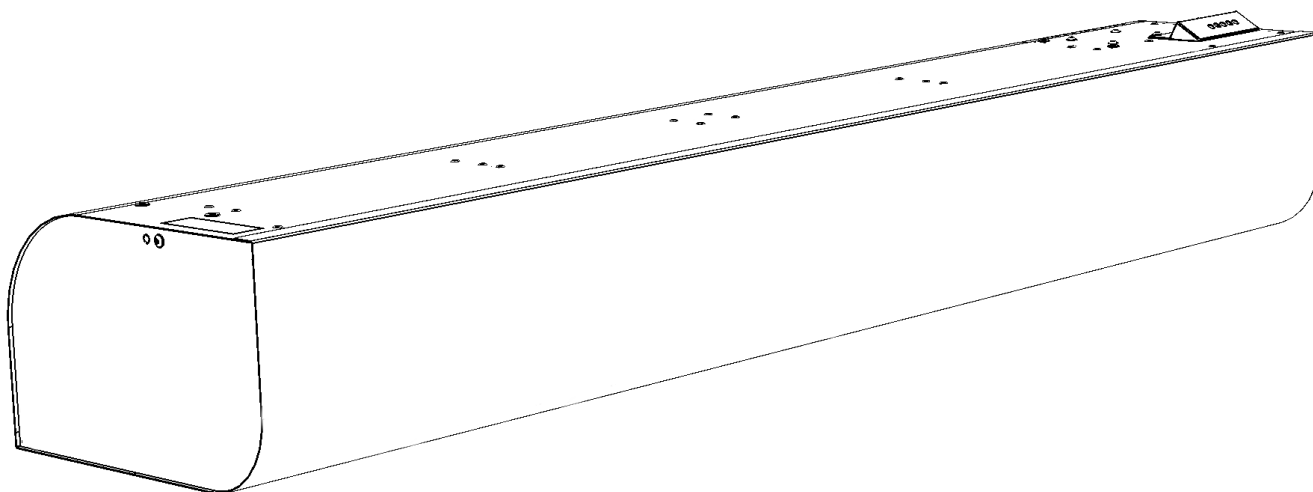




PARTNER  
IN VENTILATION  
2VV.CZ

# ESSENSSE NEO

INSTALLATION








**VCES2-B-xx-AC,  
VCES2-C-xx-AC**



4-118-0246



# 1. BEFORE YOU BEGIN

Symbol	Meaning
 <b>CAUTION!</b>	Warning or Caution
 <b>PLEASE NOTE!</b>	Important instructions
 <b>you will need</b>	Practical tips and information
 <b>TECHNICAL INFORMATION</b>	Detailed technical information
	Reference to another part of the manual



Before installing, read carefully the section **Safe use of the air curtains**, where you will find all the instructions for the safe and proper use of the product.

This manual includes important instructions for the appropriate installation of the air curtains. Before installing, read carefully all the following instructions and observe them. The manufacturer reserves the right to change, including the technical documentation, without prior notice. Keep the manual for future use. The instructions herein are part of the product

### Declaration of conformity

Details can be found at [www.2VV.cz](http://www.2VV.cz)

## 2. UNPACKING

### 2.1 CONTROL DE DELIVERY

#### PLEASE NOTE

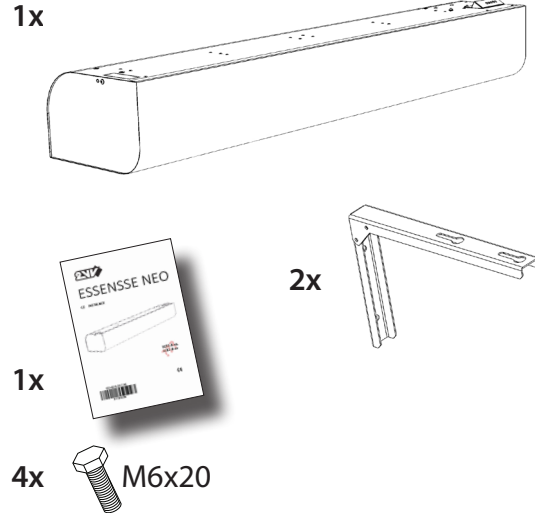
Check the product for damages immediately after delivery. In case of damage to the packaging, contact the carrier. Claims not filed in due time will be disregarded.

- Check that it corresponds to the type of product ordered. In case of discrepancy, do not unpack the product and contact the vendor.
- After unpacking, check that the product and all the other components are in good order. In case of doubt, contact the vendor.
- Do not install a damaged unit!
- If you will not unpack the product immediately after delivery, store it indoors, in a dry place with ambient temperatures between **+5 °C and +40 °C**.



	All the packaging material is environmentally friendly and can be reused or recycled. Contribute actively to the protection of the environment and ensure the proper disposal or recycling of the packaging materials.	
--	--	--

