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# 1. GENERAL GUIDELINES



Air Curtain is an electrical device producing a directional air flow. When mounted above the doorways it separates the indoor space from the outdoor ambience functioning as if a closed door. Meanwhile the door remains open and provides free entrance and contact. By producing a homogeneous air flow the Air Curtain prevents the heat losses and protects the indoor space from the adverse weather conditions. This allows creating an agreeable microclimate indoors, thus reducing energy consumption by heaters and **air-conditioners by saving up to 60-85%. Functionally Air Curtains represent the energy saving class of equipment and are used together with other types of climatic equipment.**



“OLEFINI S.A.” Air Curtains are manufactured in strict compliance with the following quality Standards:

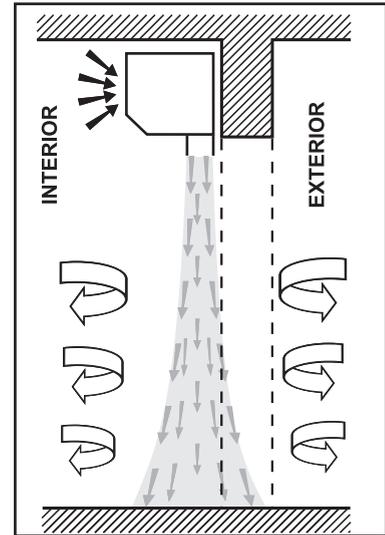
International Organization for Standards  
ISO 9001:2015, European Standard - CE

## Low Voltage Directive

EN 60335 - 1 LVD 2006/95/EC  
EN 60335 - 2 - 30

## Electromagnetic Compatibility

EN 55014-1  
EN 55014-2  
EN 61000-3-2  
EN 61000-3-3  
EN 61000 - 6 - 1 2004/108/EC  
EN 61000 - 6 - 3



## 1.1 LABELING & SYMBOLISM



90% of all faults are caused by negligence in transportation of the Air Curtains and loading operations, pay attention to the special labeling on the outer surface of the package and strictly follow the instructions marked by the specific symbols.



Protect from moisture



Don't drop



Don't try to put more than 6 units in a stack



Each Air Curtain has a special labeling about the model designation and it's technical characteristics for it's full identification. Company "OLEFINI S.A." provides 100% quality control of each produced Air Curtain which is fixed by a serial number - S/N.

Symbols - CE, QC - stand for a guarantee of reliability of the device according to the European standards and continues quality checks.

Besides, each Heated Air Curtain has an additional purpose labeling for safety precautions.







## 1.2 INSTALLATION INSTRUCTIONS

Generally, efficiency of an Air Curtain depends on temperatures differences, difference of air density inside and outside of the protected premises, building openings, as well as the height of the Air Curtain installation, on the wind loading and other less important factors.

To choose an Air Curtain successfully, an engineer or assembler should study attentively the premises where the equipment is to be mounted and to consider the above factors.

It is recommended to mount "OLEFINI S.A." Air Curtains in such a way so that air outlet is as close to the edge of the protected doorway as possible. It is desirable that the nozzles of the Air Curtains completely block the doorway. "OLEFINI S.A." Air Curtains can be mounted separately or in a cascade connection, providing in this way protection of doorway of any width or height.

Bellow is the description of a simplified way of selecting Air Curtains with only height of mounting and type of the protected premises taken into consideration.

### AIR CURTAIN SELECTION

	Fan diameter (mm)	Door height (m)	Air speed (m/sec)	Usage
<b>COMMERCIAL</b>	100	2.3-2.5	8.0-9.0	Shops, doorways, offices
<b>MINI / INTELLECT</b>	80 / 100 / 110			
<b>ECONOMICAL ( PLASTIC )</b>	110	2.5-3.0	8.5-10.0	Shops, offices, hotels, hospitals airports, doorways, banks
<b>GENERAL</b>	120	3.5-4.0	9.5-11.5	
<b>INDUSTRIAL</b>	130	5.0-6.0	11.5-12.5	Warehouse, factories, cooling chambers
<b>POWER INDUSTRIAL</b>	180	6.0->	16.0-22.0	Industrial doorways, hangars

#### ATTENTION

\*Air Curtains are mounted so that there are no hindrances for the free air inflow and outflow when the device is switched on. It is strictly forbidden to close the air inlet diffuser.

\*It is necessary to disconnect power supplies before mounting or repositioning the Air Curtain.

\*It is forbidden to mount an Air Curtains above electric sockets and wires under tension.

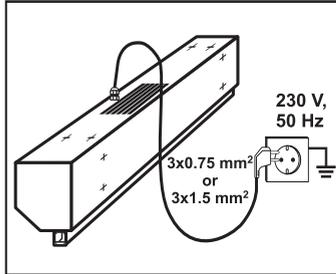
\*It is forbidden to mount an Air Curtains below 1.8m height.

\*Mounting of Air Curtains with the water heat exchanger requires special attention to the connection of the Air Curtain to the hydraulic system of the premises.

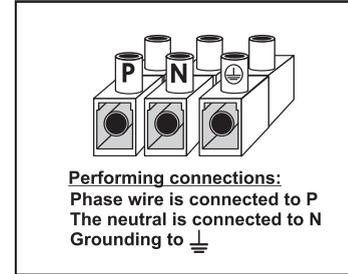
# 1.3 POWER SUPPLY CONNECTIONS



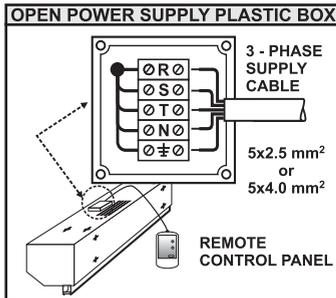
All "OLEFINI S.A." Air Curtains without Heaters (simple) and Heated Air Curtains (with water heating), Work with a single-phase alternating-current mains 230 V (+ 10 %), 50 Hz with grounding.



These models are delivered with the Euro plug TYPE F and should be used with a socket of the same type with grounding. The standard power cable should have profile 3x0.75 sq. mm. In case of using a longer cable than the standard one, it is recommended to apply a cable with 3x1.5 sq. mm profile. All the simple and water Air Curtains connections, should be performed only through the unipolar 6 Amperes automatic safety device switch, where the gap between the contacts to be at least 3 mm.



