has to be kept.
- The installed position of the air curtain can be chosen to accommodate the service hood.
- It must be operated in dry, covered indoor spaces with an ambient temperature between +5° C and +40° C and relative humidity up to 80%
- The air curtain is not intended for moving air that contains combustible or explosive mixtures, chemical fumes, coarse dust, soot, grease, poisons, infectious germs, etc.

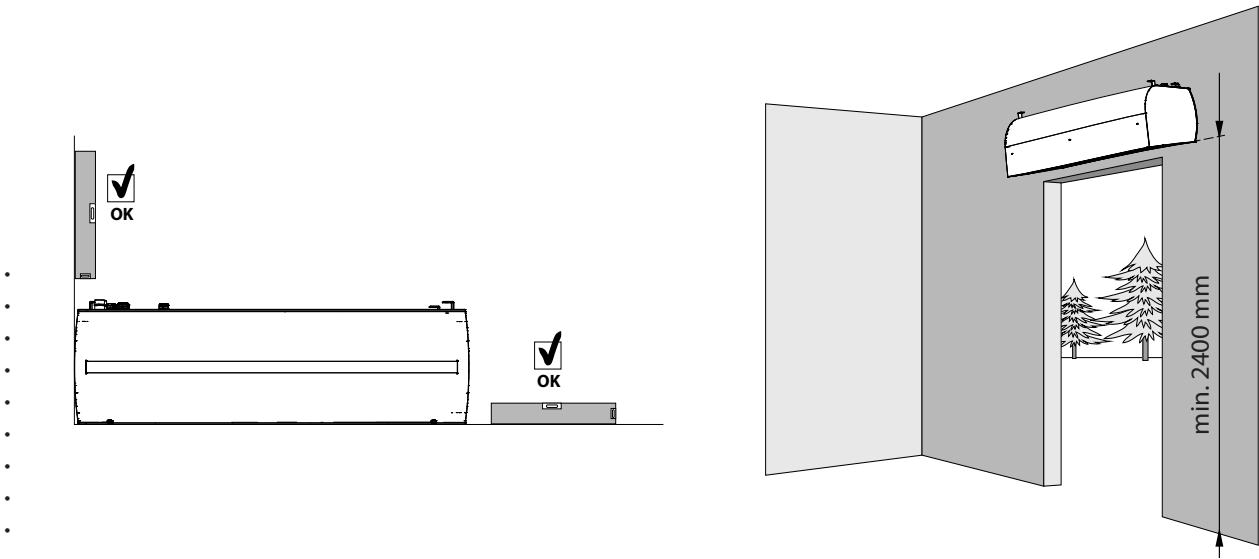
#### 5.1.-2 Clearance distance



## ●● 6. INSTALLATION

### 5.1-3 Measure the installation site

- Only nonflammable materials (those that do not burn, smoulder or carbonise) or fire-resistant materials (those that do not burn, but mainly smoulder, e.g., plaster board) can be kept within 100 mm in any direction of the air curtain. However, these materials should not block the intake or outlet openings.
- For air curtains with an electric heater, safe distances from building structural surfaces and flammable objects are as follows:
- The safe distance for flammable materials in the direction of the main air flow (i.e., behind the outlet) is 500 mm,
- The safe distance for flammable materials above the air curtain is 500 mm,
- The safe distance for flammable materials in other directions is 100 mm.



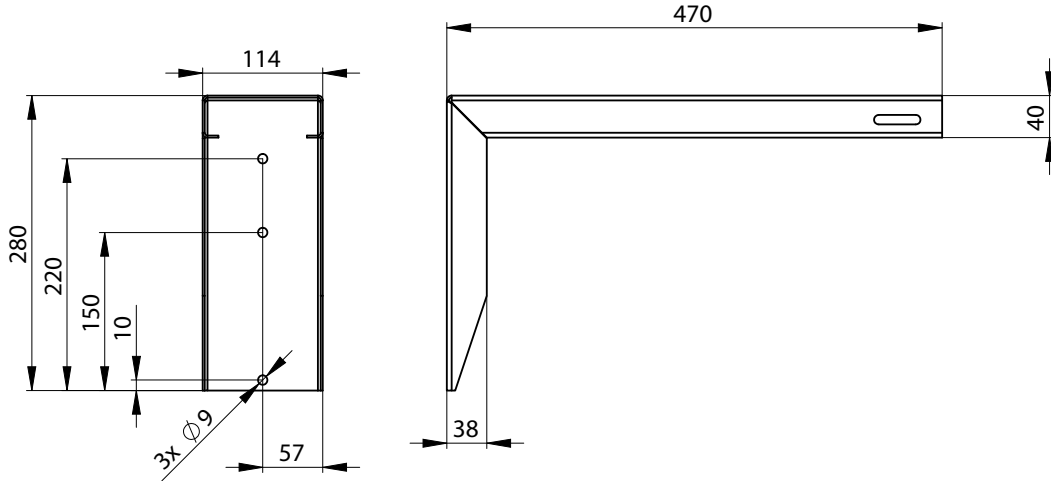
### 6.1-3 Measure the installation site

Choose the location for the installation and measure the installation site. Measure out the dimensions of ceiling installation or for wall mounted brackets.

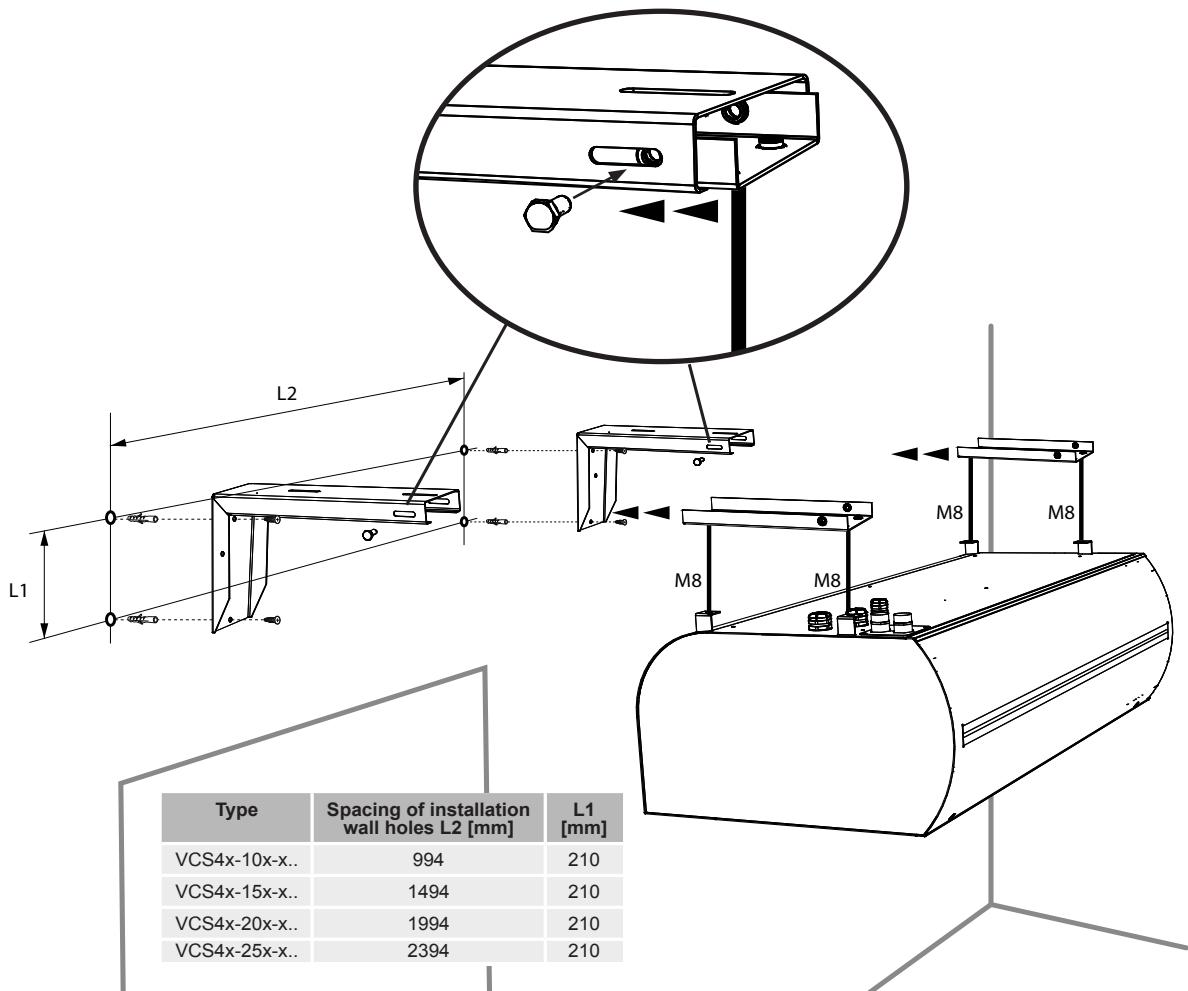
## 6. INSTALLATION



For wall installation use „Wall mounted bracket set“: VCS4-KONZ-STE. „Wall mounted bracket SET“ has to be ordered separately as an optional accessory.

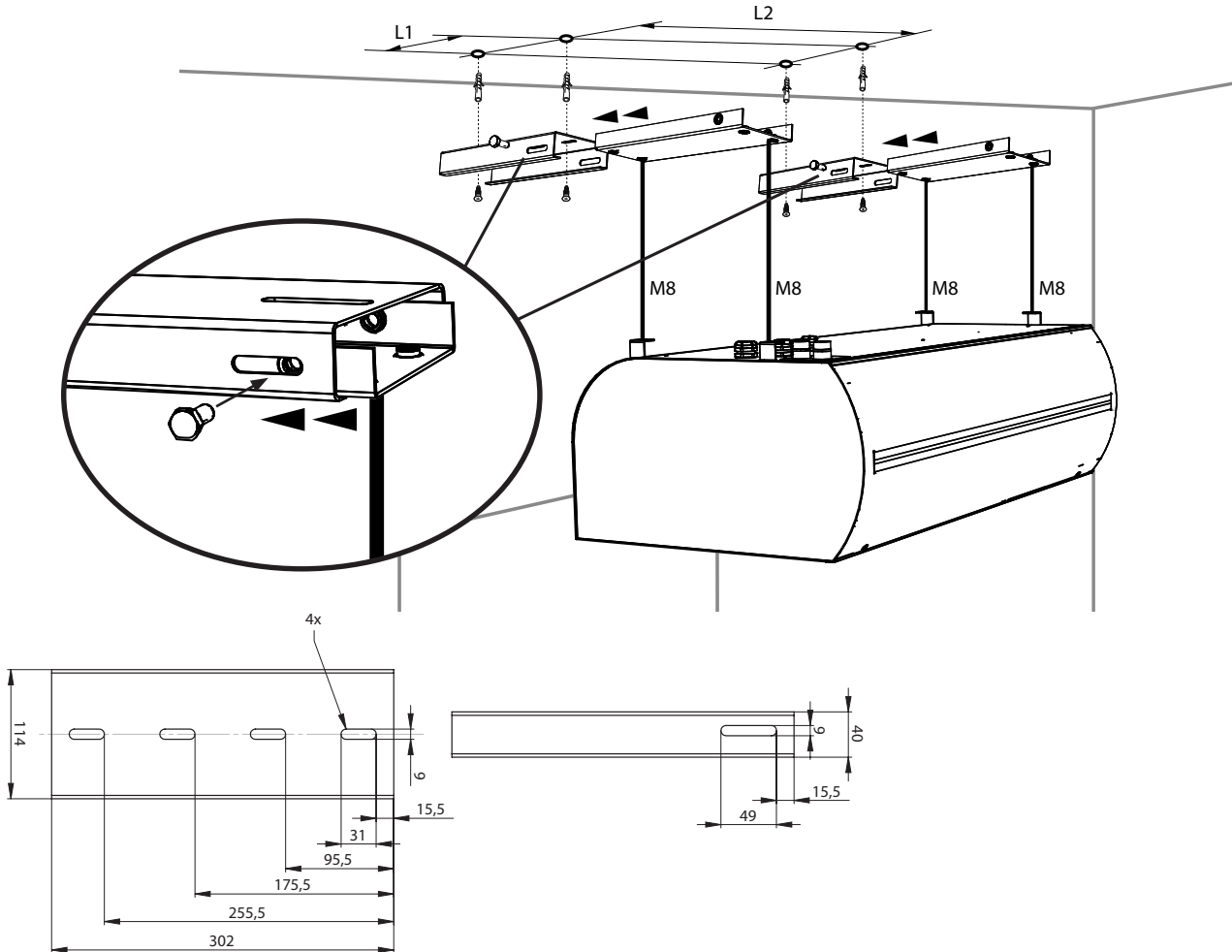


### Measurement



## ● ● 6. INSTALLATION

For ceiling installation use „Ceiling holder SET”: VCS4-KONZ-STR. „Ceiling holder SET” has to be ordered separately as an optional accessory.



Type	L1 [mm]	L2 [mm]
VCS4-X-100-X...	240	994
VCS4-X-150-X...	240	1494
VCS4-X-200-X...	240	1994
VCS4-X-250-X...	240	2394

### 5.1-4 Suspend the air curtain on the threaded bars and ensure that the suspension will not come loose



- In consideration of the air curtain weight into account, it is necessary to use either a suitable lifting device (forklift, etc.) or use two additional individuals to support it, as long as it is not securely fastened.



- Suspension has to carry the weight of the air curtain!