### 2.2 CONTENTS

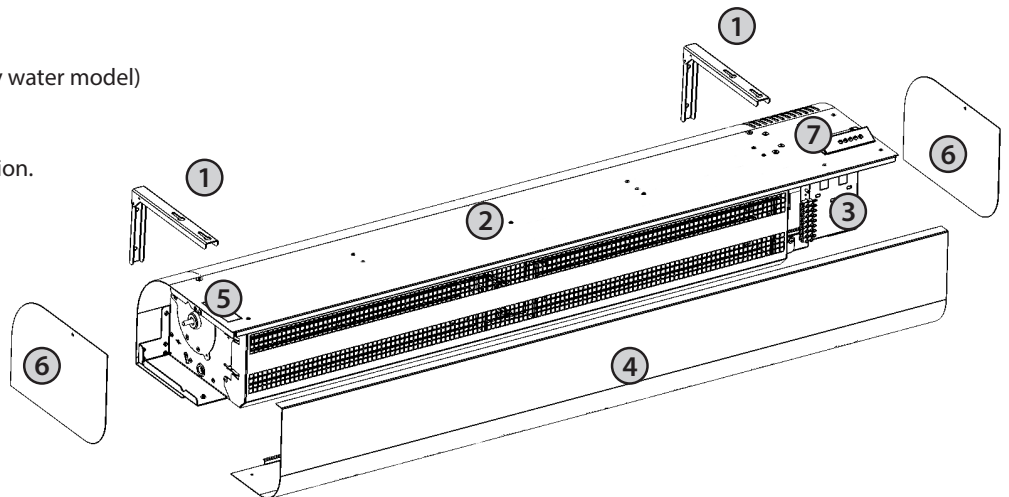


#### PLEASE NOTE

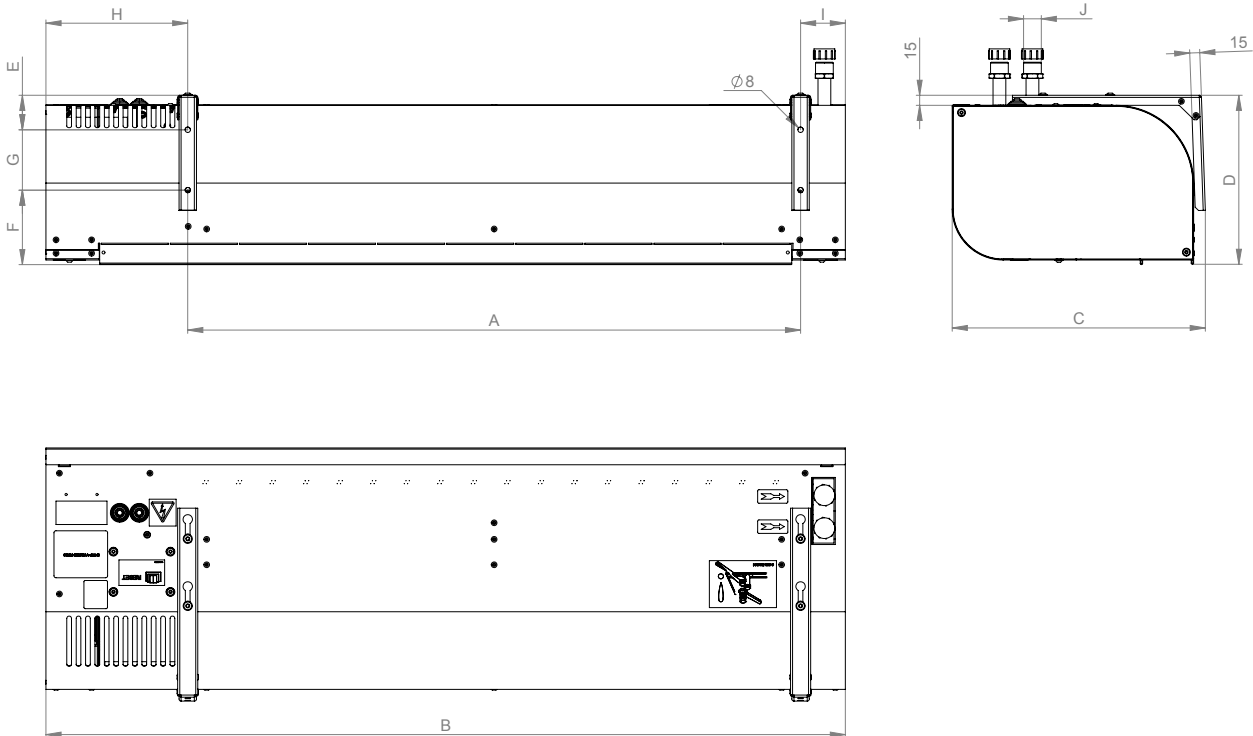
- If the unit was transported in temperatures lower than 0°C, after unpacking, leave it in operational conditions for at least two hours without activating in order to compensate the inner temperature.

## 3. MAIN COMPONENTS

- ① Mounting brackets (2pcs)
- ② Curtain body
- ③ Area to connect the control module
- ④ Suction cover
- ⑤ Connection of water exchanger (only water model)
- ⑥ Side cover
- ⑦ Terminal box for main power connection.



## 4. DIMENSIONS



TYPE	A	B	C	D	E	F	G	H	I	J
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
VCES2B-100	913	1190	377	252	51	111	90	211	67	3/4"
VCES2C-100	913	1190	377	252	51	111	90	211	67	3/4"
VCES2B-150	1321	1600	377	252	51	111	90	211	67	3/4"
VCES2C-150	1321	1600	377	252	51	111	90	211	67	3/4"
VCES2B-200	1822	2100	377	252	51	111	90	211	67	3/4"
VCES2C-200	1822	2100	377	252	51	111	90	211	67	3/4"
VCES2B-250	2232	2510	377	252	51	111	90	211	67	3/4"
VCES2C-250	2232	2510	377	252	51	111	90	211	67	3/4"

Type	Weight (kg)	Type	Weight (kg)
VCES2B-100-E	25,5	VCES2C-100-E	27,3
VCES2B-150-E	32,6	VCES2C-150-E	37,4
VCES2B-200-E	39,8	VCES2C-200-E	47,7
VCES2B-250-E	46,9	VCES2C-250-E	55,8
VCES2B-100-V	26,1	VCES2C-100-V	27,6
VCES2B-150-V	32,9	VCES2C-150-V	39,3
VCES2B-200-V	40,1	VCES2C-200-V	47,6
VCES2B-250-V	47,4	VCES2C-250-V	55,3
VCES2B-100-S	24,8	VCES2C-100-S	26,3
VCES2B-150-S	31,3	VCES2C-150-S	35,7
VCES2B-200-S	38,3	VCES2C-200-S	45,8
VCES2B-250-S	45,1	VCES2C-250-S	53,1