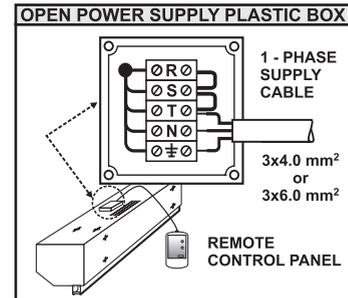
All the Heated Air Curtains with electric heating work with a three-phase alternating-current mains 400 (+ 10 %) V, 50 Hz with Neutral and Grounding. The cable is connected to the terminals in a special plastic box which is located on the top of the unit. Small capacity models can work with a single-phase alternating-current mains. It is necessary to connect terminals R, S, T for this purpose (in this case one should to pay attention to the profile of the power cable).



## ATTENTION

\*Read the instruction attentively before connecting the Air Curtain to the alternating-current mains, and also check the labeling on the top part of the Curtain and on the plastic supply box. Check up the system grounding once again before the final connection.

\*Only qualified electrician is allowed to connect the Air Curtain to the alternating-current mains, after having studied the electric schemes and the circuit network features.





To connect an Air Curtain of up to 6kW a power cable should have a profile of 5x2.5 mm<sup>2</sup>.  
 If the power capacity is higher it is necessary to use a cable profile of 5x4.5 mm<sup>2</sup>.  
 It is necessary to consult the service centre if the cable is longer.

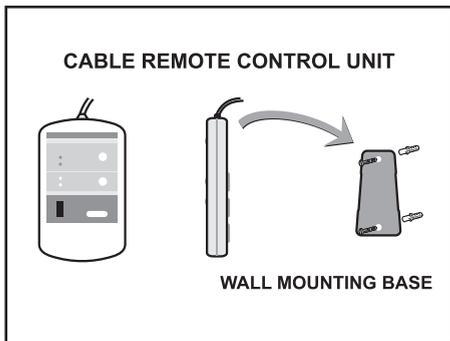
Air Curtain of up to 6 kW should be connected to the alternating-current mains through the unipolar automatic safety device switch of 35 Amperes.  
 Air Curtain of above 6 kW should be connected to the alternating-current mains through the three-pole automatic safety device switch with following distribution of the current power (see the table).  
 The opening between the connections of an automatic safety device should not be less than 3mm.

\*Motor power is included/calculated in following Table.

THERMAL POWER OF AIR CURTAINS (kW)	POWER CABLE (1-PHASE) ___x__ mm <sup>2</sup>	CURRENT / PHASE (1-PHASE) A	RECOMMENDED SAFETY DEVICE (1-PHASE) A	POWER CABLE (3-PHASE) ___x__ mm <sup>2</sup>	CURRENT / PHASE (3-PHASE) A	RECOMMENDED SAFETY DEVICE (3-PHASE) A
2,0	3x2,5	9,2	16	-	-	-
3,6	3x4,0	17,0	20	-	-	-
4,0	3x4,0	18,2	20	-	-	-
4,5	3 x 6,0	20,0	25	-	-	-
6,0	3 x 10,0	30,0	32	5x2,5	10,0	16
7,5	3 x 10,0	35,0	40	5x2,5	11,5	16
9,0	-	-	-	5x4,0	15,0	20
12,0	-	-	-	5x6,0	20,0	25
15,0	-	-	-	5x10,0	24,0	32
18,0	-	-	-	5x10,0	29,0	32
21,0	-	-	-	5x16,0	30,0	40



Switching on and off of Heated Air Curtains should be performed by the wired remote control and never by an electric system knife switch. By pressing the OFF key on the remote you close the Heaters (tubular electric heater), but the motor continues to work until unit cools off thus preventing the Air Curtains from overheating. If you switch off the power supply to the Air Curtain the motor will stop and the fan as well thus unit will overheat because of the “thermal inertia”, and this will result eventually in a malfunction.



All "OLEFINI S.A." Heated Air Curtains, except models MINI 700, Mini-800S, INTELLECT, R, LEH-13 S (*Standard version with switches*), X, XEH and Plastics are supplied with a cable remote control.

In case of cascade mounting of the Air Curtains their quantity should not exceed 5 units. Control of the Air Curtains is carried out by the wired remote control. A special telephone cable of  $6 \times 0.25 \text{ mm}^2$ , is used to connect the Air Curtains between themselves. It's total length should not exceed 15 m.

For example we have 5 air curtains (*2m long each*) so:  
 $4 \times 2.5 \text{ m (connection cable)} = 10 \text{ m} + 5 \text{ m (maximum wired remote control cable)} = 15 \text{ m}$

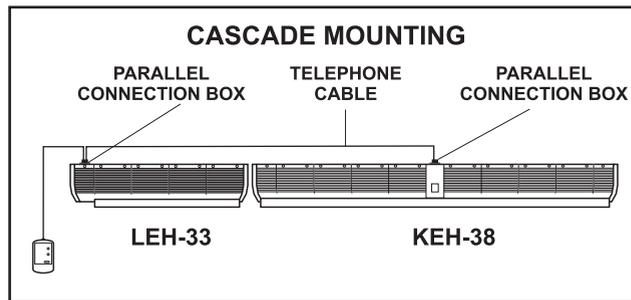
### ATTENTION

\*It is obligatory to control the Heated Air Curtains only by the wired remote control provided.

\*It is forbidden to switch OFF the Air Curtain by the electric knife switch.

\*A special telephone cable should be used for cascade mounting of the Air Curtains , supplied ONLY by us .