## ● ● 6. INSTALLATION

### 5.2 CONNECT THE WATER INTAKE AND OUTLET HOSES

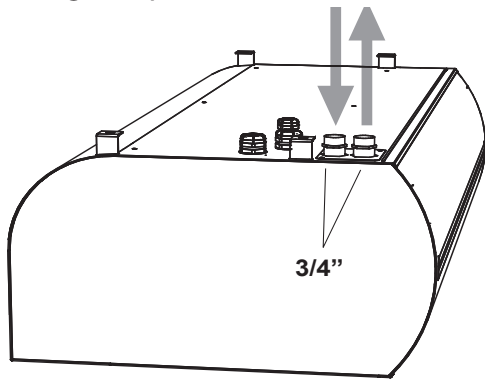
VCST4-x-xxx-V1,V2



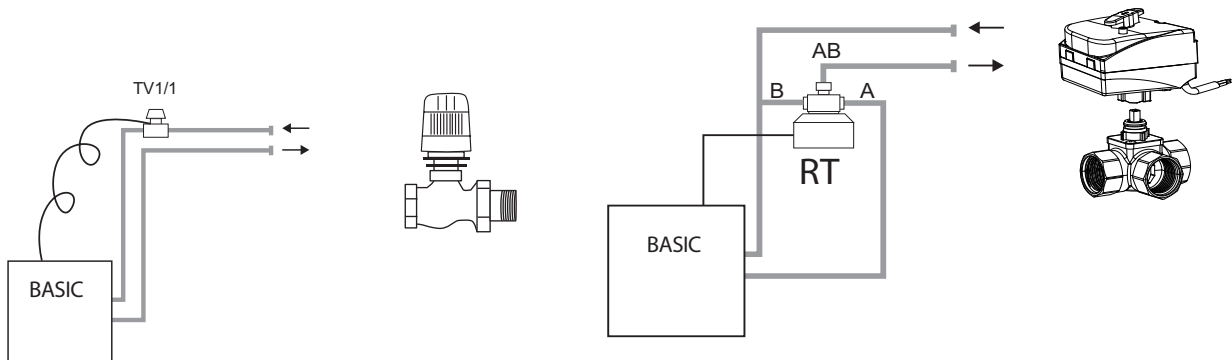
- A flexible hoses with a G3/4" connection



- Connection and pressure testing of the heater must be carried out by a person with professional plumbing knowledge, who must observe current standards and regulations of the given country.
- The maximum water temperature is +100° C. The maximum pressure is 1.6 MPa. We recommend installing a stop valve on the intake and outlet of the heater to allow the water supply to be shut off.



#### 5.2-1 Regulating the water coil with a thermostatic valve TV1/1 , RT (Air curtains with water coil and BASIC control module: VCST4-AGBA1-M-EC-V1-0A0)



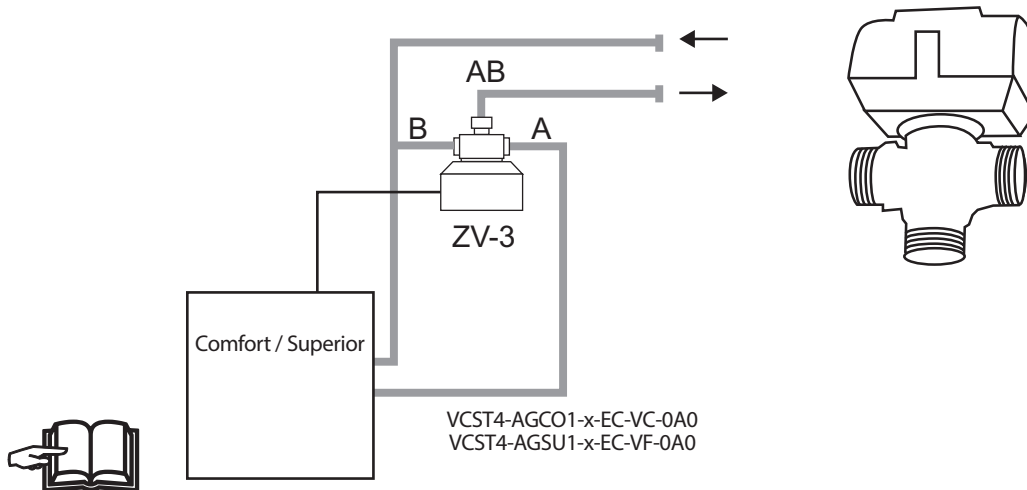
Detailed description of water coil regulation by thermostatic valve (TV1/1), including it's connection, refer the instruction manual for thermostatic valve TV1/1.

Detailed description of water coil regulation by zone valve (RT), including it's connection, refer the instruction manual for zone valve RT.

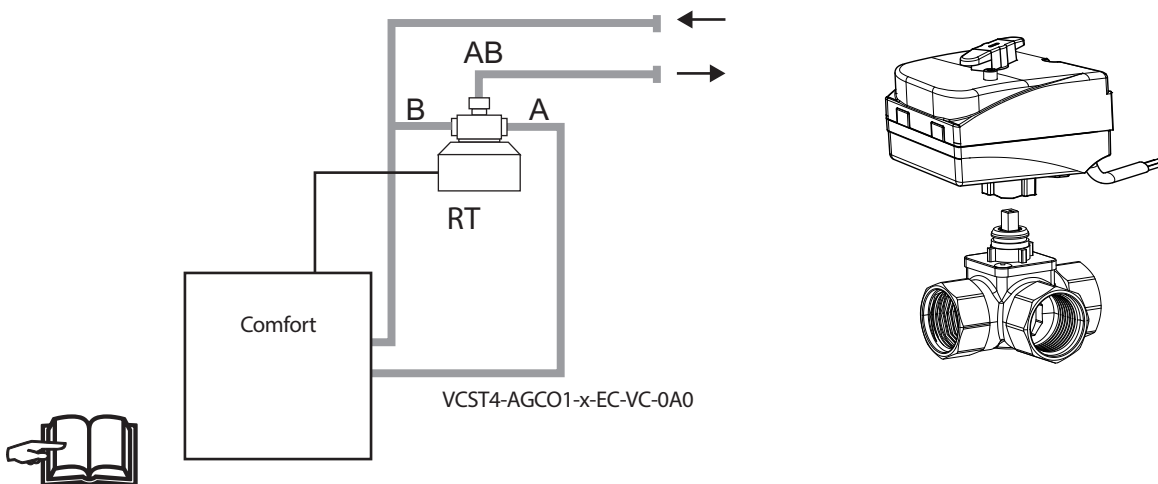
## 6. INSTALLATION

**6.2-2 For water exchanger control with regulation COMFORT you can use these valve: ZV-3, RT or ZV-3-24V**

**For water exchanger control with regulation SUPERIOR regulates heating only 0-10V you can use these valve: ZV-3, or ZV-3-24V**



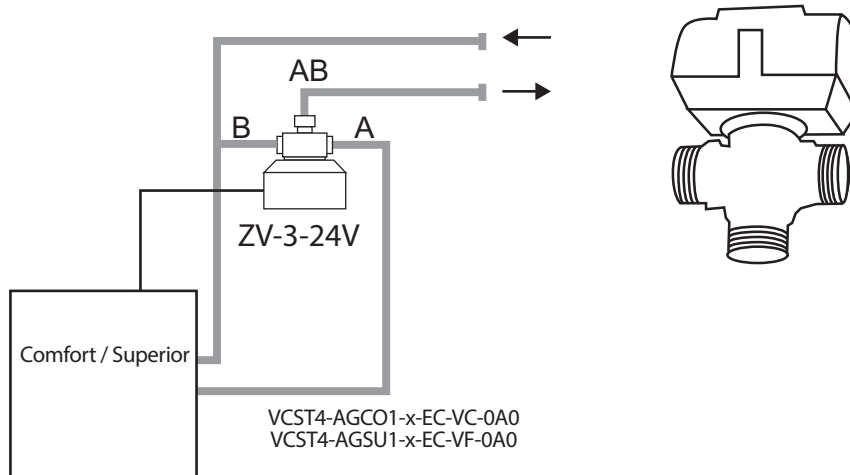
- Detailed description of water coil regulation by zone valve (ZV-3), including it's connection, refer the instruction manual for zone valve ZV-3.



- Detailed description of water coil regulation by zone valve (RT), including it's connection, refer the instruction manual for zone valve RT.

## 6. INSTALLATION

Zone valve ZV-3-24V is an required accessorie for control module VCST4-AGxx1-x-EC-VC-0A0  
**24V power supply is part of the regulation.**



- Detailed description of water coil regulation by zone valve (ZV-3-24V), including it's connection, refer the instruction manual for zone valve ZV-3-24V.

## 6. INSTALLATION

### 5.4 ELECTRO INSTALLATION



- The air curtain's electrical connection must be based on a professional design by a qualified electrical systems engineer.
- Installation must be carried out by a professionally trained electrical worker. All applicable national regulations and directives must be observed.
- The electrical schematics on the product take priority over those presented in this manual!
- Prior to installation, check to see if the terminal markings correspond to the markings on the electrical connections diagram. When in doubt, contact your supplier and do not connect the air curtain under any circumstances.
- Never reach inside the air curtain unless the main electrical supply has been turned off!
- If the product is connected to any control system other than the original one, the regulation and measurement components must be connected by the company that supplied the system.
- The electrical contractor defines the minimum size of the feed cable according to the standards applicable at the place of installation, the location for installing the cable, the surrounding conditions, and the curtain's technical parameters.



- **Special attention should be paid to the capacity of the distribution network of the air curtain with electric heater in terms of the supply of the appropriate phase current values for limiting the voltage fluctuations and flickering in the network.**

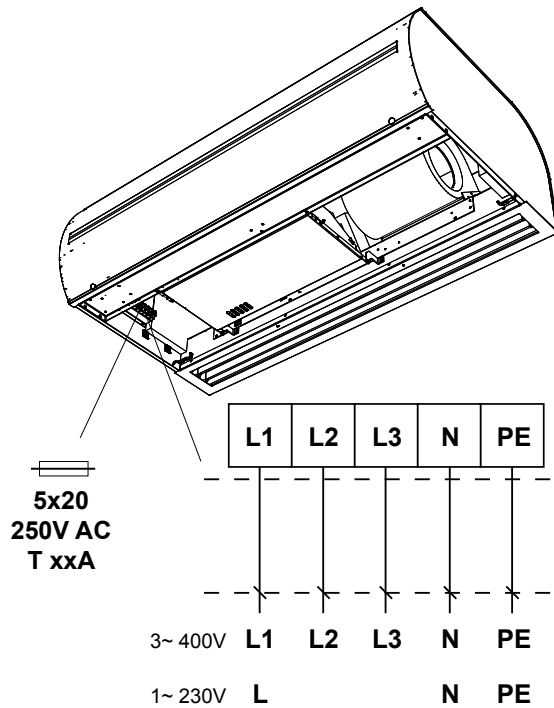
Minimal cable dimensions:

Type	Cable dimension
VCST4-x-xxx-S...	3Cx2,5
VCST4-x-xxx-V2...	3Cx2,5
VCST4-x-xxx-V3...	3Cx2,5
VCST4-x-100-E...	5Cx2,5
VCST4-x-150-E...	5Cx4
VCST4-x-200-E...	5Cx6
VCST4-x-250-E...	5Cx10

Fuse motors:

VCST4-x-xxx...		x	
		B	C
xxx	100	3,15A	4A
	150	4A	6,3A
	200	6,3A	6,3A
	250	6,3A	8A

## 6. INSTALLATION



- The electrical parameters are shown on the manufacturer's label, which is located under the air curtain's service cover.

Air curtain Type	
U = Voltage	I = Net current
f = Frequency	P = Output
n = Speed	m = Weight
ph = Phase	IP = IP rating
av = Air output	ver =
Serial number	

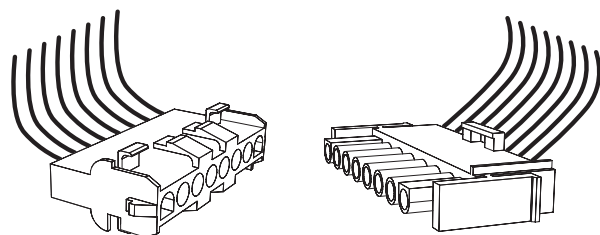
- The air curtain must be protected by an appropriate circuit breaker, in accordance with its electrical parameters. For safety reasons, over-designed protection is not recommended.
- The air curtain must be connected using the TN-S system, which means that the neutral conductor must always be connected.
- A main cut-off switch must be placed in the electrical supply network, disconnecting all poles of the network.
- The electrical enclosure of the air curtain is IP 20.



FINESSE air curtains are equipped with a fuse (with T characteristic – slow-blow). This safety fuse protects the electronic panel and fans. It is located under the service cover next to the main power supply connectors.