## 5. TECHNICAL PARAMETERS

Type	Heater output [kW]*		Total consumption [A]	Motor			Supply frequency [Hz]
	1st step	2nd step		Power (W)	Current (A)	Tension (V)	
VCES2B-100-E0	3,2	4,7	13,8	161	0,7	230	50/60
VCES2B-150-E0	3,8	7,5	11,9	230	1		50/60
VCES2B-200-E0	4,8	9,5	15,4	299	1,3		50/60
VCES2B-250-E0	6,9	12,2	19,4	370	1,6		50/60
VCES2B-100-E1	3,2	6,3	13,8	161	0,7		50/60
VCES2B-150-E1	5	10	21,8	230	1		50/60
VCES2B-200-E1	6,3	12,6	27,5	299	1,3		50/60
VCES2B-250-E1	8,2	16,3	26,2	370	1,6		50/60
VCES2B-100-E2	4,7	9,5	14,5	161	0,7		50/60
VCES2B-150-E2	7,5	15	22,8	230	1		50/60
VCES2B-200-E2	9,5	19	29,1	299	1,3		50/60
VCES2B-250-E2	12,2	24,5	37,1	370	1,6		50/60
VCES2B-100-V	16,9		0,7	161	0,7		50/60
VCES2B-150-V	24,7		1	230	1		50/60
VCES2B-200-V	35,7		1,3	299	1,3		50/60
VCES2B-250-V	43,3		1,6	370	1,6		50/60
VCES2B-100-S	-	-	0,7	161	0,7		50/60
VCES2B-150-S	-	-	1	230	1		50/60
VCES2B-200-S	-	-	1,3	299	1,3		50/60
VCES2B-250-S	-	-	1,6	370	1,6		50/60
VCES2C-100-E1	5	9,9	15,4	370	1,6	230	50/60
VCES2C-150-E1	7,9	15,2	23,8	460	2		50/60
VCES2C-200-E1	10,2	19,1	30,7	690	3		50/60
VCES2C-250-E1	12,9	25,1	38,9	740	3,2		50/60
VCES2C-100-V	22,4		1,6	370	1,6		50/60
VCES2C-150-V	31,8		2	460	2		50/60
VCES2C-200-V	44,4		3	690	3		50/60
VCES2C-250-V	53,7		3,2	740	3,2		50/60
VCES2C-100-S	-	-	1,6	370	1,6		50/60
VCES2C-150-S	-	-	2	460	2		50/60
VCES2C-200-S	-	-	3	690	3		50/60
VCES2C-250-S	-	-	3,2	740	3,2		50/60

\* Intake air temperature +18°C, at maximum heater output and fan speed.



The other technical parameters can be found in the corresponding technical sheet of the product

## 6. INSTALLATION

### 6.1 OPERATIONAL CONDITIONS:

The air curtain is designed to be used in an indoor, dry environment, with ambient temperatures between **5°C to +40°C**, a maximum relative humidity of 80%, and to transport air free of coarse dust, grease, chemical fumes and other contamination. The electrical protection is IP 20 (against particles larger than 12.5 mm, not protected against water).

Curtains with electric heater are fitted with an operational thermostat with automatic reset (located on each heater) and an emergency thermostat with manual reset.

The water exchangers are designed for a maximum water temperature of +100°C and maximum pressure of 1.6 MPa.

### 6.2 INSTALLATION CONDITIONS

The installation and assembly of the unit may be carried out only by a suitably qualified person who has the adequate tools!

2 mounting brackets and 4 bolts are supplied with the product as standard.

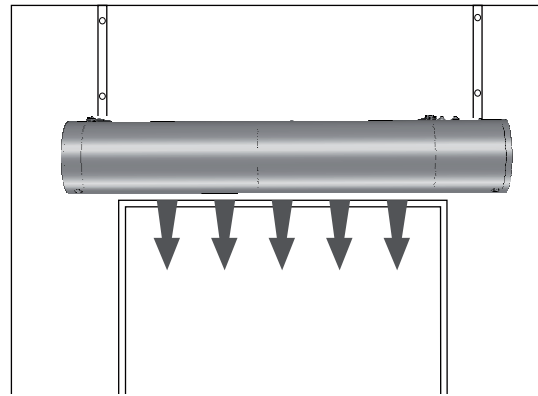
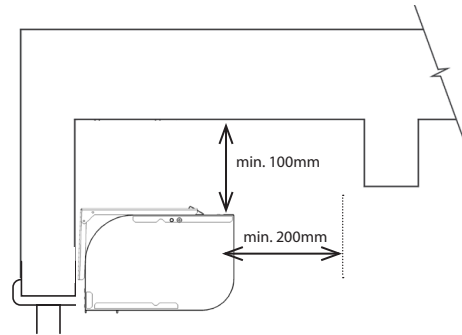
If the unit is to be mounted on threaded rods, they have to be ordered separately. The following rules should be observed for the proper function of the unit.



#### PLEASE NOTE

- minimum clearances must be observed (see fig. clearances) with respect to the flammability of materials.
- the clearances with respect to the flammability of materials are determined by the architect with regards to the regulations applicable at the place of installation
- the unit may be installed only in horizontal position
- there must be at least 200 mm of free space in front of the suction cover for the proper functioning of the unit
- the exhaust should be located as near as possible to the door or the curtain opening
- the curtain should extend beyond both sides of the opening by at least 100 mm
- if the curtain is to be installed above a door, place it as near as possible to the upper border of the door. See that the intake and exhaust are not blocked and that the air can flow freely, see fig.

### 6.3 SUSPENSION:



If there is a window above the door or another material preventing the installation on the brackets, the unit may be hung from the ceiling with threaded rods, directly onto dowels (see below).

#### Installation with mounting brackets

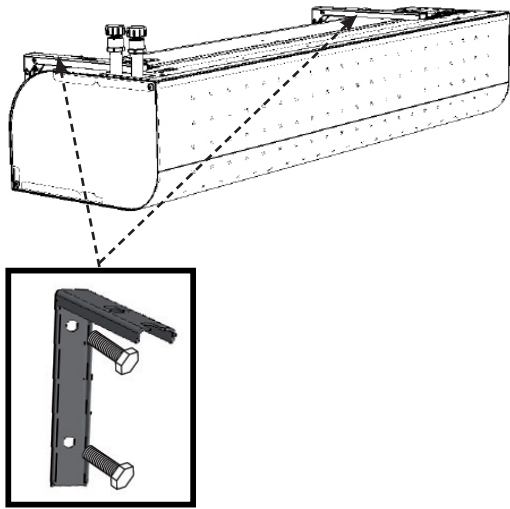


#### YOU WILL NEED

- 4x dowels (not included)
- 4x bolts (not included)

Measure the holes on the wall according to the dimension chart (see "Dimensions") (observe the installation rules) Do not forget to choose whether the unit will be installed according to A or B and to set the height of the opening according to that! Insert back in the opening in the curtain (and only partially in the curtain) the screws that held the brackets and hang the curtain from them. **Check that the curtain is fastened properly to prevent it falling**