\* In case of Cascade unit connection each unit MUST have it's own Door Switch & Room Thermostat

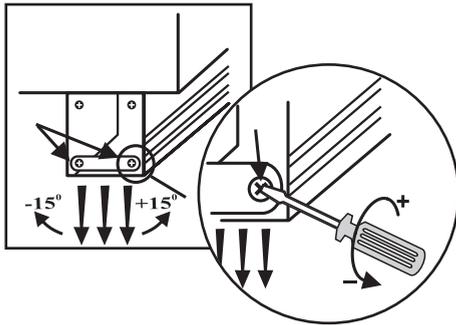
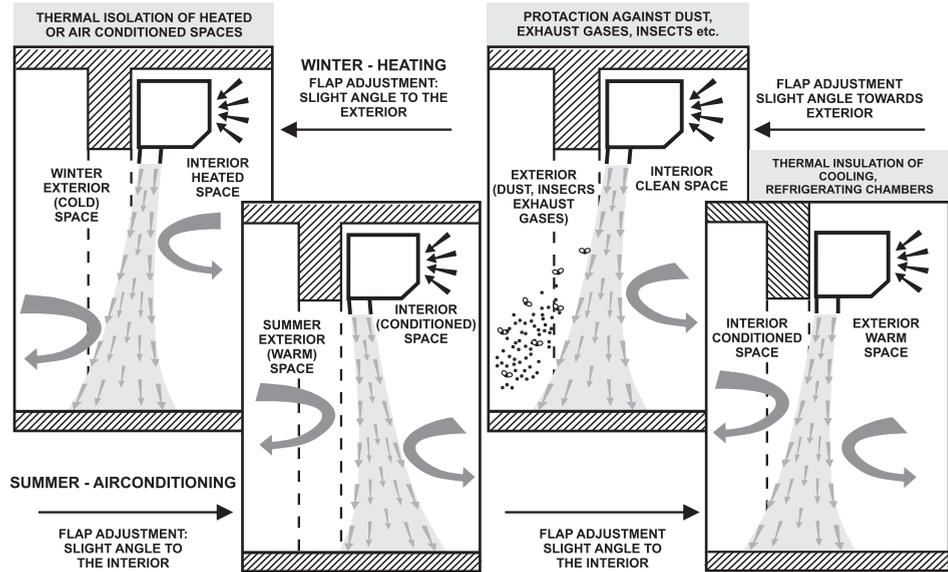


# 1.4 ADJUSTMENT AND OPERATION

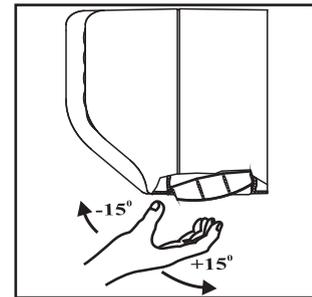


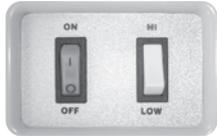
## AIR STREAM GENERAL ADJUSTMENT

The air stream should be directed vertically or turned under a small angle towards the incoming cold or polluted air. The angle depends on the air speed, air density and air temperature between the outer space and the premises. All "OLEFINI S.A." Air Curtains, except the INTELLECT series, MINI-700 INOX, X & XEH series are equipped by a very simple and effective system of regulation of an air stream.



“OLEFINI S.A.” Air Curtains are supplied with guided nozzles which allow to smoothly regulate an air stream and to change its direction. The nozzle angular inclination allows turning an air stream up to 15 degrees against the vertical both inside and outside. The drawings show the ways of controlling an air stream depending on the design of a model.





Control board  
for K - 43



Control board  
for KEH - 43



Control board  
for MINI - 800 S

“OLEFINI S.A.” Air Curtains can be controlled by switches on the control panel located on the device, or by the wired-infrared remote control.

Air Curtains without Heat (simple ones) have switches on the control panel: ON-OFF and HI-LOW which allow controlling both activation of the device and speed mode of the fan accordingly.

Heated Air Curtains Models: KEH43/44/46, MINI-800 S, R, LEH-13 S have a HI-LOW switch for regulating Motor speeds and a rotary switch for ON-OFF and Heaters regulation. MINI-700 have a 3 position rotary switch only.

These Air Curtains work in the following way:

When switch is in ON position you start the fan, the Air Curtain works without Heat. By rotating the switch further more you start Heaters operation according to the desired LOAD.

By positioning the switch to OFF you automatically close the motor and the Heaters as well.

“OLEFINI S.A.” Air Curtains are supplied with thermostats located above the thermal elements to prevent their overheating. These sensors cut off power supply to the thermal elements at a temperature of  $65^{\circ} \pm 5^{\circ} \text{C}$ .

To restore operation from a thermostat cut off in the device you should do the following:

1. Switch off the power supply to the Heaters,
2. Wait for 2-3 minutes to reset the thermostats,
3. Switch on again the power supply to the Heaters again,
4. Check the functionality of the device.

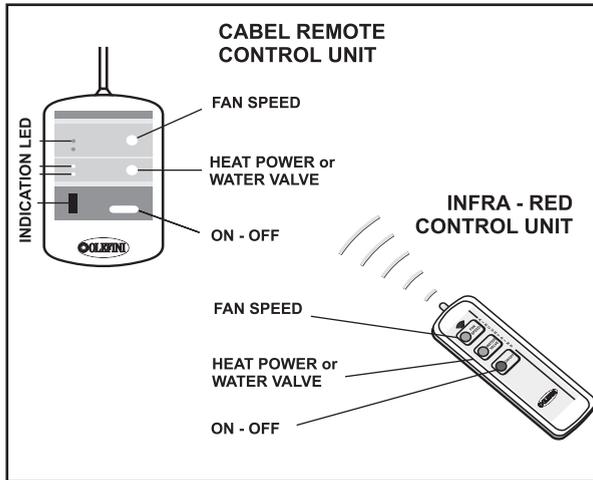
### ATTENTION

\*In case you have the above described situation for more than three times, you should switch off the device, and should consult a qualified electrician to find out the failure cause.

\*If the device does not produce a sufficient warm air stream, it is necessary to apply to the service centre and locate the cause of the problem.



“OLEFINI S.A.” Heated Air Curtains (Electrical or water) have a wired-infrared remote control, allowing to switch ON-OFF the device, to change fan speed, to change heating efficiency (HEAT POWER) or to control the hot water solenoid valve (WATER VALVE) depending on the way of heating.



To operate the Wired remote control you should first of all connect the cable to the CON BOX located on the back side of the Air Curtains.

To operate the hot water solenoid valve you should connect the valve cables to the terminal block (box) located on the back side of the Air Curtains. It should be done according to the power supply electric scheme in the given instruction.

#### FUNCTIONS

1. ON-OFF: After pressing the button ON the Air Curtain starts operation.

After pressing the button OFF the Air Curtain stops if it worked without heating. If the Air Curtain was working in heating mode also, the fan will continue to rotate for approx. 120 seconds to cool the Air Curtain.

2. HEAT POWER or WATER VALVE: Control of the heat power (0% -33% -66% -100%) or opening/closing of the solenoid water valve depending on the way of heating.