### 5.5 CONTROL MODULES

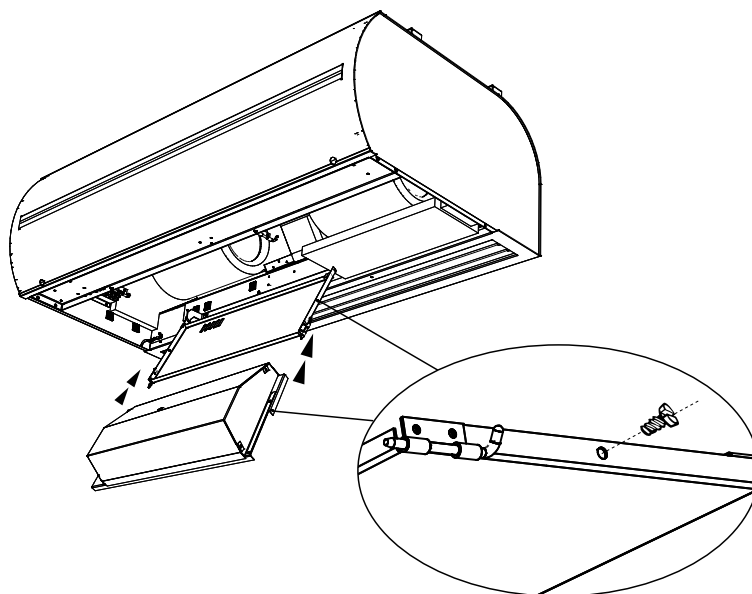
Air curtains Standesse are produced with universal connection interface. Air curtains Standesse can be controlled by one of following control modules. Control modules are required accessories and has to be orderot separately. Air curtain is connected with control module by „Quick connection sockets“



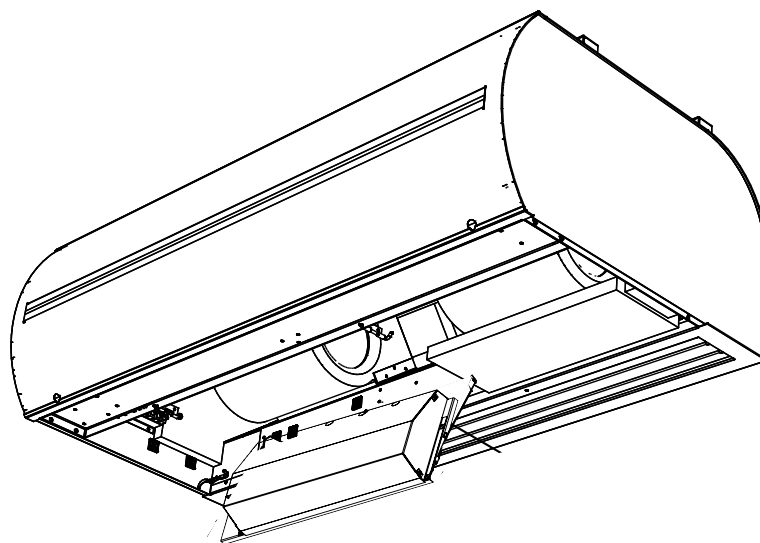
## 6. INSTALLATION

### 5.6 INSERT CONTROL MODULE TO THE AIR CURTAIN

1



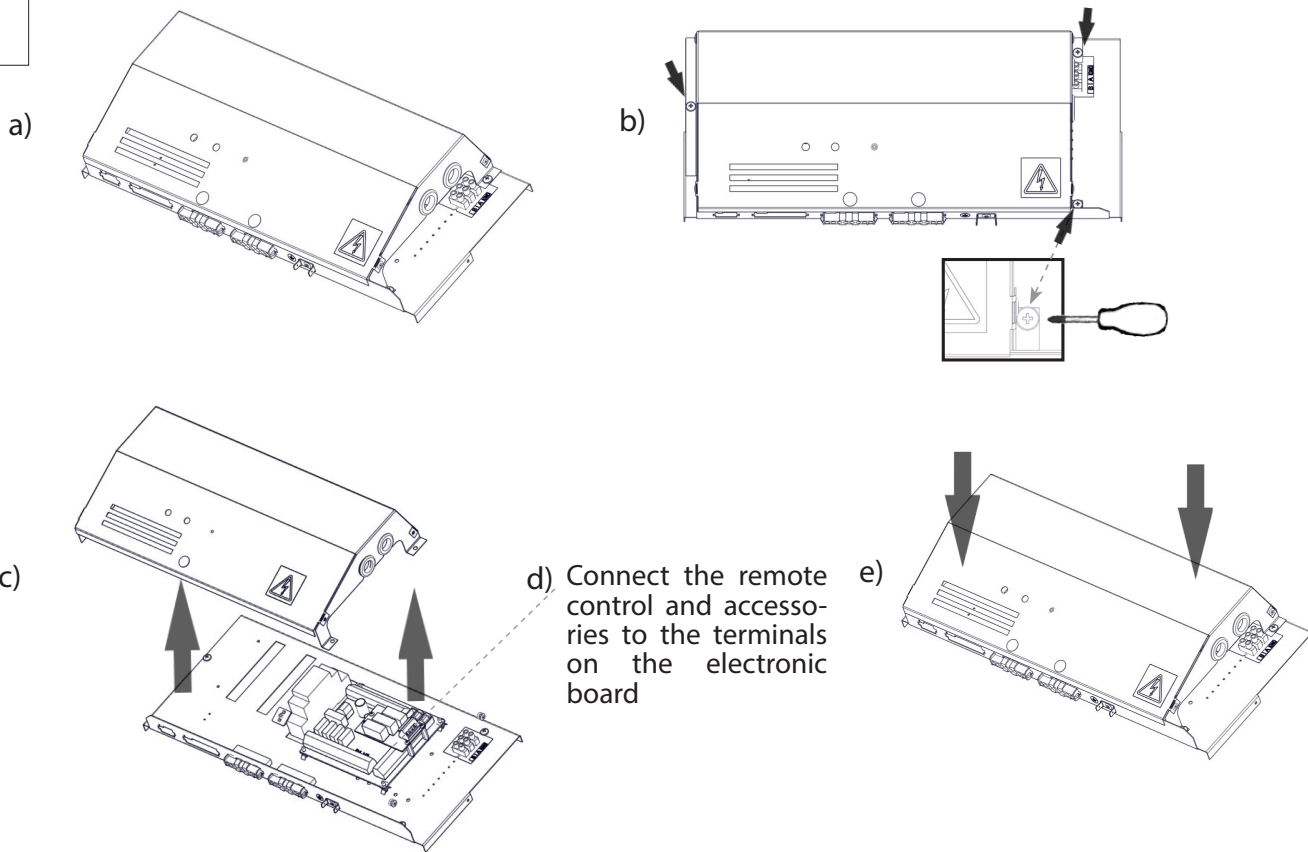
2



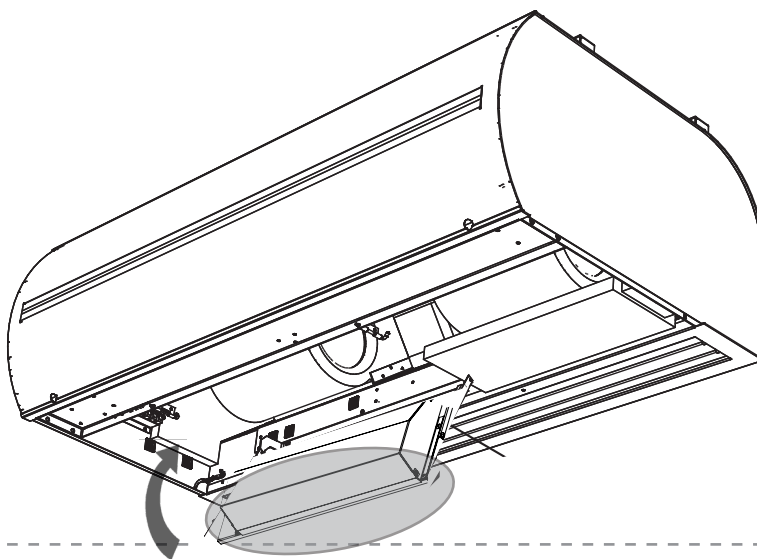
## 6. INSTALLATION

Connection to the regulation control panel and accessories

3



4



## 6. INSTALLATION

### 5.7 EXIT SIGN

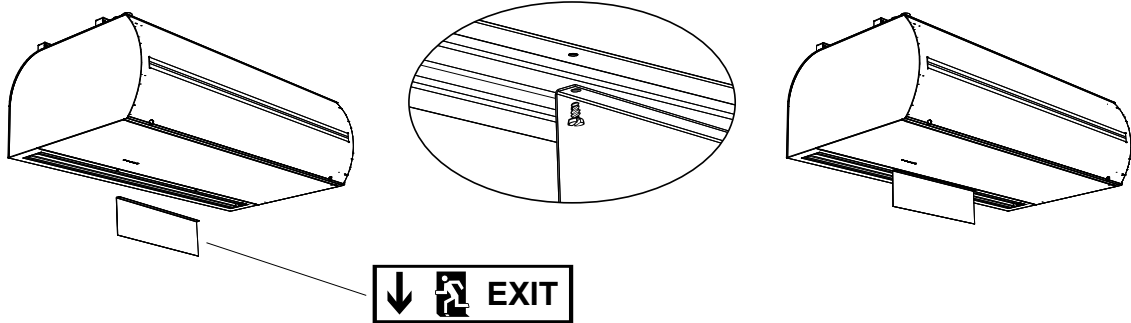


- Exit sign marking of emergency exit

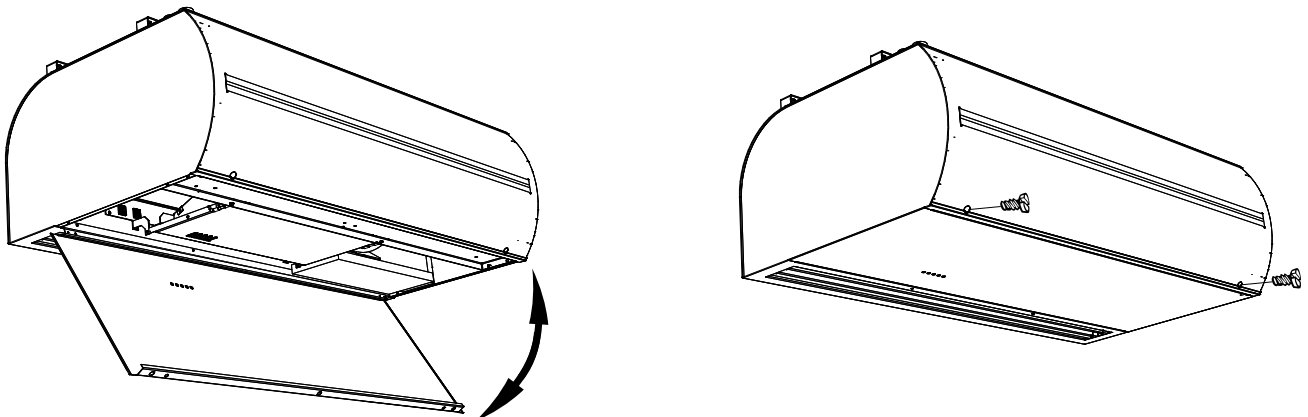
**For all types of VCST4x- air curtains!**



**Not included in delivery.**



### 5.8 COVERING THE AIR CURTAIN



## 6. INITIAL START-UP



Before starting up the unit check that:

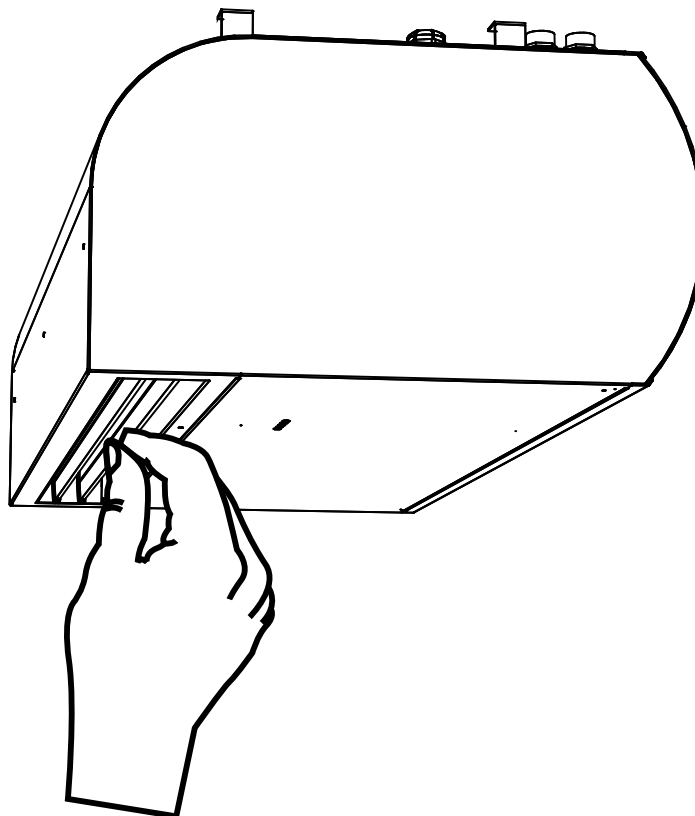
- No tools or other objects that may damage the unit have been left inside.
- The power and heating water supply are well connected.
- The unit is properly covered.
- The control panel is properly connected



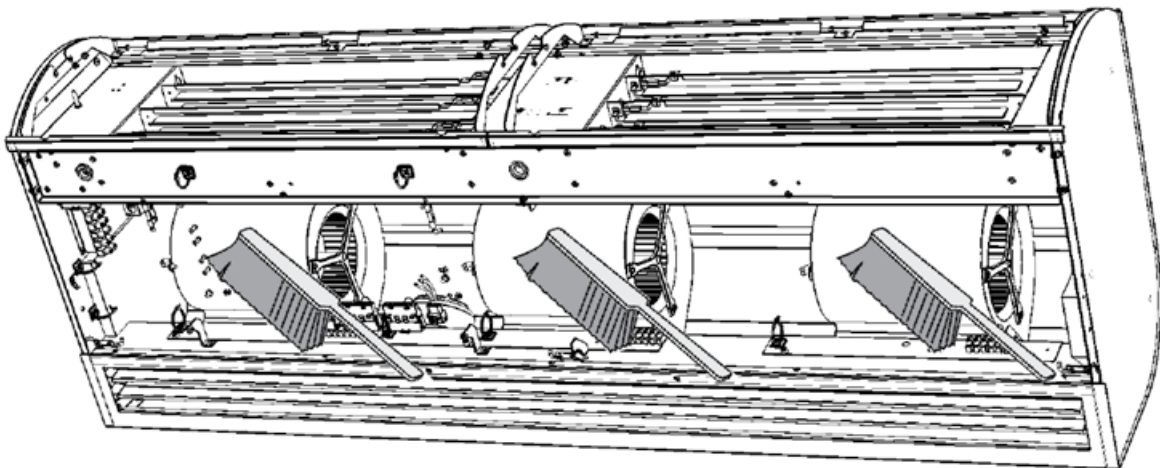
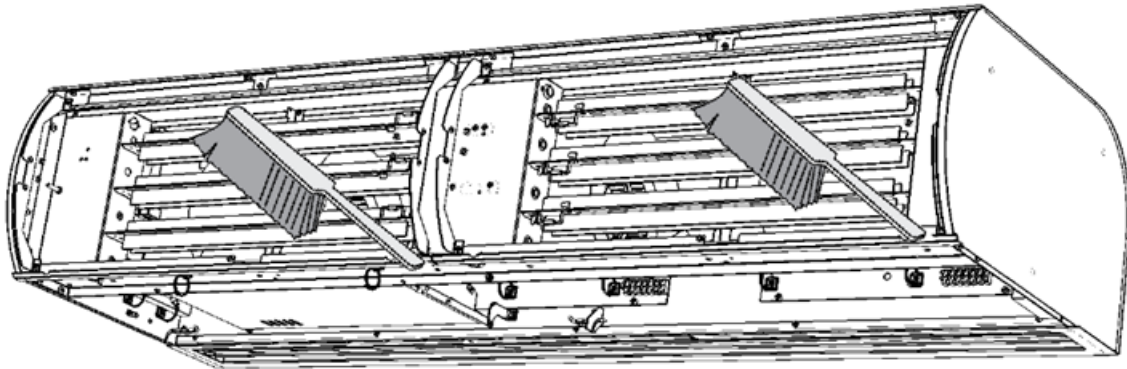
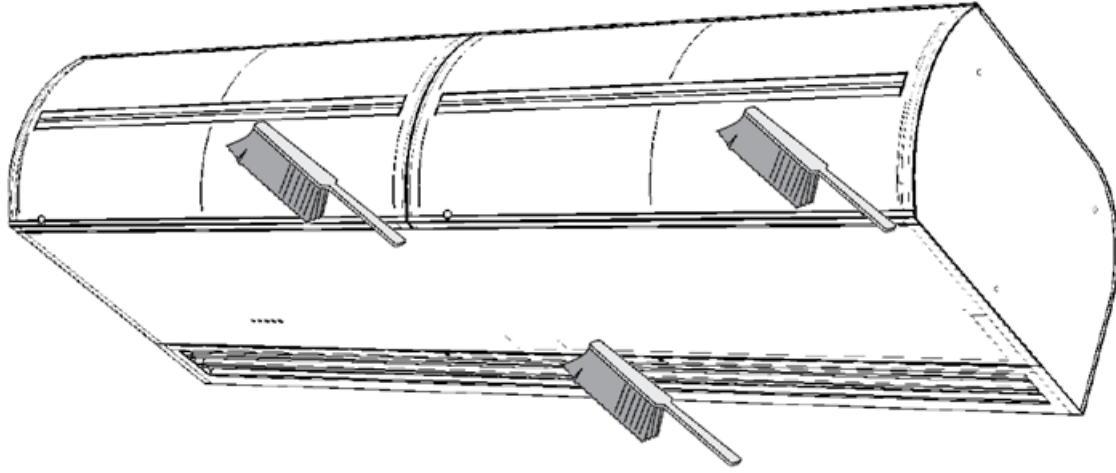
During the commissioning, check the proper function of the unit (fans, heating). Check the other possible settings and functions according to the user manual of each regulator