## 6. INSTALLATION



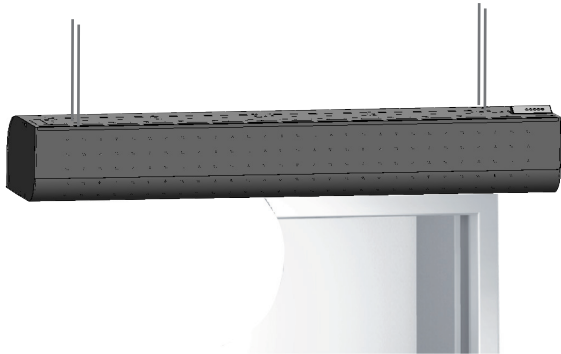
### Installation with threaded rods



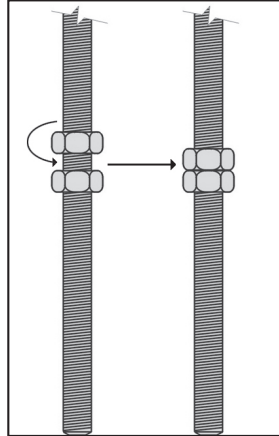
#### YOU WILL NEED

- 4 6mm anchors (not included)
- 4 M6 threaded rods (not included)
- 8 M6 nuts (not included)
- M10 spanner (not included)

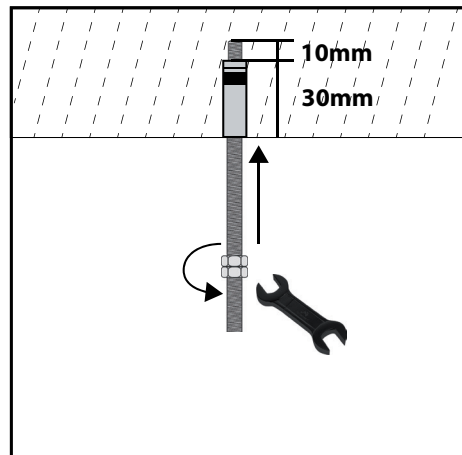
hanging from threaded rods



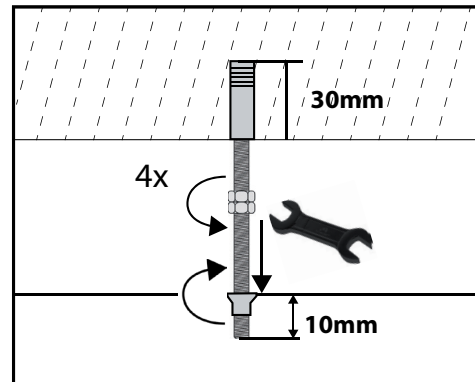
Before installing, check that the ceiling can bear the weight of the unit. Install according to the following figures.



#### 1. Fastening to the ceiling



#### 2. Fastening to the curtain

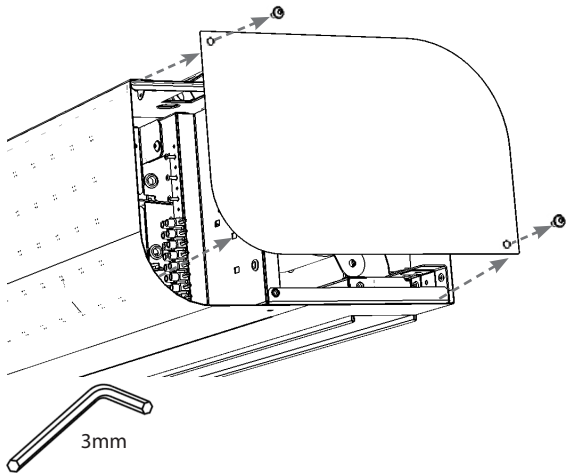


## 6. INSTALLATION

### 6.4 Installing the control module (detailed instructions can be found in the respective manual)

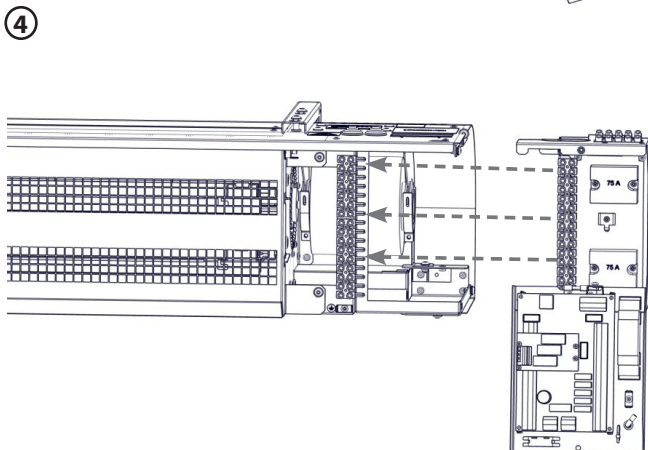
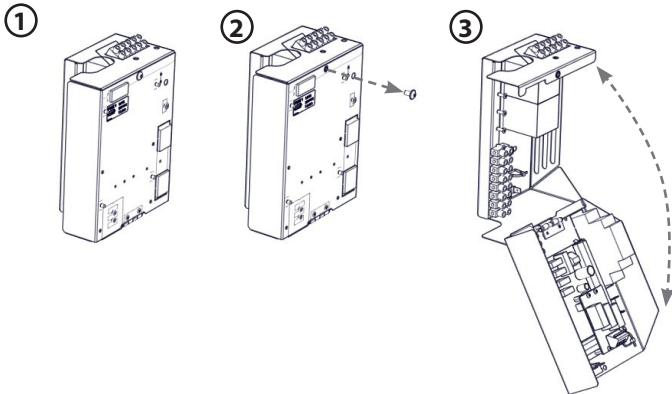
The following procedure requires the removal of the suction cover