3. FAN SPEED: Control of the fan rotation speed. Though an Air Curtain has a three-stage motor, there are only two speeds (high and low) used in the existing models. The Middle speed (Blue wire) can be provided by a qualified electrician by switching terminals of the control unit.

#### 4. INFRARED CONTROL UNIT (OPTIONAL)

“OLEFINI S.A.” Air Curtains can be controlled by an additional infrared remote control unit. You can switch on an Air Curtain by a remote control from the distance of up to 10m and with the angle of deviation up to 15 degrees. CR 2032 type 3-V batteries are used for the remote control unit.



“INTELLECT” type Air Curtains can be controlled by the control board on the device, or by an infrared remote control.

Control buttons

1. «  » - Switch «ON/OFF».
2. «  » - Speed gain «FAN SPEED».
3. «  » - Speed reduction («FAN SPEED»).
4. «  » -Thermal load («HEAT POWER»).



Control panel for INTELLECT

Our new INTELLECT air-curtains have the ability to work in two different Modes.

The transition from one mode to the other occurs only during opening (ON operation) the unit and may be done only via the control panel mounted on the unit and not by the Infrared remote control.

In order to go from one mode to the other we close the unit from ON-OFF switch on the panel and we open the unit again by pressing the ON-OFF button for 5 seconds continuously.

For being able each time to know in which mode the unit currently works we have to notice the colour of the ON-OFF LED.

When the LED is GREEN we are in the Air-curtain MODE, where the unit works like a normal air-curtain with or without the Door Switch Option (whether we have connected one or not).

When the LED is ORANGE we are in the Room Heater MODE, where the unit works like a Heater (providing that we have connected a Room Thermostat and if we also wish a Door Switch).

- During Air-Curtain MODE unit works as follow (providing that we have connected a Door Switch):

- When the Door Opens Unit works in the desired-preset (by the USER) HI SPEED (via the UP DOWN buttons). If in addition we have opened the heaters then we will also have heaters ON in the desired again heating efficiency.



- When the Door closes unit **STOPS** (motor and heaters).

All the above providing that we operate the UNIT from either Control Panel or Infrared remote and not from MAIN SWITCH.

- During Heater MODE unit works as follow (providing that we have connected a Room Thermostat and a Door Switch):

1) If we have only Fan running:

- When the Door Opens Unit works in the desired-preset (by the USER) **HI SPEED** (via the UP DOWN buttons).
- When the Door Unit works in the closes desired-preset (by the USER) **LOW SPEED** (via the UP DOWN buttons).

2) If we have Fan and also Heaters ON:

- When the Door Opens Unit works in the desired-preset (by the USER) **HI SPEED** (via the UP DOWN buttons) and in the Heat Power that we have preset despite the Room Thermostat's commands.

- When the Door closes unit preset works according to Room Thermostat's commands:

A) In desired-preset (BY USER) Speed (via the UP DOWN buttons).

B) In the same Pre-Set (BY USER) Heat effect as in the Open Door state.

When Room Thermostat Closes, with Door closed, Air-curtain **STOPS** (Motor and Heaters).

All the above providing that we operate the UNIT from either Control Panel or Infrared remote and not from MAIN SWITCH.

- XEH Air-Curtains are equipped with electronics also but with only a HI-LOW speed adjustment.
- Simple UD Air-Curtains are equipped with electronic speed adjustment in 15 different stages. Thus giving to the end user the ability to better control the unit's air stream according to the needed circumstances.



### ATTENTION

\*It is recommended to set the maximum fan speed for an open door (for all operating modes).

\*Switching off the equipment with saving all adjustments in all modes is performed by pressing the button "ON/OFF" of the wireless or wired control on the unit.

\*It is prohibited to mount the Air Curtains of the given series with the horizontal flow of the air stream.

## 1.5 MAINTENANCE AND SERVICE



All “OLEFINI S.A.” Air Curtains are designed and produced for a long-term operation under condition of observance of the following rules of maintenance and servicing:

### AIR CURTAINS WITHOUT HEATING

1. Clean the air filters on the regular basis (each 7-15 days) by water or by air stream (by means of a vacuum cleaner).
2. See to it that extraneous subjects do not get into the Air Curtain (screw-drivers, pencils etc.). They can damage the fan.
3. Unusual noise or vibration of the Air Curtain can be a malfunction sign. It is necessary to apply to the service centre.

### AIR CURTAINS WITH HEATING

1. Regular clearing of the filters of a thermal air curtain will help you to avoid many problems. It is necessary to clean the air filters every other 15 days. If the air is highly polluted, clean the filters every 7 - 10 days.

2. It is recommended to carry out the following test on the regular basis to provide the maximum efficiency of the thermal air curtain with electric heating (except the air curtains with a strip heater). Press the button OFF while the device is on. If the Air Curtain works normally, heating elements will be disconnected at once, but the fan will continue to work until the system temperature falls to +50°C (thermostat TH2 set temperature).

After that the fan will be switched off. If something goes wrong, apply to the service centre.

3. When the Air Curtain with electric heating is not in use, clean the electric heaters carefully. Extraneous subjects on the heater can provoke inflammation. The best way to clean the thermal elements is to use a vacuum cleaner or a soft brush.

4. For all the air curtains with water heating, see to it that the water inside the device is fresh and pure. It is recommended to have a water filter for treating the water from dirt.

5. When the Air Curtain with water heating is not in use for a long time empty the water out from heat exchanges to avoid breakage.

### ATTENTION:

Always see to it that the Air Curtain working in a Heating Mode is never switched off by an electric knife switch. Switch the Air Curtains off only by the wired or the infrared remote control!!

## 1.6 WARRANTY



### WARRANTY

Company “OLEFINI S.A.” gives a (3) three years guarantee for the Air Curtains from the date of sale and under the condition that the buyer will follow the given instruction.

The guarantee means replacement of any faulty or defective part of the Air Curtains, in case the fault is not caused by it's negligent use, it's drop or wrong mount.

The guarantee does not mean replacement of the whole Air Curtains.