### **6.1 SET AIR FLOW DIRECTION**

This is set by tilting the air curtain's fan louvers in the desired direction.



## 7. CLEANING AND MAINTENANCE



## 7. CLEANING AND MAINTENANCE

### 7.1 CLEANING



The main electrical supply must be switched off before any interference to the inside of the air curtain. The air curtain must be allowed to cool down!

Cleaning is forbidden to use compressed air, aggressive chemicals, solvents or water.

Clean with a damp cloth, a soft cloth, or a vacuum cleaner.

Clean the surface of the air curtain, including the suction part.

Perform cleaning as needed, recommended at least every 3 months.

Observe safety and use protective equipment.

## 8. SERVIS

### 8.1 WHEN YOU AREN'T ABLE TO REMOVE DEFECT BY YOURSELF

If you are unable to resolve the problem, contact the supplier.

For the fast removal of defects please provide the following information:

- product reference number
- serial number
- running time
- used accessories
- installation location
- installation condition (including electrical)
- detailed description of the problem and the steps that you have taken for its removal

Warranty and post-warranty service is performed by the manufacturer, supplier or authorized service organization.

When ordering service intervention it is necessary to describe the defect, product type designation indicated on its label, and the location of installation.

### 8.2 PUTTING THE PRODUCT OUT OF OPERATION - DISPOSAL

Before disposing of the product, make the product unusable. Even old products contain raw materials that can be reused. Take them to a collection point of secondary raw materials.

The product is good to dispose at the place, which is specialized for it, and thus it will be possible to recycle materials. Store unusable parts of the product at a controlled dump.



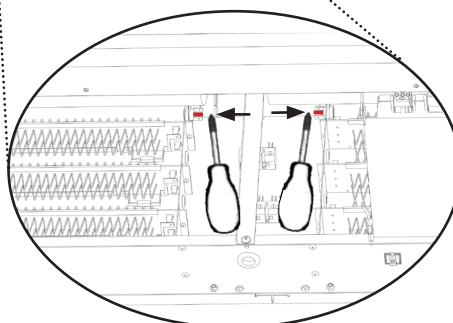
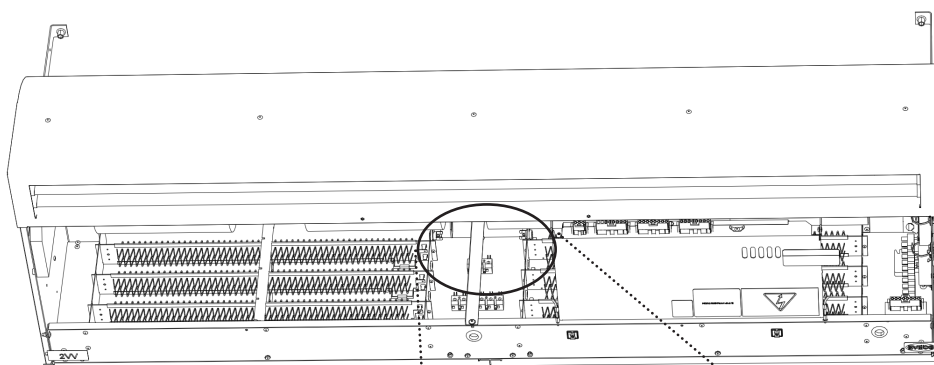
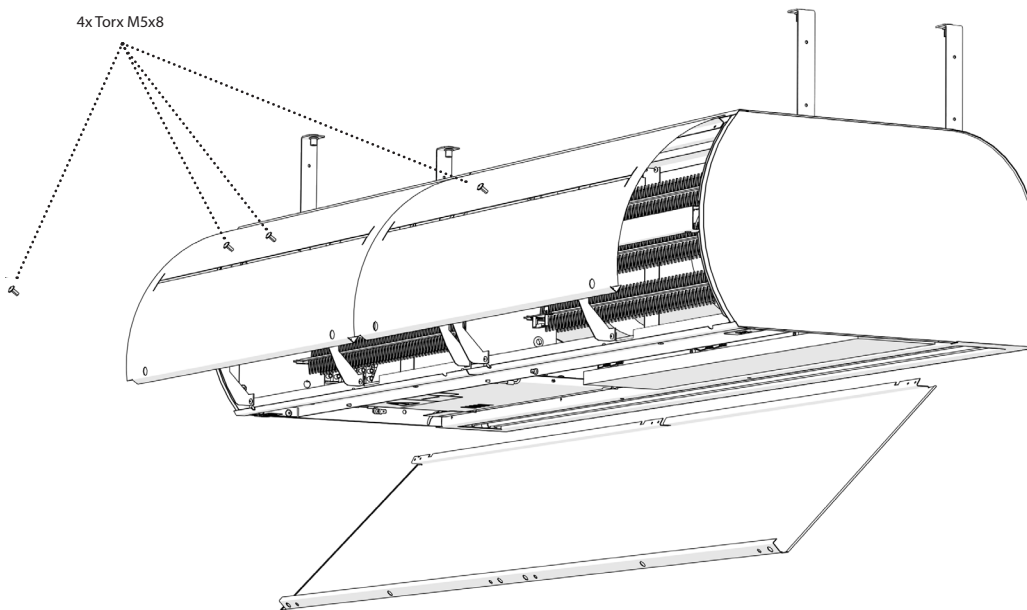
When disposing of materials, it is necessary to observe the relevant national regulations on waste disposal.

## 8. SERVIS

### 8.3 EMERGENCY THERMOSTAT RESET

**The main power supply must be switched off before any intervention inside the air curtain. The air curtain must be allowed to cool down!**

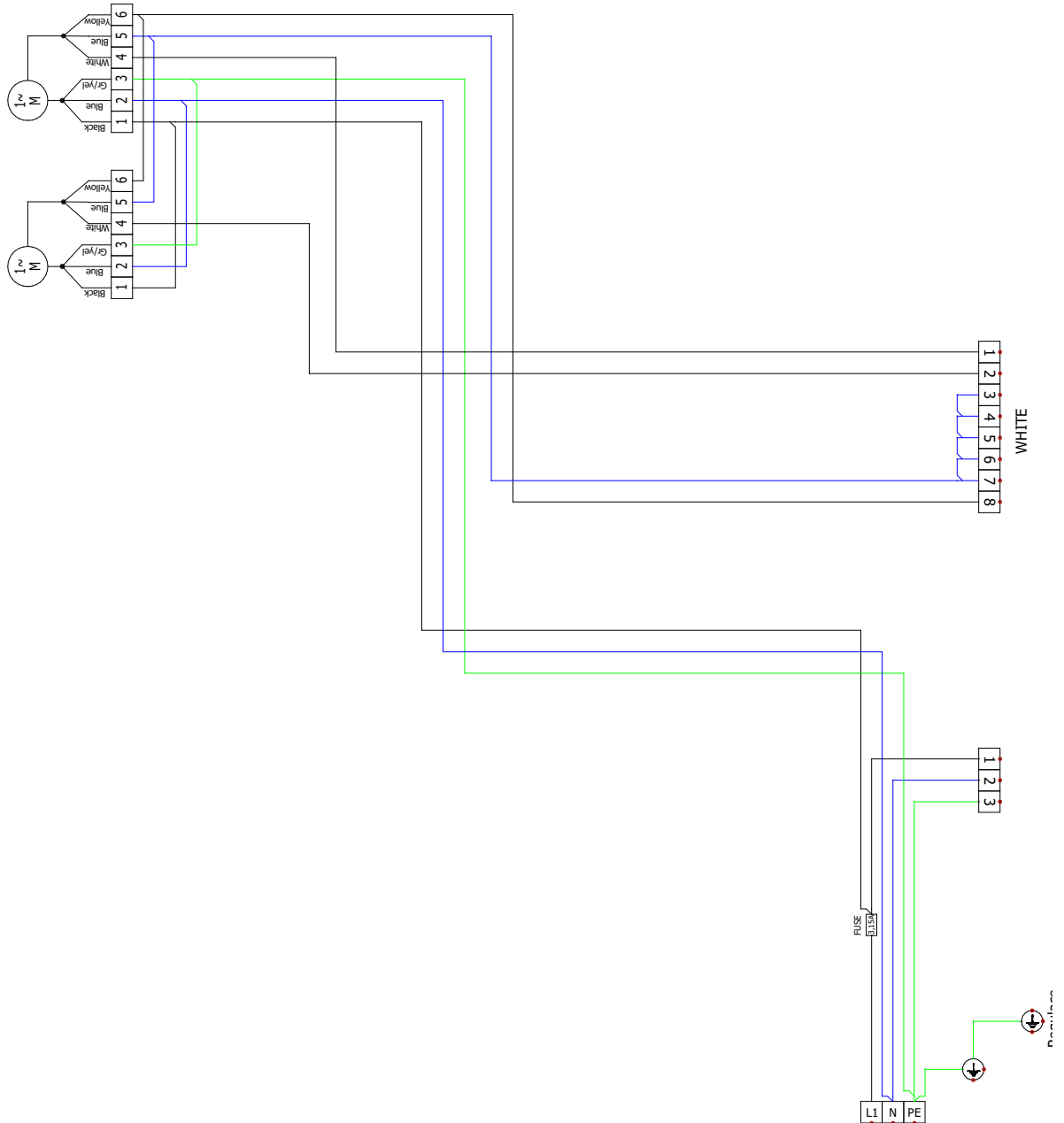
- Check of emergency thermostats and subsequent reset.
- Visual inspection of curtain, heat exchanger and connection.
- Clean the surface and inside of the air curtain, including the suction part.



Click reset ok.