#### 6.4.1. remove the design sideboard fastened with two M5 screws on the side of the motor

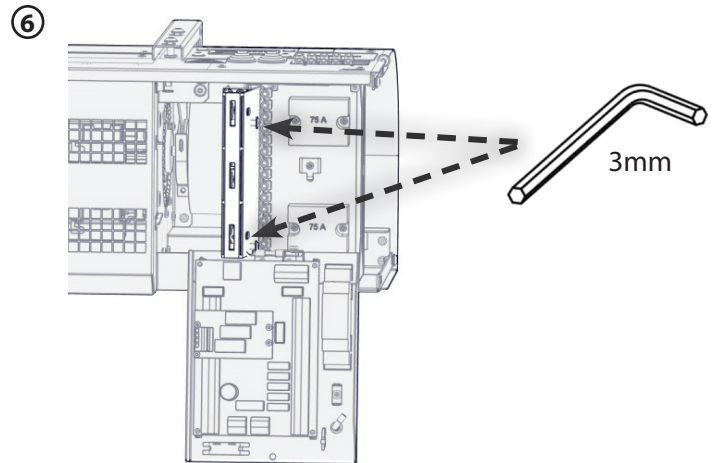
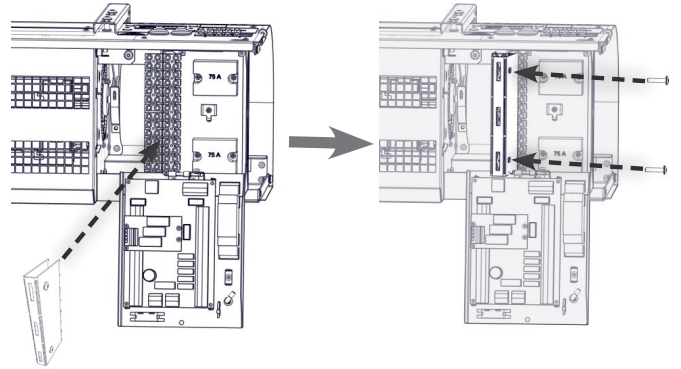


#### 6.4.2 Installing the control module (Not included)

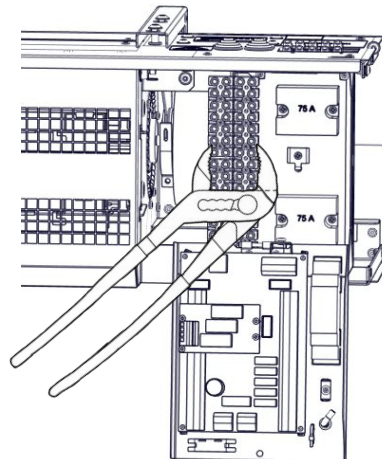
1) insert the module into the unit



5) Tighten the terminal box with the help of the tool



Tensioning the terminal block using the siko tongs:



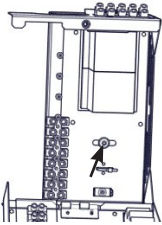
**CAUTION!**

Siko pliers are not included



## 6. INSTALLATION

- 2) Insert and fasten the regulator's terminal box to the curtain's terminal box with the supplied tool or with Siko pliers.
- 3) Tighten all the screws of the module.
- 4) Fasten the regulator with a screw, see figure below

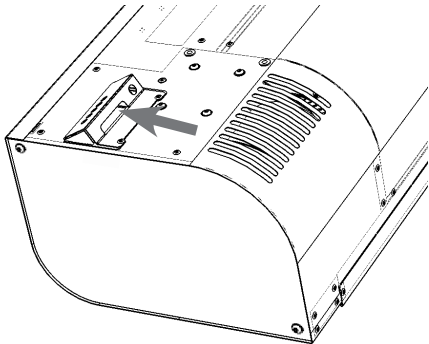


### TECHNICAL INFORMATION

The tool to install the module is supplied with the module.

#### 6.4.3 Connecting the supply cables

- The power cable may be connected to the main terminal box located on the upper part of the unit only after having installed the control module (see figure below).
- Pull the regulator's communication cable.
- Pull the cables to the accessories, if applicable



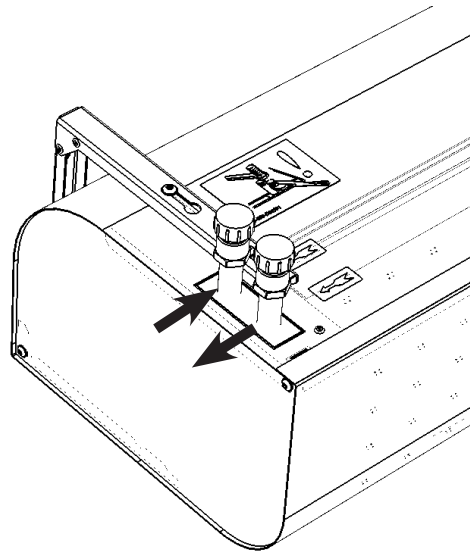
### CAUTION!

**The supply must be determined by the relevant designer, it must comply with the applicable regulations and take into account the power an installation parameters of the air curtain**

#### 6.5 Connecting the water heater

(only for the curtain with LPHW)

- flexible hoses are recommended to connect the water heater
- the connection and pressure tests of the heater must be carried out by a person with qualifications in plumbing and in compliance with the applicable regulations
- the diameters of the pipes to connect the water heater are listed in the section DIMENSIONS
- the heater is designed for water with a maximum pressure of 1.6 MPa and a maximum temperature of +100°C.

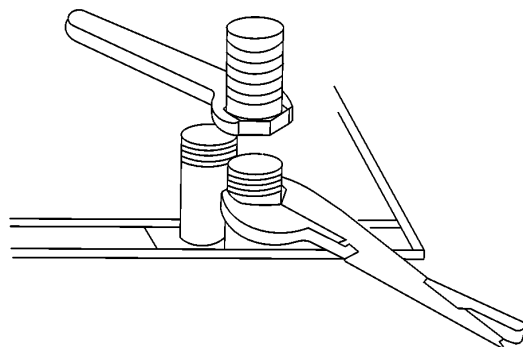


### PLEASE NOTE

- connect the pipes in the countercurrent connection, the hot water connection and the return heating water are shown in the figure above
- it is advisable to install a shut-off valve at the inlet and the outlet of the heater to interrupt the water supply



When connecting the heater, hold the outlet with pliers to prevent damages (see figure)



## 7. COMMISSIONING

### CAUTION!

Before starting up the unit check that:

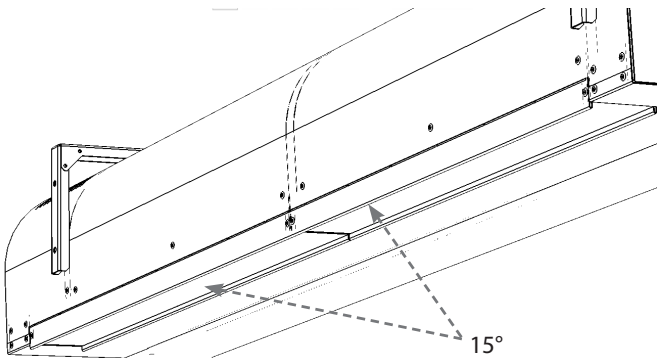
- No tools or other objects that may damage the unit have been left inside.
- The power and heating water supply are well connected.
- The unit is properly covered.
- The control panel is properly connected

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

### **7.1 SETTING THE DIRECTION OF THE EX-HAUST AIR**

#### CAUTION!

Deflect the exhaust in the desired direction during the installation of the unit. The exhausts of the Essense air curtain can blow air at a maximum angle of 15°



## 8. CLEANING AND MAINTENANCE

### 8.1 CLEANING



#### **ATTENTION!**

**Before carrying out any work inside the air curtain, the main power input must be disconnected. The air curtain must be allowed to cool down!**

- It is forbidden to use compressed air, aggressive chemicals, solvents or water for cleaning.
- Clean using a damp cloth, fine brush or vacuum cleaner.
- Clean the surface of the air curtain including the suction inlet part.
- Clean as necessary, it is recommended that cleaning should be performed at least once every 3 months.
- Adhere to workplace safety and use protective aids.

## 9. SERVIS

### 9.1 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.

### 9.2 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.

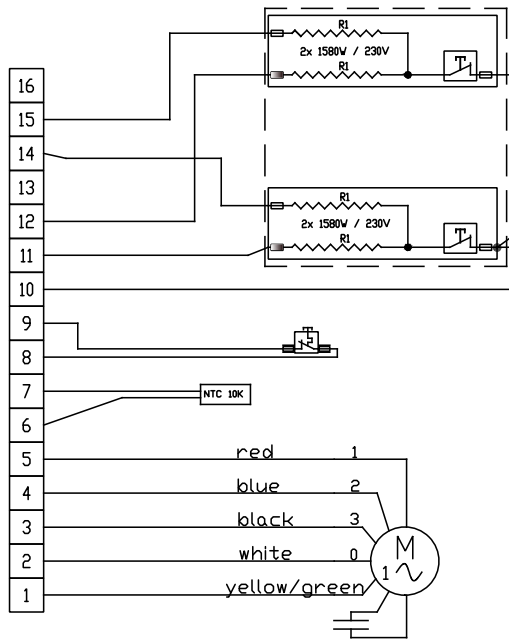
The product is good to dispose at the place, which is specialized for it, and thus it will be possible to recycle materials. Store unusable parts of the product at a controlled dump.



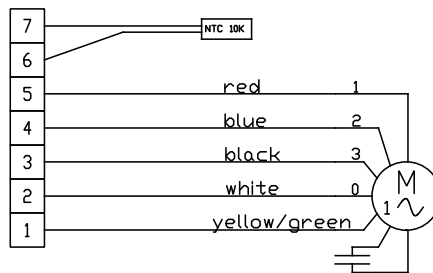
When disposing of materials, it is necessary to observe the relevant national regulations on waste disposal.