### **ATTENTION:**

**Any intervention in the mechanical or electric parts of the Air Curtain by the buyer or by unauthorized personel cancels the right of the buyer to use the guarantee.**

Tel: (+3022960) - 27624, 22960-23377

Fax: (+3022960) - 23361

www.olefini.gr, e-mail: sales@olefini.gr



## 2. TECHNICAL CHARACTERISTICS

### GENERAL STATEMENTS

"OLEFINI S.A." Air Curtains vary in more than 200 different types depending on unit length, way of mounting, way of heating etc. The cascade connection option gives customers the ability to cover most installation cases. Air Curtains are provided either without heating (Simple), Heated: with water or electric heating (strip and tubular heaters), also Air Curtains can be supplied with the dust-collecting filter and an infrared control unit.

The following section contains the technical characteristics of all Air Curtains produced by OLEFINI and mounting instructions. In spite of the fact that the mounting and adjustment of a unit to be installed is not so sophisticated, "OLEFINI S.A." recommends that it should be done by qualified personnel.

Most of the following Air Curtain models can be mounted horizontally or vertically [except: MINI-700, MINI-800S, R, LEH-13 S, INTELLECT, X, XEH & Plastic models].

All the Air Curtains, except Plastic units and MINI-800S, R, LEH- 13 S can be manufactured in a metal stainless steel case (see the labeling).

### ATTENTION

\*All the given characteristics of air velocity and air volume are given without taking into account of the dustcollecting filters and protective air diffusers (in case of vertical installation).

\*\*"OLEFINI S.A." reserves the right to improve the design and technical characteristics of the manufactured items.

\*Heat exchanges in the Air Curtains with water heating are designed so that only hot water ( $t^{\circ} < 95^{\circ}\text{C}$ ) should be used, not steam. Working pressure is up to 10 bar.

\*MAXIMUM OPERATING TEMPERATURE:  $50^{\circ}\text{C}$

\*MAXIMUM OPERATING HUMIDITY: 80%

\*NOT TO BE USED IN TOXIC ENVIRONMENT

\*This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance.

\*Cleaning and user maintenance shall not be made by children without supervision.

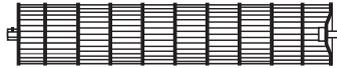
\*If the supply cord is damaged, it must be replaced by the manufacturer, it's service agent or similarly qualified persons in order to avoid a hazard.



**COMMERCIAL TYPE AIR CURTAINS  
ELECTRICALLY HEATED  
WITH METALLIC CROSS FLOW FAN**

**MINI 700**

Fan diameter 60 mm



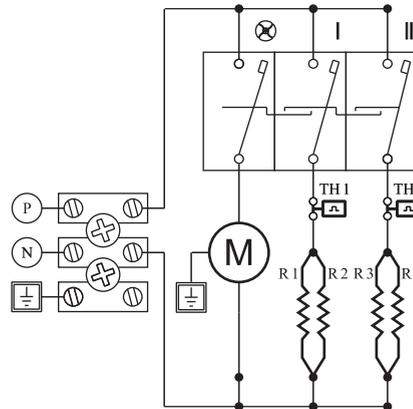
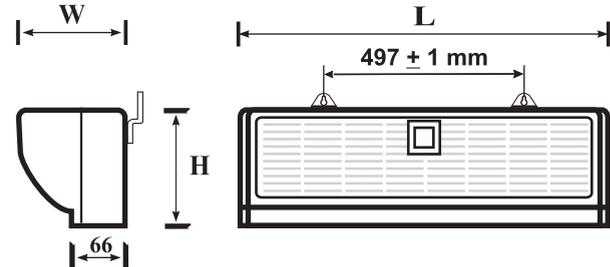
Type	MINI700
Door width (m)	0,7
Door height (m)	2,0
Max air velocity (m/sec)	3
Max air volume (m³/h)	300

Dimensions	L: Length (mm)	699
	W: Depth (mm)	121
	H: Height (mm)	202

Weight (kgr)	4
Heating stages	3
Heat output (kW)	2,0 / 4,0
Max current cons (A)	18
T outlet - T inlet (°C)	25
Electrical supply (V/Hz/N~)	230 / 50 / 1

MINI 700 model is a non-standard and low consumption Air Curtains model.

The given model is designed for protecting small doorways such as, working extraction windows of booths, cash desks etc. where the narrow flow of warm air is required.



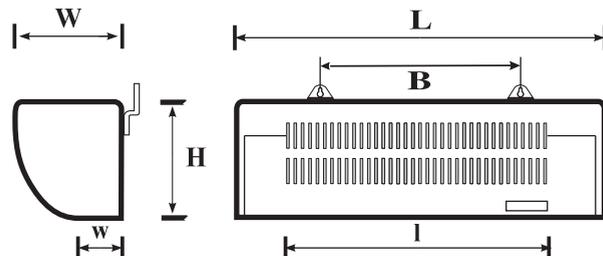
THERMOSTAT - TH 1	
	CLOSE < 65 °C
	OPEN > 65 °C

P, N	SINGLE PHASE POWER 230V, 50Hz
R1 - R4	HEATING ELEMENTS
M	MOTOR



**COMMERCIAL TYPE AIR CURTAINS  
ELECTRICALLY HEATED  
WITH PLASTIC CROSS FLOW FAN**

**FAN DIAMETER 110 mm**



TYPE	INTELLECT 08 R/L	INTELLECT 10 R/L	INTELLECT 12	INTELLECT 16	INTELLECT 20
Max door width (m)	0.8	1.0	1.2	1.6	2.0
Max door height (m)	2.3	2.3	3.0	3.0	3.0
Max Outlet velocity (m/sec)	8,5 / 5,0	8,5 / 5,0	8,5 / 5,0	8,5 / 5,0	8,5 / 5,0
Max Air volume (m³/h)	1080 / 645	1400 / 730	1800 / 1000	2600 / 1430	2950 / 1745
Motor power input (W)	120	240	240	300	660
Capacitor (µF)	4	4	4	8	12
Noise level in 1 m [dB(A)]	60 / 58	60 / 58	60 / 58	60 / 58	60 / 58
<b>DIMENSIONS</b>					
<b>L:</b> Total length (mm)	840	1070	1220	1670	2020
<b>W:</b> Total width (mm)	202	202	202	202	202
<b>H:</b> Height (mm)	203	203	203	203	203
<b>I:</b> Outlet length (mm)	663	893	1180	1630	1980
<b>w:</b> Outlet width (mm)	54	54	54	54	54
Weight (kgr)	9	12	15,5	19,0	21,0
Thermal power (kW)	6	6	6 or 9	9 or 12	12
Max current cons. (A)	9 / phase	9 / phase	9 or 13,5 / phase	13,5 or 18 / phase	18 / phase
T outlet - Tinlet (°C)	15 - 35	45 - 65	20	20	20
Power supply (V/Hz/N-)	400 / 50 / 3L+N	400 / 50 / 3L+N	400 / 50 / 3L+N	400 / 50 / 3L+N	400 / 50 / 3L+N
Motor speed (rpm)	1350 / 1000	1350 / 1000	1350 / 1000	1350 / 1000	1350 / 1000
Heating stages	4	4	4	4	4
Ingress Protection	IP20	IP20	IP20	IP20	IP20