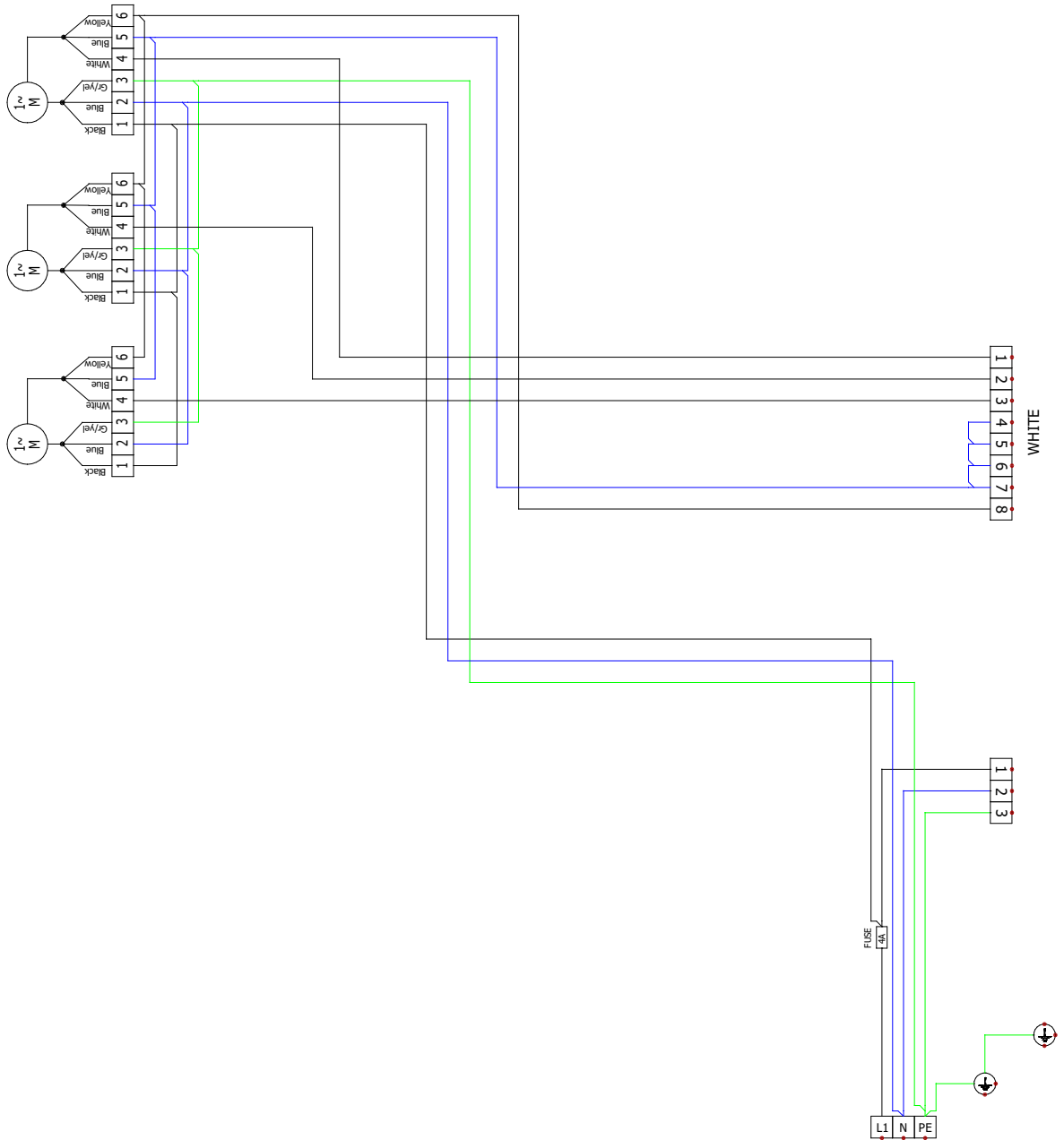
# 9. ELECTRICAL SCHEMES

VCST4B-10-S-EC and VCST4B-10-Vx-EC



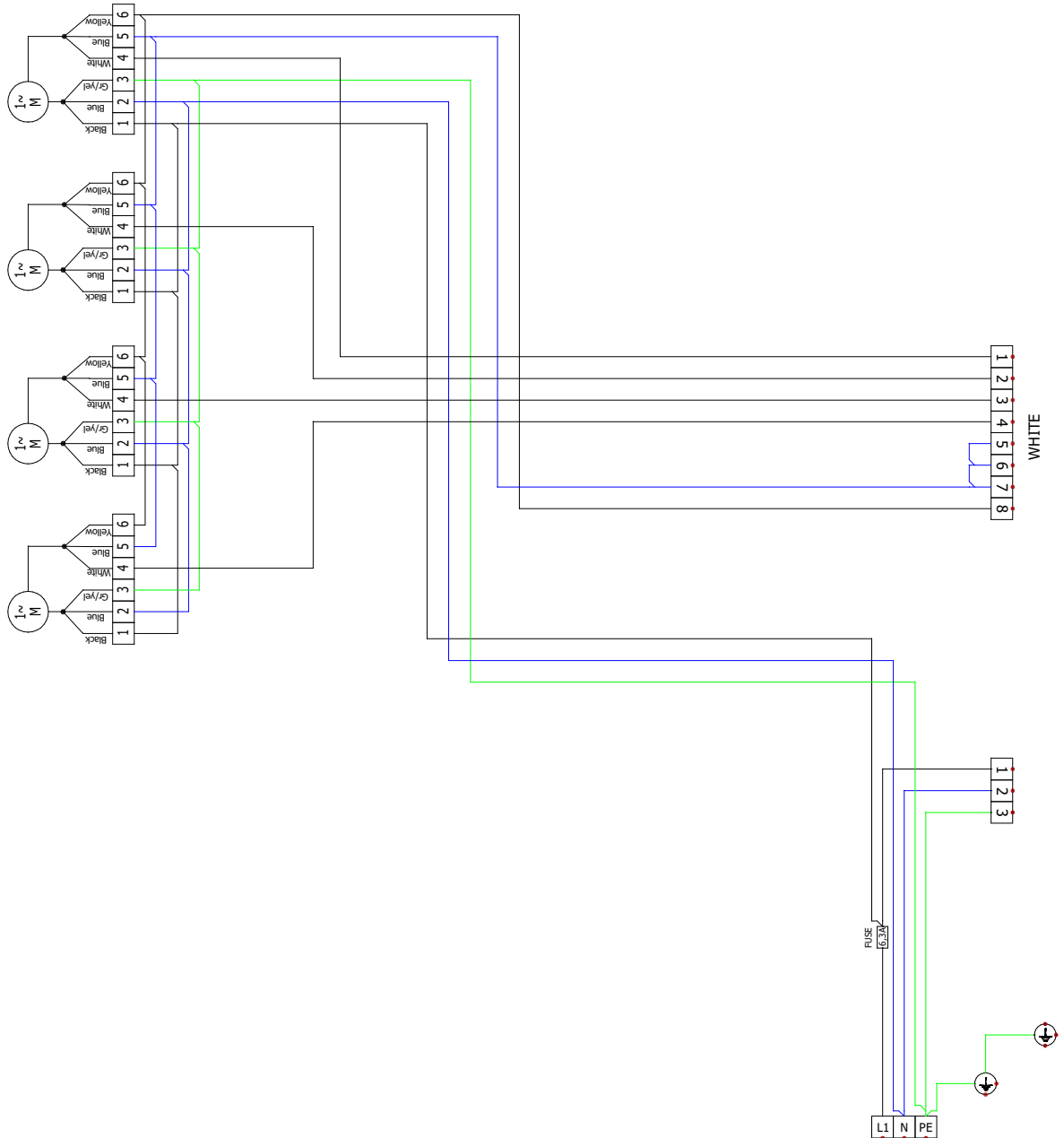
# 9. ELECTRICAL SCHEMES

VCST4B-15-S-EC and VCST4B-15-Vx-EC



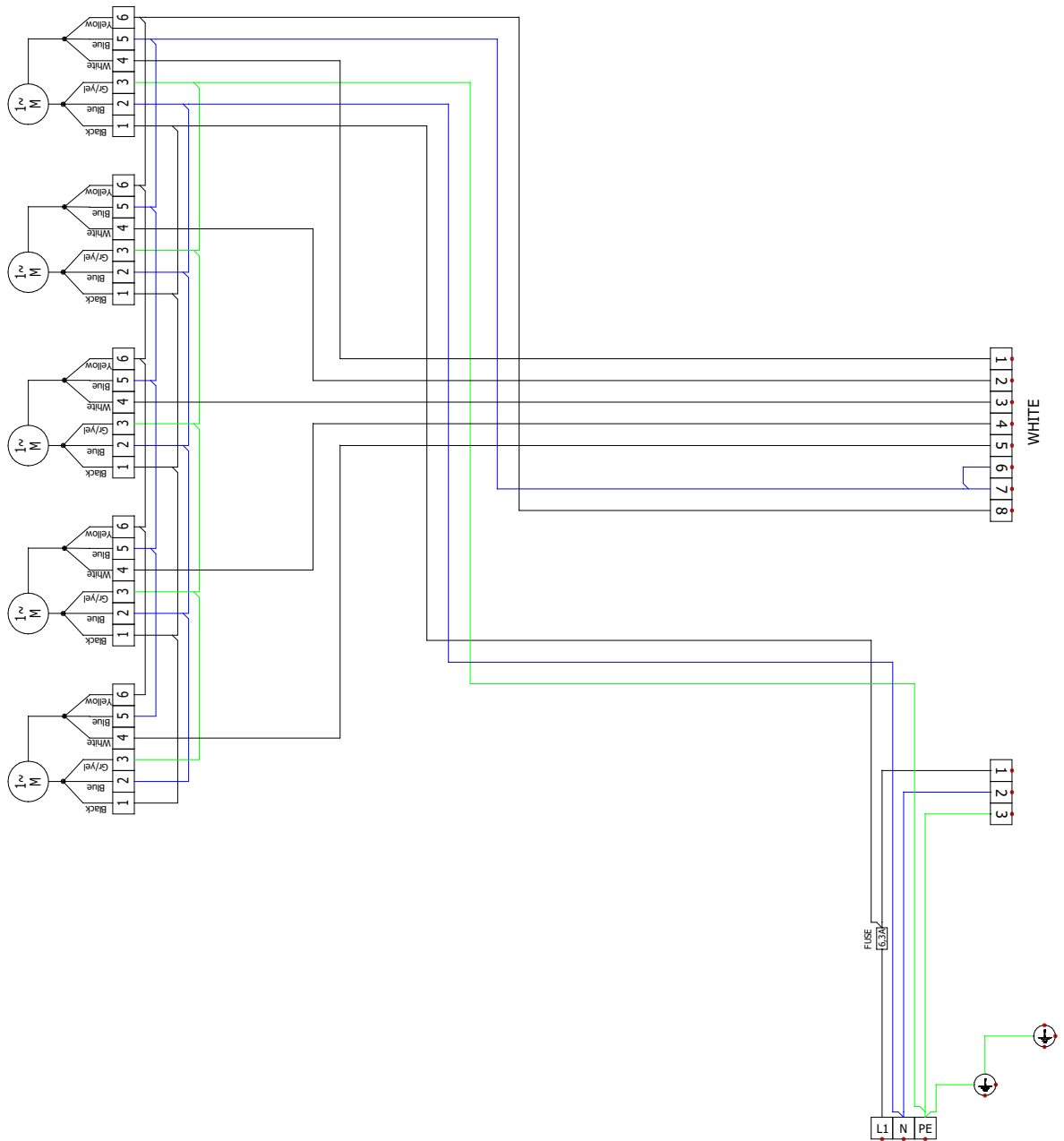
# 9. ELECTRICAL SCHEMES

VCST4B-20-S-EC and VCST4B-20-Vx-EC



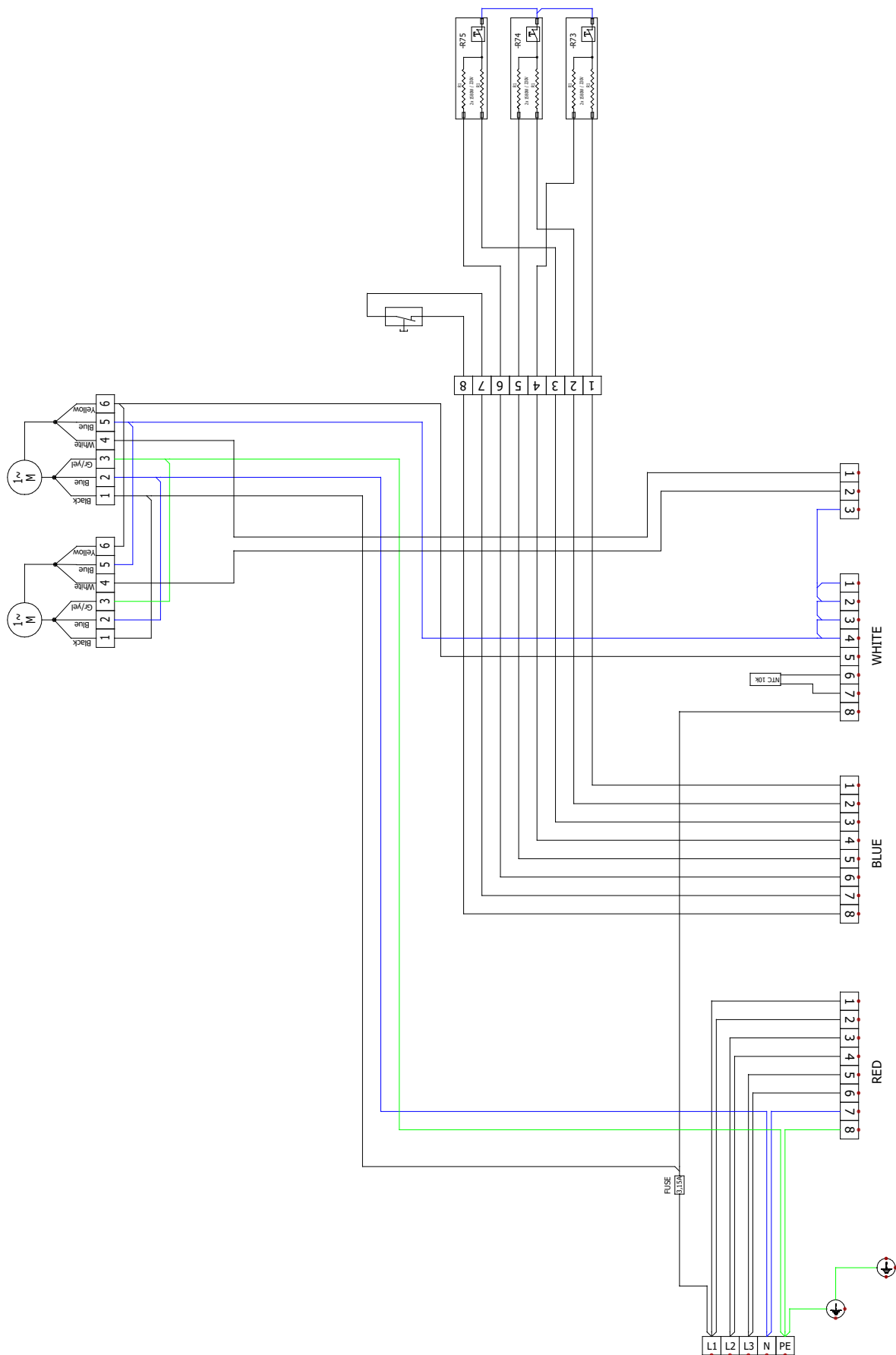