# 10. WIRING DIAGRAM

VSES2B100-E1AC-ZP-xxx

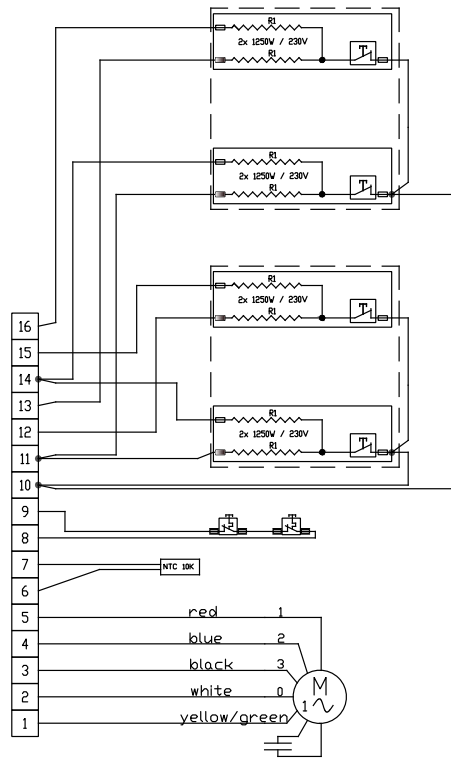


VSES2B100-V1,S0AC-ZP-xxx

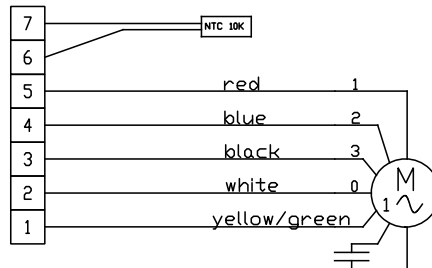


# 10. WIRING DIAGRAMS

VSES2B150-E1AC-ZP-xxx

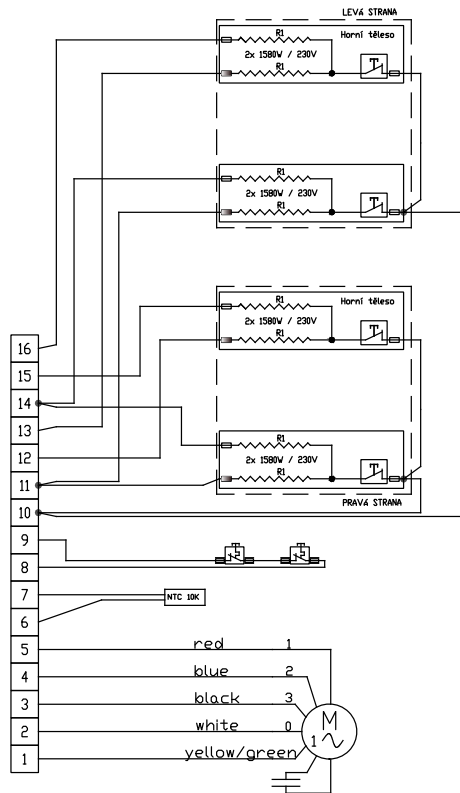


VSES2B150-V1,S0AC-ZP-xxx

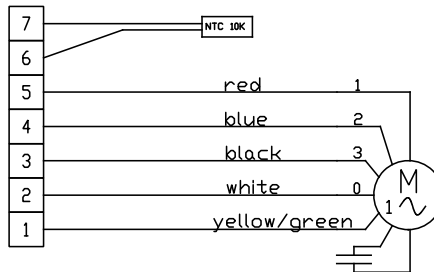


# 10. WIRING DIAGRAM

VSES2B200-E1AC-ZP-xxx

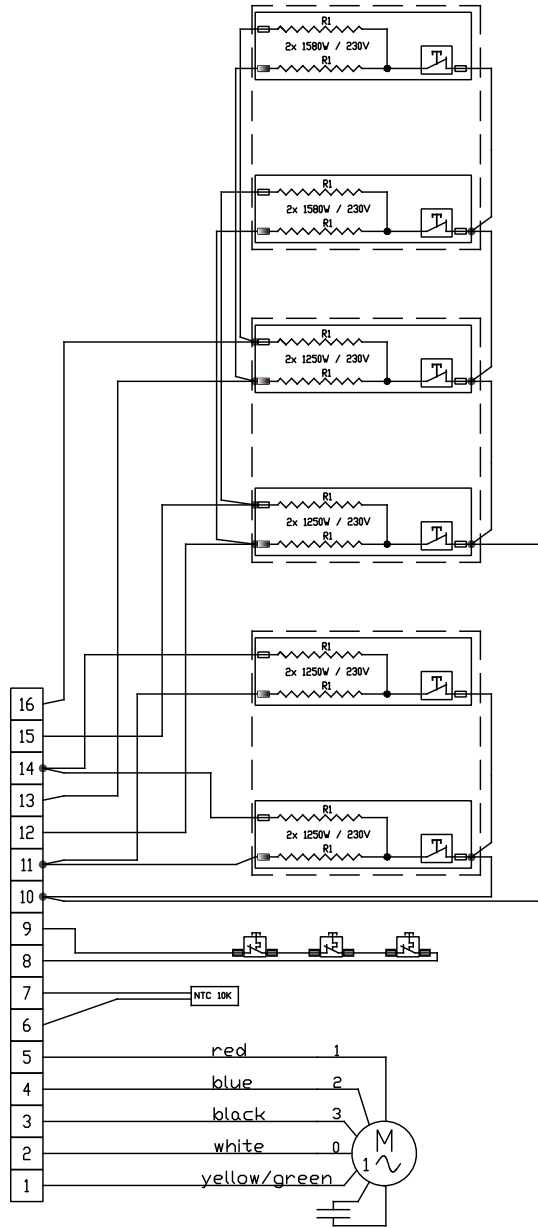


VSES2B200-V1,S0AC-ZP-xxx

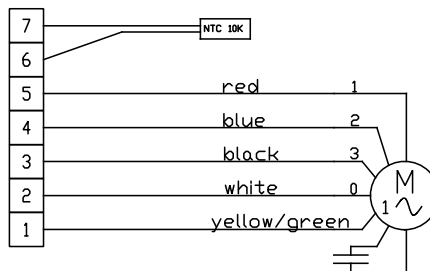


# 10. WIRING DIAGRAMS

VSES2B250-E1AC-ZP-xxx

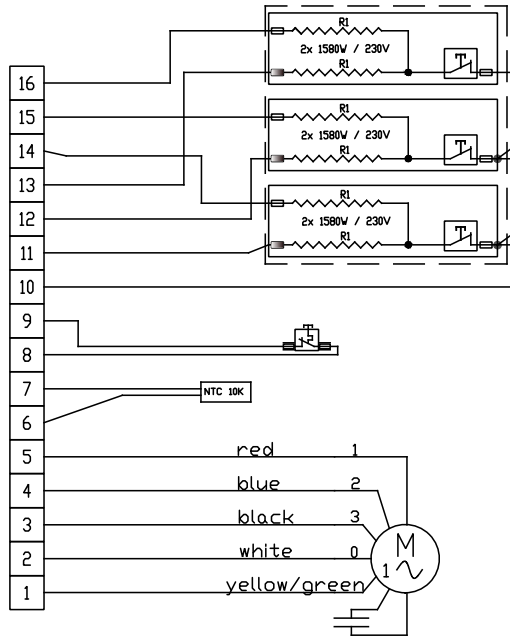


VSES2B250-V1,S0AC-ZP-xxx

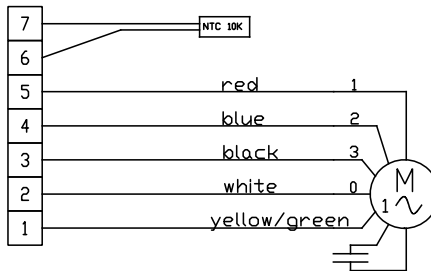


# 10. WIRING DIAGRAM

VSES2C100-E1AC-ZP-xxx