TYPE	L±1mm	B ±1mm
INTELLECT 08	840	500
INTELLECT 10	1070	700
INTELLECT 12	1220	600
INTELLECT 16	1670	800
INTELLECT 20	2020	1000

**CONTROL BOARD**



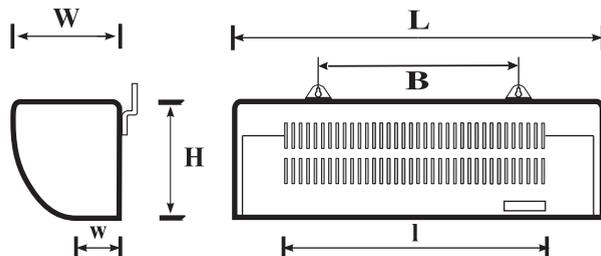
**Control buttons**

1. «⏻» - Switch («ON/OFF»)
2. «▲» - UP Speed («FAN SPEED»)
3. «▼» - DOWN Speed («FAN SPEED»)
4. «🔥» - Heat Stages («HEAT POWER»)



**COMMERCIAL TYPE AIR CURTAINS  
ELECTRICALLY HEATED  
WITH PLASTIC CROSS FLOW FAN**

**FAN DIAMETER 110 mm**



TYPE	R/L XEH 08	R/L XEH 10	XEH 12	XEH 16	XEH 20
Max door width (m)	0.8	1.0	1.2	1.6	2.0
Max door height (m)	2.3	2.3	3.0	3.0	3.0
Max Outlet velocity (m/sec)	8,5 / 5,5	8,5 / 5,5	8,5 / 5,5	8,5 / 5,5	8,5 / 5,5
Max Air volume (m³/h)	1080 / 700	1400 / 880	1800 / 1100	2600 / 1580	2950 / 1920
Motor power input (W)	120	240	240	300	660
Capacitor (µF)	4	4	4	8	12
Noise level in 1 m [dB(A)]	60 / 58	60 / 58	60 / 58	60 / 58	60 / 58
<b>DIMENSIONS</b>					
<b>L:</b> Total length (mm)	840	1070	1220	1670	2020
<b>W:</b> Total width (mm)	202	202	202	202	202
<b>H:</b> Height (mm)	203	203	203	203	203
<b>l:</b> Outlet length (mm)	663	893	1180	1630	1980
<b>w:</b> Outlet width (mm)	54	54	54	54	54
Weight (kgr)	9	12	15,5	19,0	21,0
Thermal power (kW)	6	6	6 or 9	9 or 12	12
Max current cons. (A)	9/phase	9/phase	9 or 13,5/phase	13,5 or 18/phase	18/phase
T outlet - T inlet (°C)	15 - 35	45 - 65	20	20	20
Power supply (V/Hz/N-)	400/50/3L+N	400/50/3L+N	400/50/3L+N	400/50/3L+N	400/50/3L+N
Motor speed (rpm)	1350 / 1000	1350 / 1000	1350 / 1000	1350 / 1000	1350 / 1000
Heating stages	4	4	4	4	4
Ingress Protection	IP20	IP20	IP20	IP20	IP20

TYPE	L ±1mm	B ±1mm
R/L XEH 08	840	500
R/L XEH 10	1070	700
XEH 12	1220	600
XEH 16	1670	800
XEH 20	2020	1000

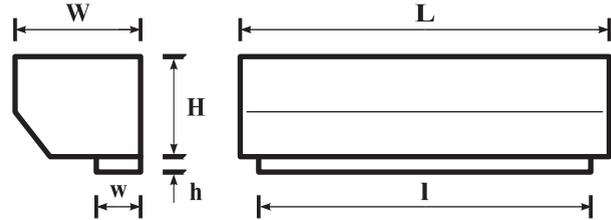
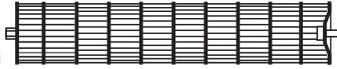
**CONTROL BOARD**