# 9. ELECTRICAL SCHEMES

VCST4B-25-S-EC and VCST4B-25-Vx-EC



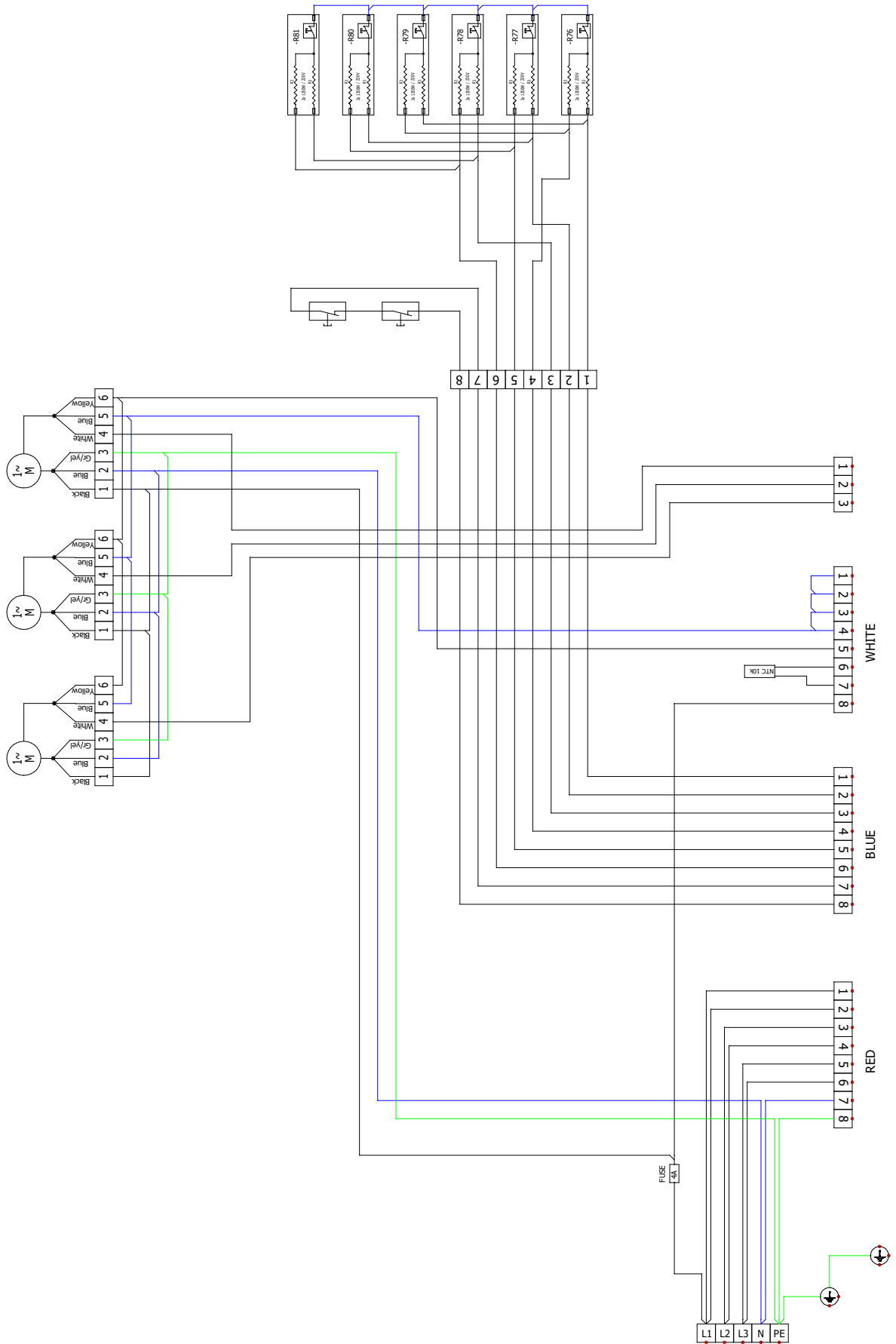
# 9. ELECTRICAL SCHEMES

VCST4B-10-E-EC



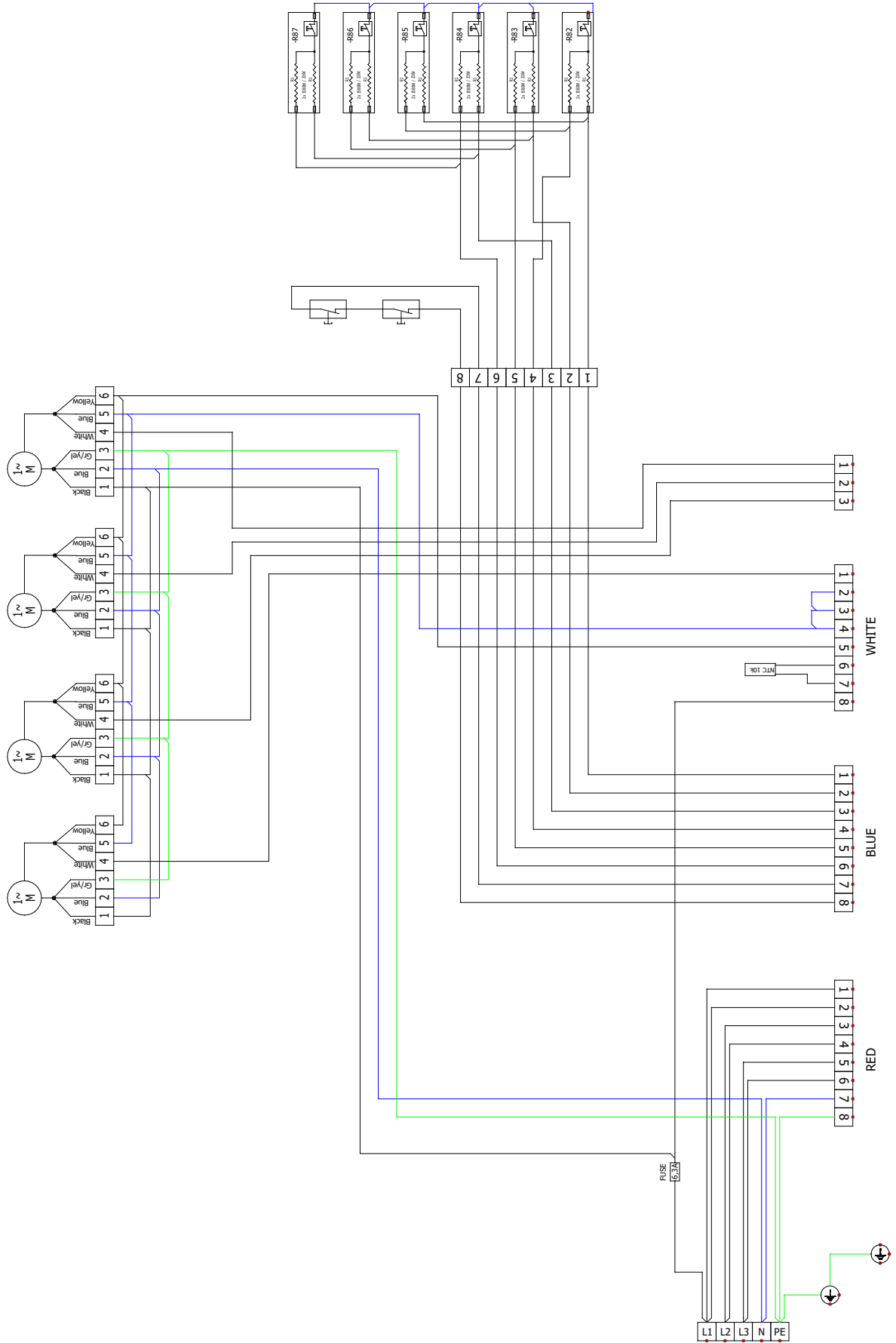
# 9. ELECTRICAL SCHEMES

VCST4B-15-E-EC



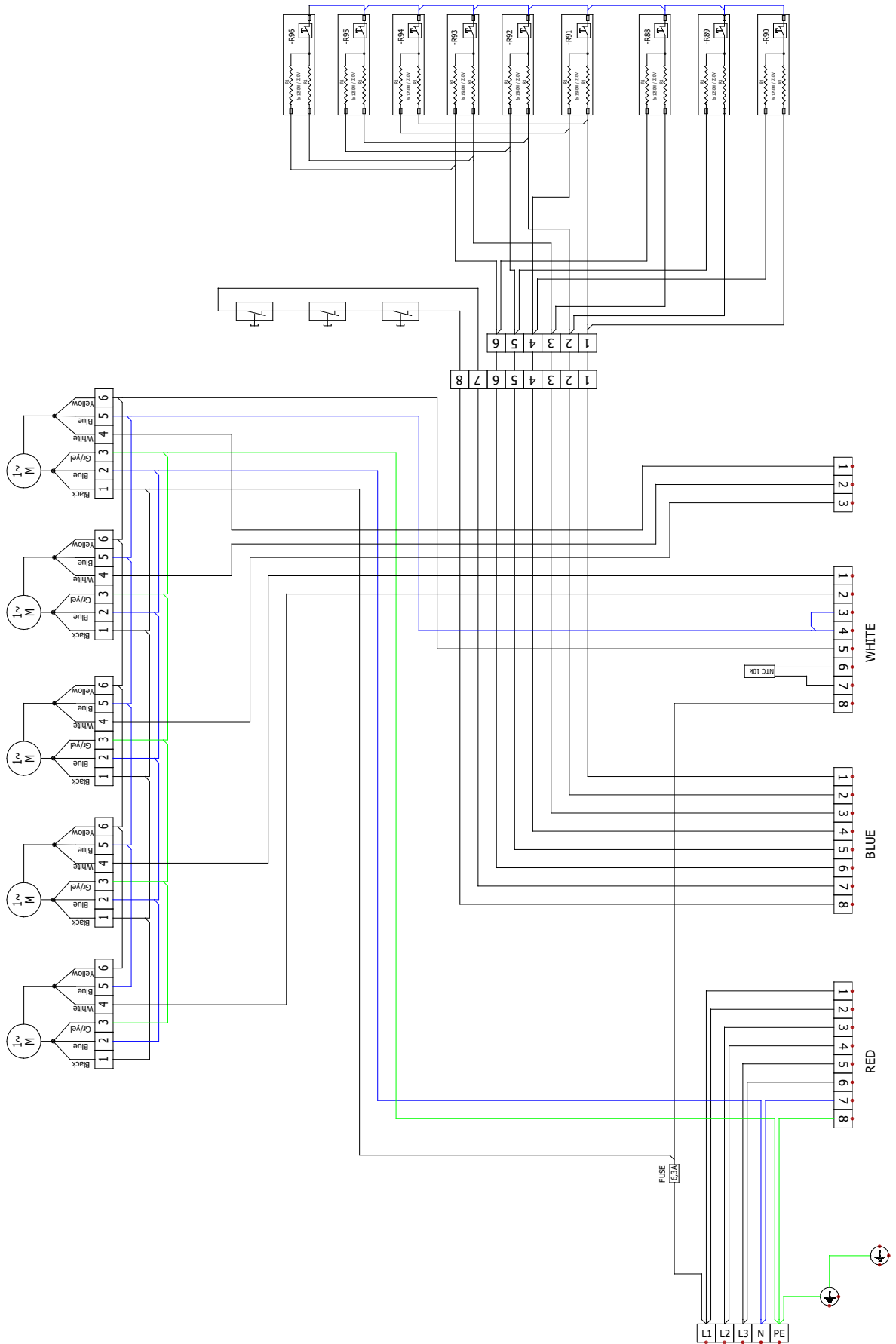
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VCST4-B20-E-EC