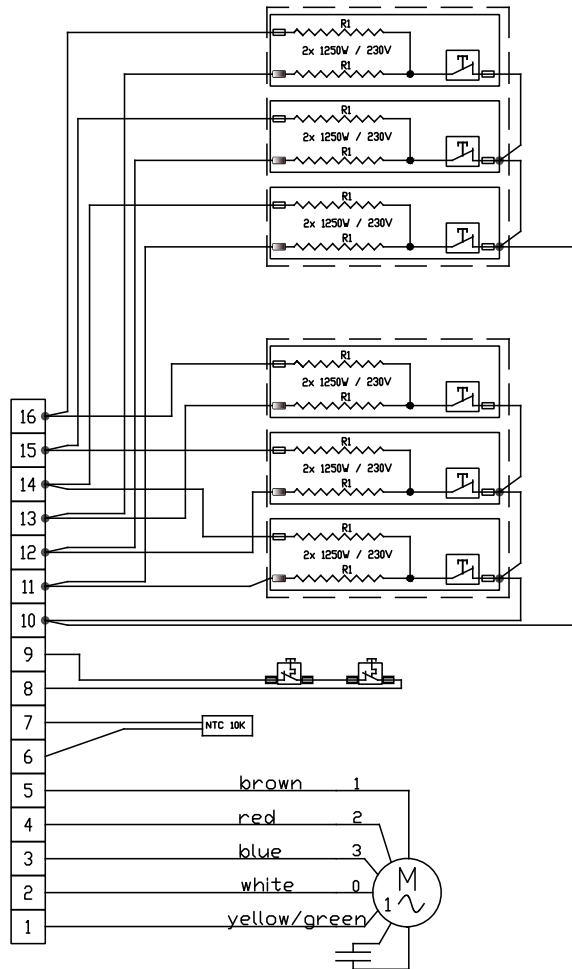
VSES2C100-V1,S0AC-ZP-xxx



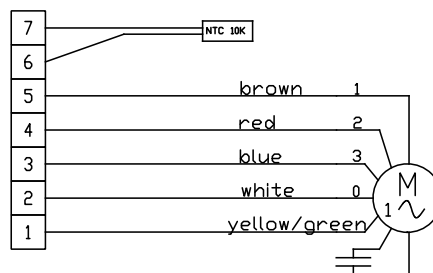


# 10. WIRING DIAGRAMS

VSES2C150-E1AC-ZP-xxx

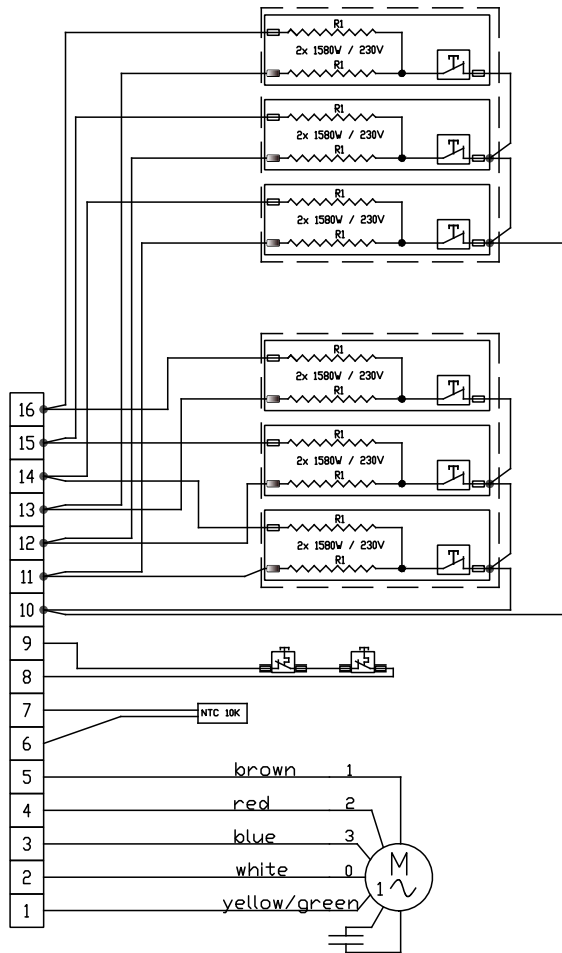


VSES2C150-V1,S0AC-ZP-xxx

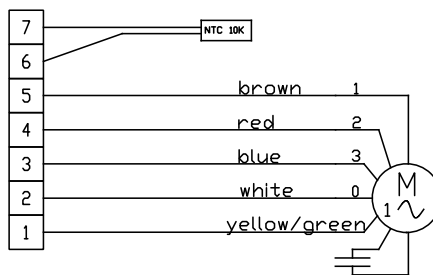


# 10. WIRING DIAGRAM

VSES2C200-E1AC-ZP-xxx

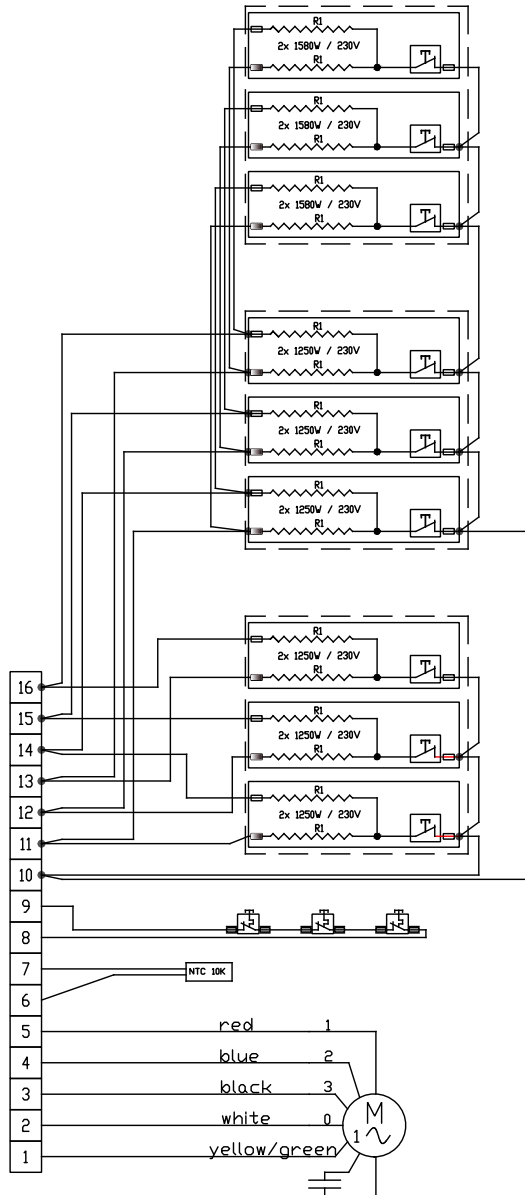


VSES2C200-V1,S0AC-ZP-xxx

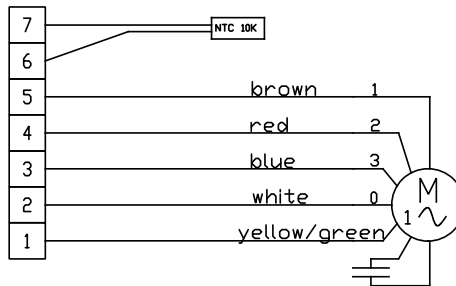


# 10. WIRING DIAGRAMS

VSES2C250-E1AC-ZP-xxx



VSES2C250-V1,S0AC-ZP-xxx



## 11. 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**

**Adresse**

**2VV, s.r.o.,**  
Fáblovka 568,  
533 52 Pardubice,  
Česká republika

**Internet :**

<http://www.2vv.cz/>