**COMMERCIAL TYPE AIR CURTAINS  
SIMPLE  
WITH PLASTIC CROSS FLOW FAN**

**FAN DIAMETER 100 mm**

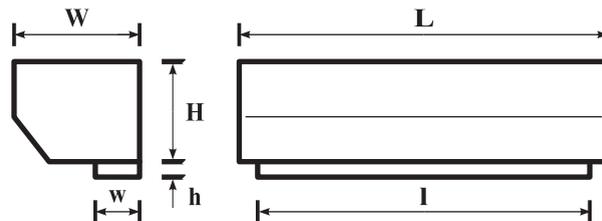


Type		L or R-11 W	L or R-12 W	L or R-13 W	K-14 W	K-15 W	K-16 W	K-17 W	K-18 W
Max door width (m)		0,7	0,8	1,0	1,2	1,4	1,6	1,8	2,0
Max door height (m)		2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5
Max Outlet velocity (m/sec)		10.0 / 8.0	10.0 / 8.0	10.0 / 8.0	10.0 / 8.0	10.0 / 8.0	10.0 / 8.0	10.0 / 8.0	10.0 / 8.0
Max Air volume (m³/h)		1000 / 800	1150 / 900	1300 / 1050	1400 / 1100	1700 / 1350	2000 / 1600	2200 / 1800	2500 / 2000
Motor power input (W)		120	120	120	240	240	240	240	240
Capacitor (µF)		4	4	4	4	4	4	4	4
Noise level in 1 m (dB(A))		54/45	54/45	54/45	60/53	60/53	60/53	61/55	61/55
DIMENSIONS	L: Total length (mm)	847	945	1045	1206	1406	1606	1806	2006
	W: Total width (mm)	166	166	166	166	166	166	166	166
	H: Height (mm)	172	172	172	172	172	172	172	172
	l: Outlet length (mm)	700	800	900	1160	1360	1560	1760	1960
	w: Outlet width (mm)	54	54	54	54	54	54	54	54
	h: Outlet height (mm)	64	64	64	64	64	64	64	64
Weight (kgr)		8	9,5	11	15	17	19	22	24
Thermal power (kW)		-	-	-	-	-	-	-	-
Max current cons. (A)		-	-	-	-	-	-	-	-
T outlet - T inlet (°C)		-	-	-	-	-	-	-	-
Power supply (V/Hz/N~)		230/50/1	230/50/1	230/50/1	230/50/1	230/50/1	230/50/1	230/50/1	230/50/1
Motor speed (rpm)		1300/900	1300/900	1300/900	1300/900	1300/900	1300/900	1300/900	1300/900
Heating stages		-	-	-	-	-	-	-	-
Ingress Protection		IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20
REMARKS	Motor side	left / right	left / right	left / right	middle	middle	Middle	middle	middle
	Wired Remote control	optional	optional	optional	optional	optional	optional	optional	optional
	Infrared control panel	optional	optional	optional	optional	optional	optional	optional	optional
	Filter	optional	optional	optional	optional	optional	optional	optional	optional



**COMMERCIAL TYPE AIR CURTAINS  
ELECTRICALLY HEATED  
WITH PLASTIC CROSS FLOW FAN**

**FAN DIAMETER 100 mm**

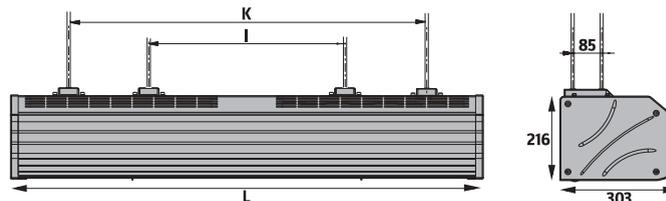


<b>Type</b>		<b>MINI 800S</b>	<b>L or REH-13 W</b>	<b>L or REH-13S</b>	<b>KEH-14 W</b>	<b>KEH-15 W</b>	<b>KEH-16 W</b>	<b>KEH-17 W</b>	<b>KEH-18 W</b>
Max door width (m)		0.8	1.0	1.0	1.2	1.4	1.6	1.8	2.0
Max door height (m)		2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Max Outlet velocity (m/sec)		7.0 / 5.0	9.0 / 7.0	8.0 / 5.5	9.0 / 7.0	9.0 / 7.0	9.0 / 7.0	9.0 / 7.0	9.0 / 7.0
Max Air volume (m³/h)		1050 / 720	1150 / 900	1600 / 1300	1280 / 990	1500 / 1200	1750 / 1400	2000 / 1600	2300 / 1800
Motor power input (W)		120	120	120	240	240	240	240	240
Capacitor (µF)		4	4	4	4	4	4	4	4
Noise level in 1 m (dB(A))		60 / 58	54 / 43	58 / 52	55 / 45	56 / 50	56 / 50	59 / 52	59 / 52
<b>DIMENSIONS</b>	L: Total length (mm)	810	1104	1045	1206	1406	1606	1806	2006
	W: Total width (mm)	166	274	166	274	274	274	274	274
	H: Height (mm)	172	172	172	172	172	172	172	172
	I: Outlet length (mm)	668	900	900	1160	1360	1560	1760	1960
	w: Outlet width (mm)	62	54	62	54	54	54	54	54
	h: Outlet height (mm)	64	64	64	64	64	64	64	64
Weight (kgr)		10	21	11	24	27	30	33	37
Thermal power (kW)		4.5	6 / 9	6	9	9	12	12 / 15	12 / 15
Max current cons. (A)		20	9 / 13.5	9	13.5	13.5	18	18 / 22.5	18 / 22.5
T outlet - T inlet (°C)		17 - 20	20-26 / 28-36	15 - 20	28 - 36	27 - 35	25 - 33	16-21 / 20-25	16-21 / 20-25
Power supply (V/Hz/N~)		230/50/1	400/50/3L+N	400/50/3L+N	400/50/3L+N	400/50/3L+N	400/50/3L+N	400/50/3L+N	400/50/3L+N
Motor speed (rpm)		1350 / 1000	1310 / 1000	1310 / 1000	1310 / 1000	1310 / 1000	1310 / 1000	1310 / 1000	1310 / 1000
Heating stages		3	4	4	4	4	4	4	4
Ingress Protection		IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20
<b>REMARKS</b>	Motor side	right	left / right	left / right	middle	middle	middle	middle	middle
	Wired Remote control	-	+	+	+	+	+	+	+
	Infrared control panel	-	optional	optional	optional	optional	optional	optional	optional
	Filter	-	optional	optional	optional	optional	optional	optional	optional



**APEH SERIES**  
**ELECTRICALLY HEATED**  
**WITH PLASTIC CROSS FLOW FAN**

FAN DIAMETER 100 mm

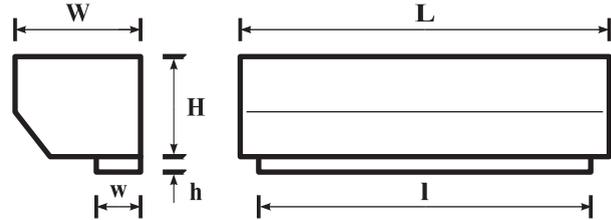
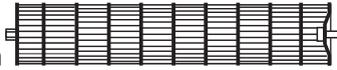