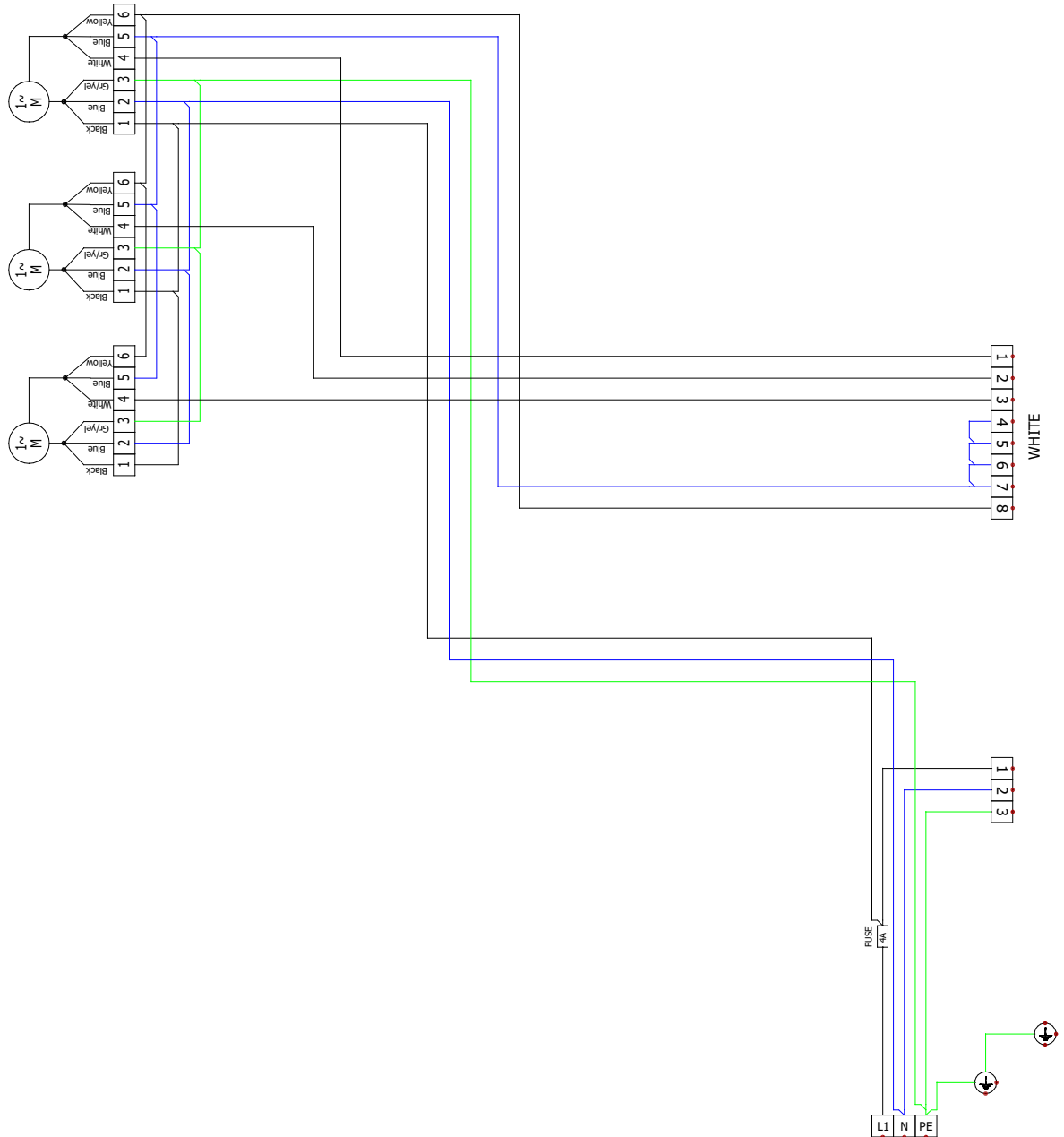
# 9. ELECTRICAL SCHEMES

VCST4B-25-E-EC



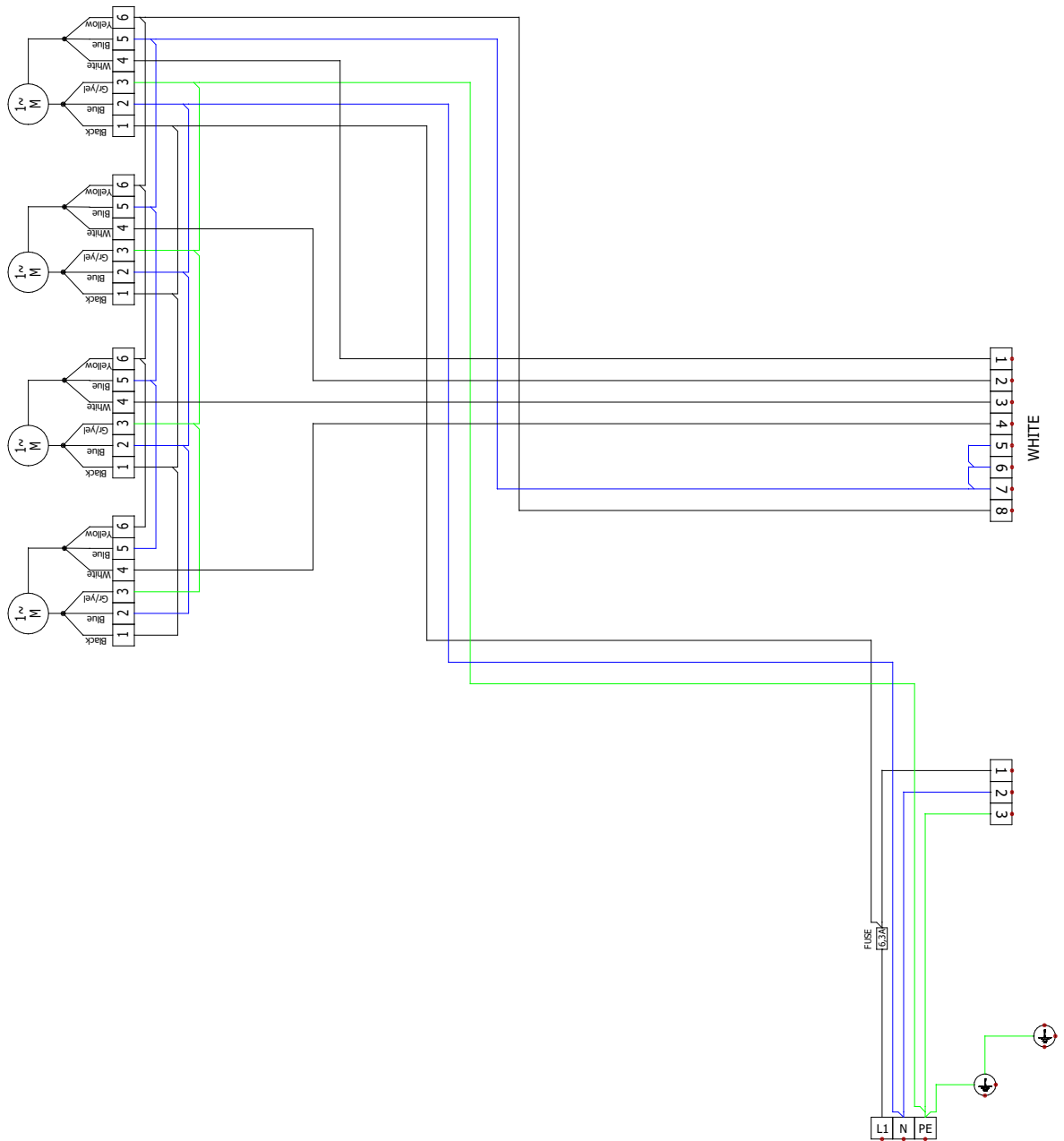
# 9. ELECTRICAL SCHEMES

VCST4C-10-S-EC and VCST4C-10-Vx-EC



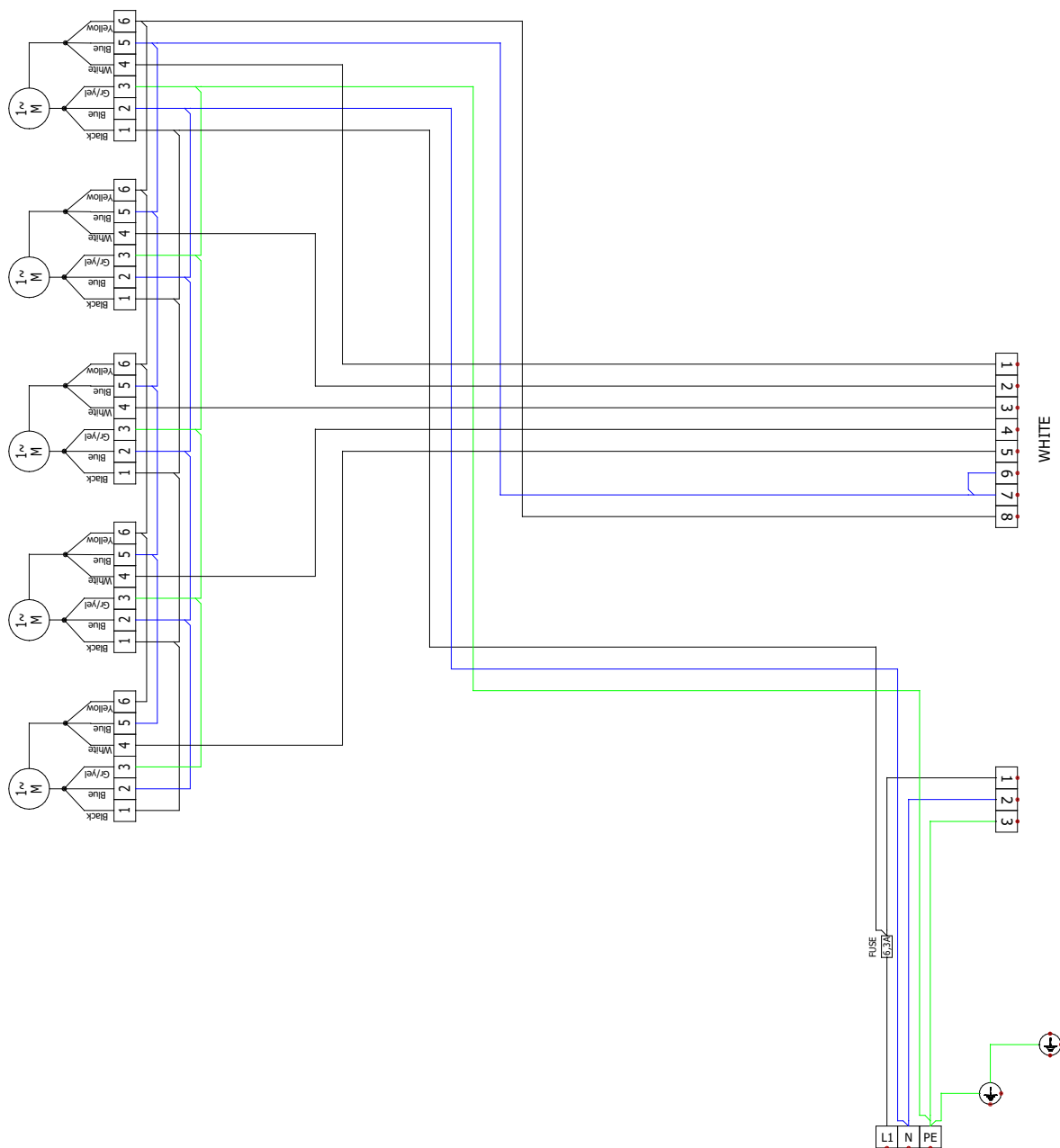
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VCST4C-15-S-EC and VCST4C-15-Vx-EC



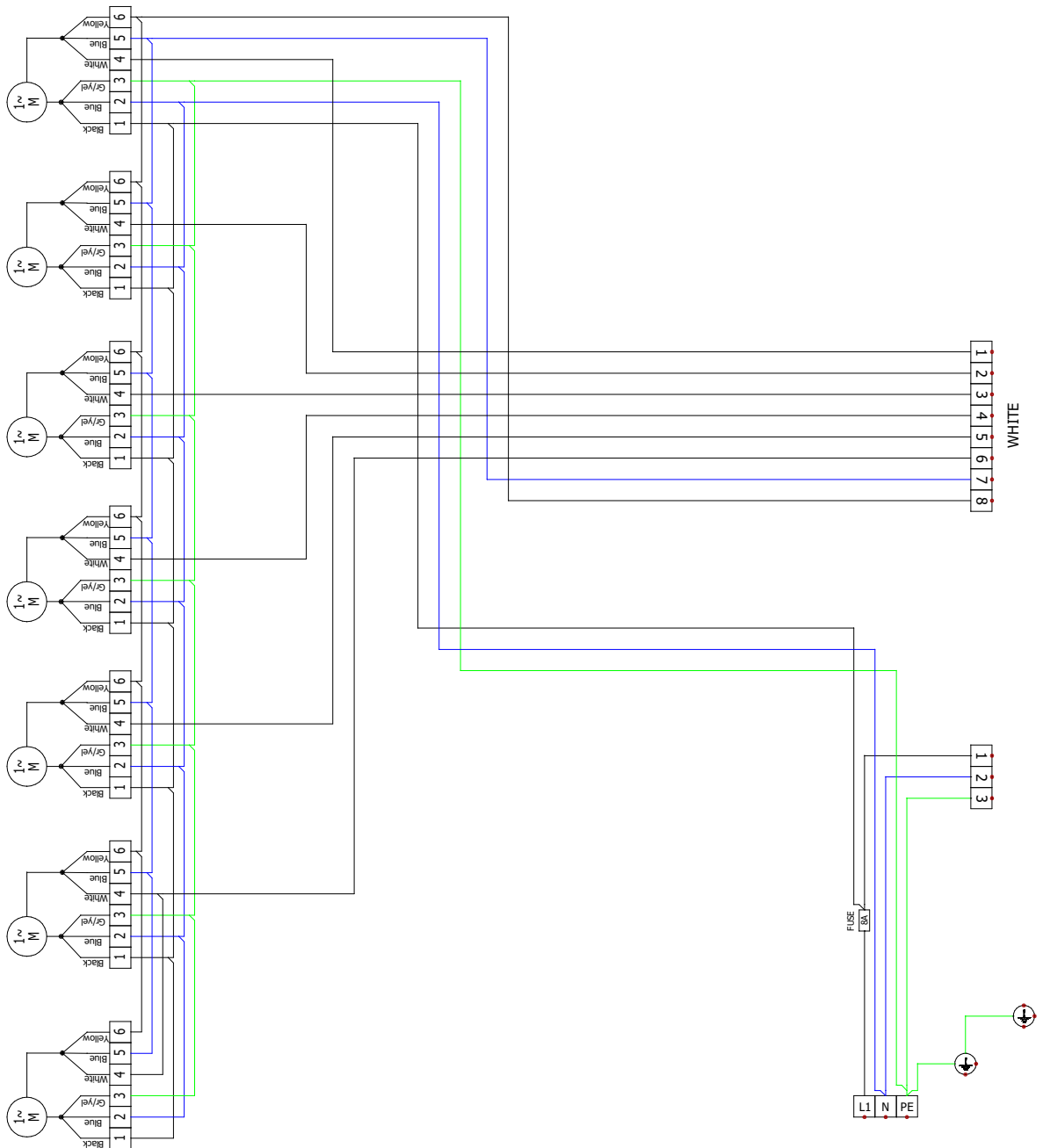
# 9. ELECTRICAL SCHEMES

VCST4C-20-S-EC and VCST4C-20-Vx-EC



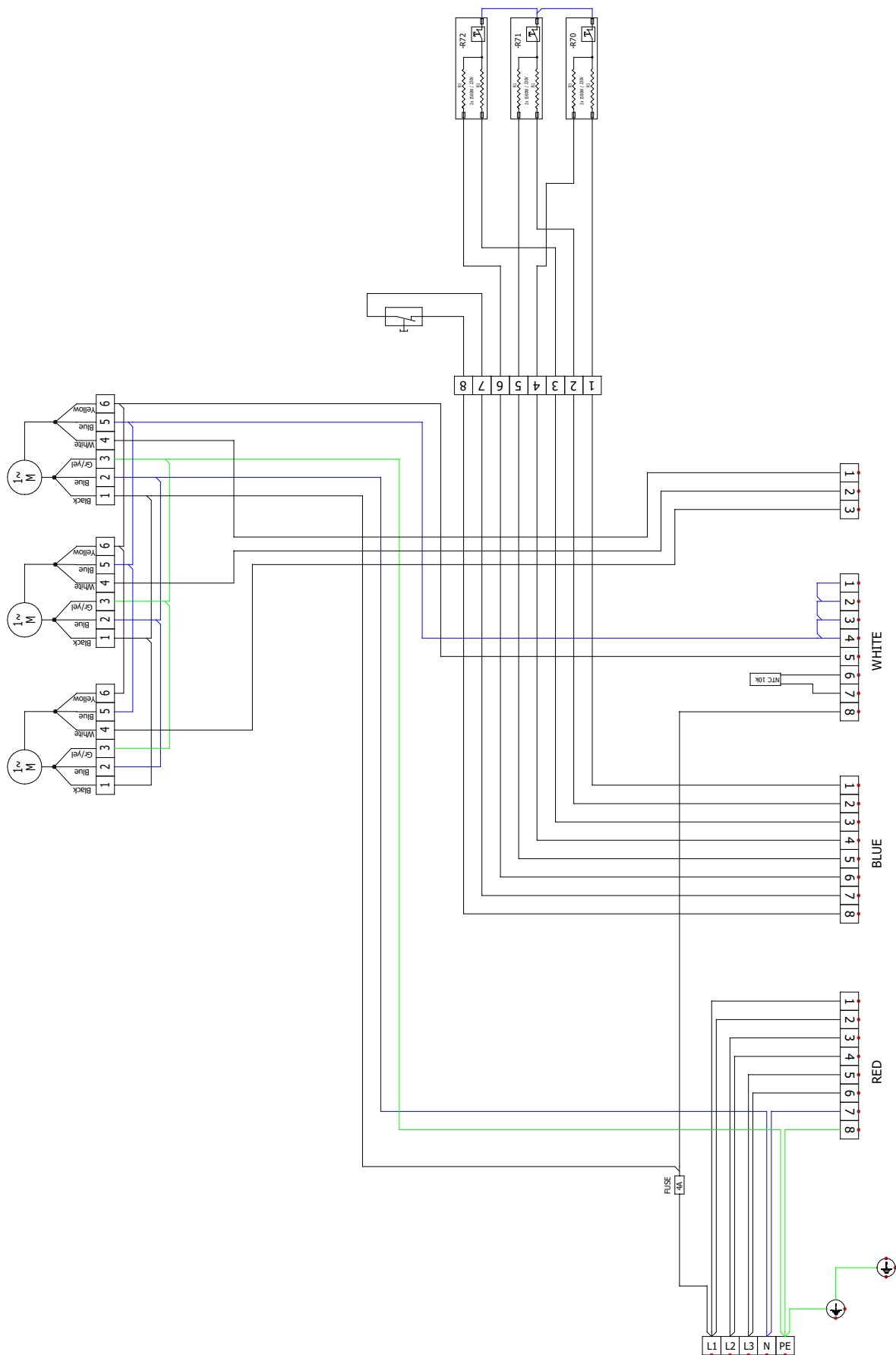
# 9. ELECTRICAL SCHEMES

VCST4C-25-S-EC and VCST4C-25-Vx-EC



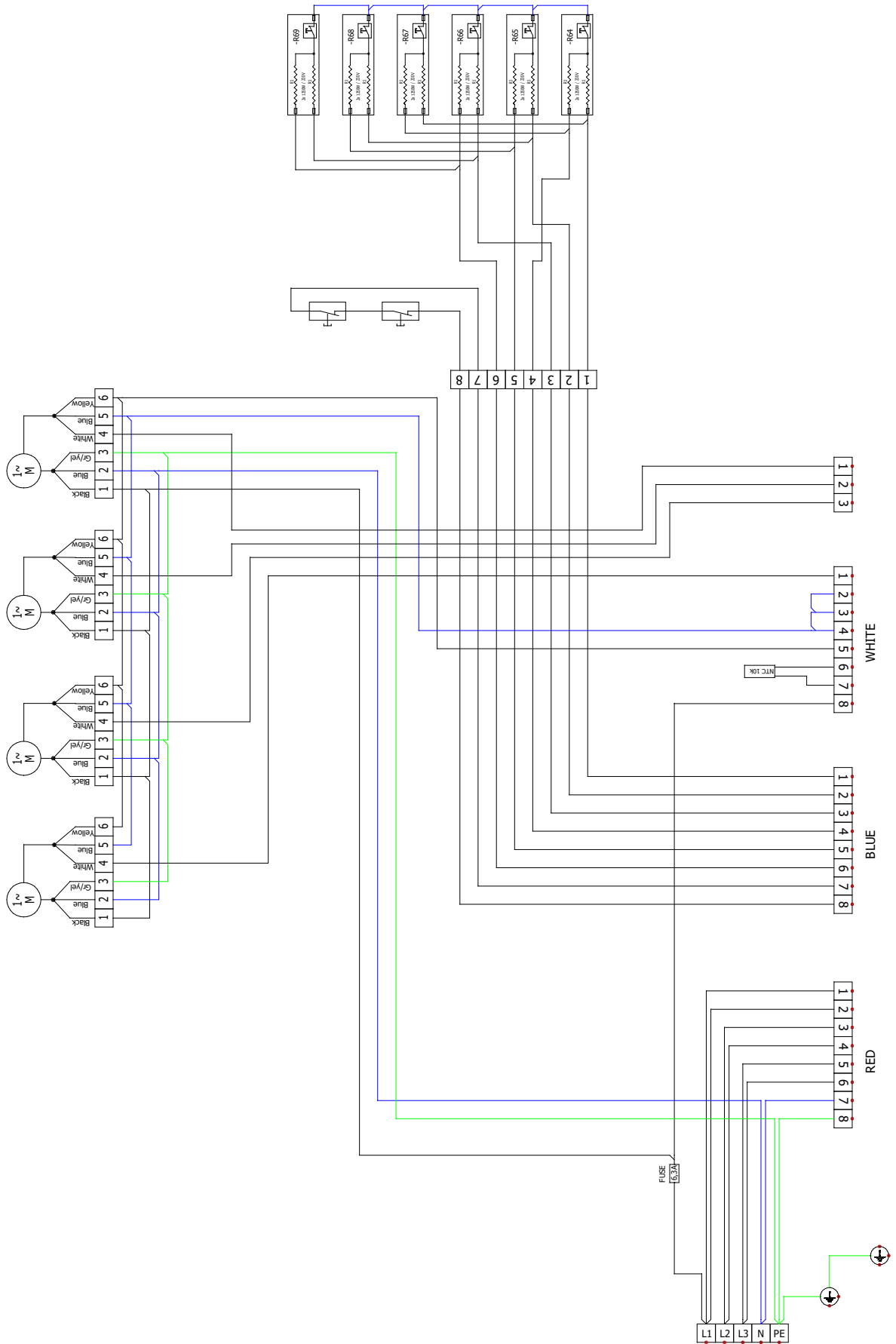
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VCST4C-10-E-EC



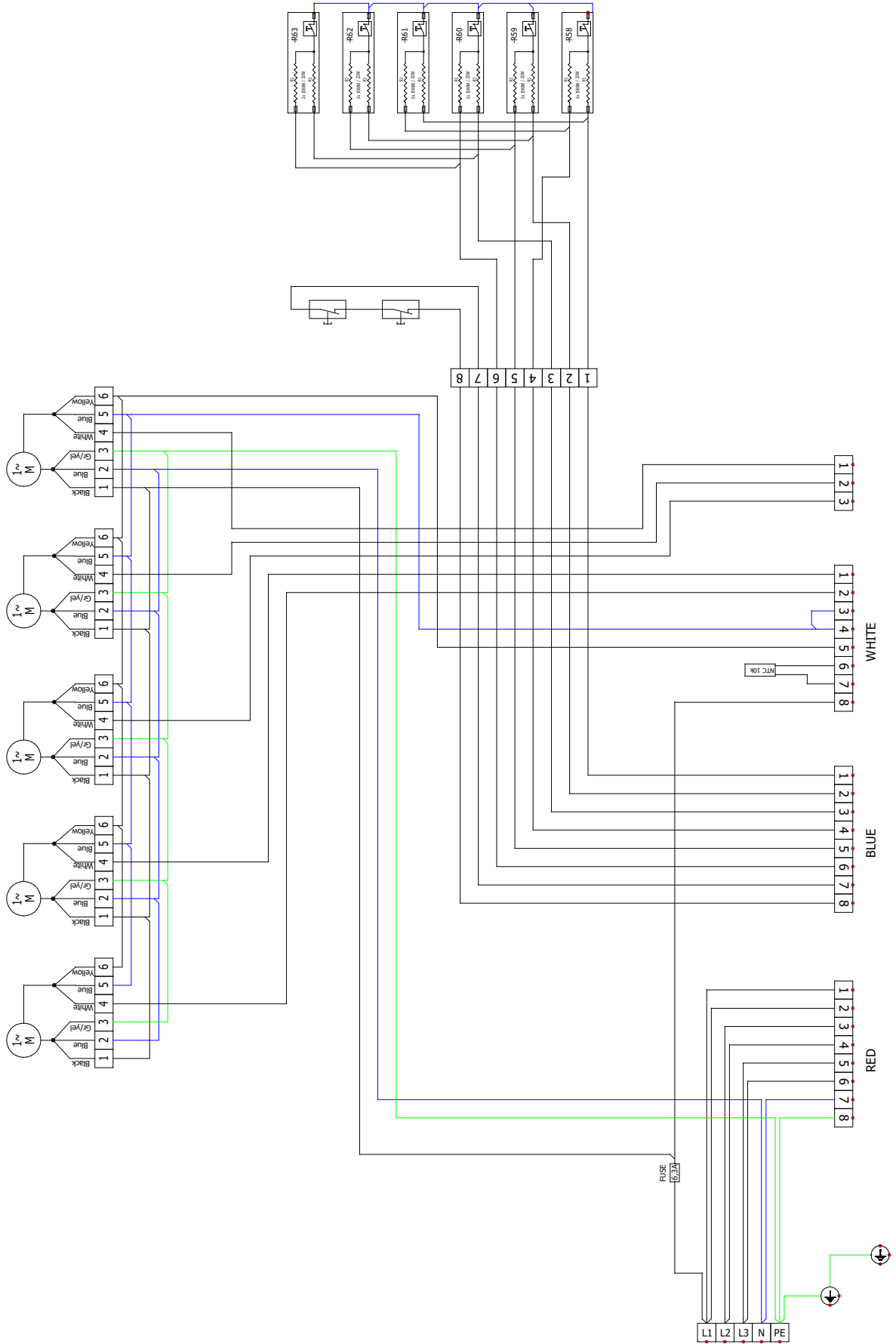
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VCST4C-15-E-EC



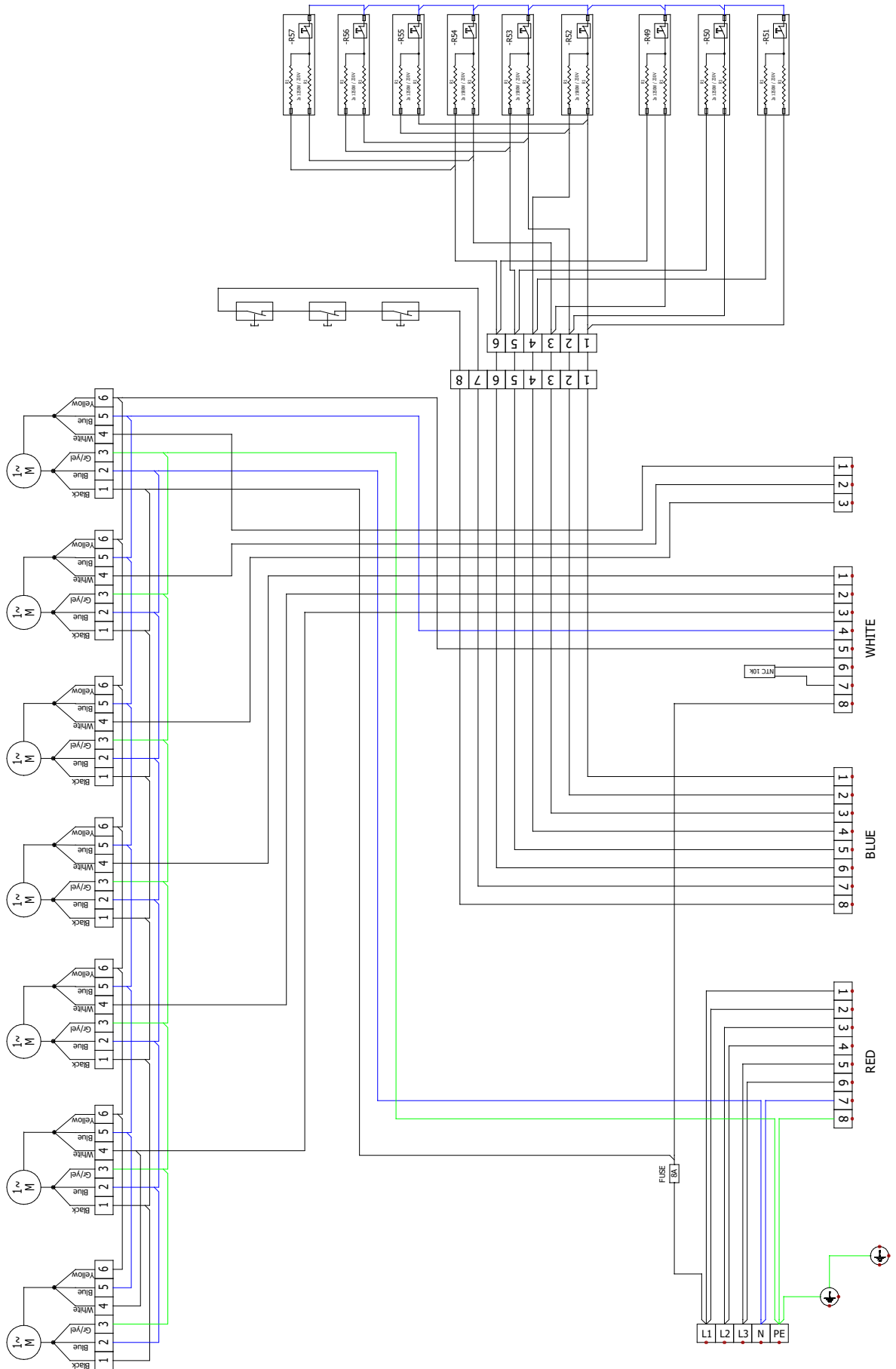
# 9. ELECTRICAL SCHEMES

VCST4C-20-E-EC



# 9. ELECTRICAL SCHEMES

VCST4C-25-E-EC



## 10. CONCLUSION

After installing the air curtain, read carefully the **Manual for the appropriate regulator**. In case of any doubt or query, do not hesitate to contact our sales or technical support departments.

### CONTACT

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