TYPE	APEH-13	APEH-14	APEH-15	APEH-16	APEH-17	APEH-18
Max door width (m)	1,10	1,20	1,40	1,60	1,80	2,00
Max door height (m)	2,50	2,50	2,50	2,50	2,50	2,50
Max Outlet velocity (m/sec)	8.5 / 5.5	8.5 / 5.5	8.5 / 5.5	8.5 / 5.5	8.5 / 5.5	8.5 / 5.5
Max Air volume (m <sup>3</sup> /h)	1290 / 830	1500 / 970	1820 / 1180	2100 / 1370	2400 / 1550	2700 / 1750
Motor power input (W)	240	240	240	240	240	240
Capacitor (µF)	4	4	4	4	4	4
Noise level in 1 m [dB(A)]	54 / 43	54 / 43	54 / 43	54 / 43	54 / 43	54 / 43
<b>DIMENSIONS</b>						
<b>L:</b> Unit length (mm)	1042	1182	1386	1582	1786	1982
<b>K:</b> Mounting distance (mm)	400	500	600	700	600	600
<b>I:</b> Mounting distance (mm)	-	-	-	-	1200	1300
Weight (kgr)	21	24	27	30	33	37
Power supply (V/Hz/N-)	400 / 50 / 3L+N					
Motor speed (rpm)	1310/1000	1310/1000	1310/1000	1310/1000	1310/1000	1310/1000
Thermal power (kW)	6 or 9	9 or 12	9 or 12	12 or 15	15 or 18	15 or 18
Max current cons. (A) (per phase)	9 or 13,5	13,5 or 18	13,5 or 18	18 or 22,5	22,5 or 27	22,5 or 27



**COMMERCIAL TYPE AIR CURTAINS  
HOT WATER HEATED  
WITH PLASTIC CROSS FLOW FAN**

**FAN DIAMETER 100 mm**

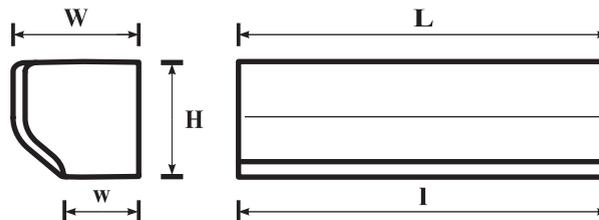


Type	L / RWH-13 W	KWH-14 W	KWH-15 W	KWH-16 W	KWH-17 W	KWH-18 W	
Max door width (m)	1.0	1.2	1.4	1.6	1.8	2.0	
Max door height (m)	2.3	2.3	2.3	2.3	2.3	2.3	
Max Outlet velocity (m/sec)	7.0 / 5.5	7.0 / 5.5	7.0 / 5.5	7.0 / 5.5	7.0 / 5.5	7.0 / 5.5	
Max Air volume (m³/h)	900 / 710	1000 / 790	1200 / 950	1400 / 1100	1600 / 1250	1800 / 1400	
Capacity (lt)	0.73	0.75	0.91	1.0	1.24	1.4	
Noise level in 1 m (dB(A))	54 / 50	54 / 50	54 / 50	54 / 50	54 / 50	54 / 50	
DIMENSIONS	L: Total length (mm)	1104	1206	1406	1606	1806	2006
	W: Total width (mm)	274	274	274	274	274	274
	H: Height (mm)	172	172	172	172	172	172
	l: Outlet length (mm)	900	1160	1360	1560	1760	1960
	w: Outlet width (mm)	54	54	54	54	54	54
	h: Outlet height (mm)	64	64	64	64	64	64
Weight without water (kgr)	19	22	25	28	31	35	
*Air Inlet Temperature +15°C	*Water Inlet Temperature +70°C		Flow rate 0.6 (lt/sec) [0.3 lt/sec for L,R]				
Heating power (kW)	8.4 / 7.3	9.3 / 8.0	11.1 / 9.6	13.0 / 11.2	14.8 / 12.7	16.6 / 14.2	
Air outlet temperature (°C)	42.2 / 44.7	42.3 / 44.7	42.2 / 44.7	42.1 / 44.6	42.0 / 44.6	41.9 / 44.5	
Water outlet temperature (°C)	63.2 / 64.1	66.2 / 66.8	65.5 / 66.1	63.7 / 65.5	64.0 / 64.8	63.3 / 64.2	
Pressure drop (water) ΔP (kPa)	4.2	3.2	3.4	3.7	3.9	4.1	
*Air Inlet Temperature +15°C	*Water Inlet Temperature +90°C		Flow rate 0.6 (lt/sec) [0.3 lt/sec for L,R]				
Heating power (kW)	11.6 / 10.0	12.8 / 11.0	15.3 / 13.2	17.8 / 15.4	20.3 / 17.5	22.8 / 19.5	
Air outlet temperature (°C)	52.3 / 55.7	52.5 / 55.8	52.4 / 55.7	52.3 / 55.6	52.1 / 55.6	52.0 / 55.5	
Water outlet temperature (°C)	80.5 / 81.8	84.8 / 85.5	83.7 / 84.6	82.7 / 83.7	81.7 / 82.9	80.7 / 82.0	
Pressure drop (water) ΔP (kPa)	4.0	3.1	3.3	3.5	3.7	3.9	
REMARKS	Motor side	left / right	middle	middle	middle	middle	
	Wired Remote control	+	+	+	+	+	
	Infrared control panel	optional	optional	optional	optional	optional	
	Filter	optional	optional	optional	optional	optional	



**PLASTIC AIR CURTAINS  
SIMPLE  
WITH PLASTIC CROSS FLOW FAN**

**FAN DIAMETER 110 mm**

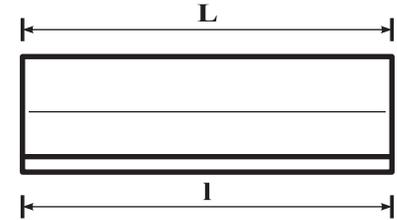
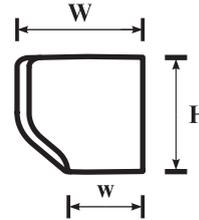
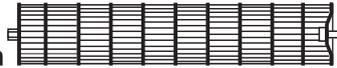


<b>Type</b>		<b>K-43</b>	<b>K-43UD</b>	<b>K-44</b>	<b>K-44UD</b>	<b>K-46</b>	<b>K-46UD</b>
Max door width (m)		1.0	1.0	1.2	1.2	1.6	1.6
Max door height (m)		3.0	3.0	3.0	3.0	3.0	3.0
Max Outlet velocity (m/sec)		10.0 / 7.0	10.0 / 4.0	10.0 / 7.0	10.0 / 4.0	10.0 / 7.0	10.0 / 4.0
Max Air volume (m³/h)		2435 / 1700	2435 / 970	2800 / 1660	2800 / 1100	3790 / 2650	3790 / 1500
Motor power input (W)		240	240	240	240	300	300
Capacitor (µF)		4	4	4	4	8	8
Noise level in 1 m (dB(A))		55 / 50	55 / 45	55 / 52	55 / 45	56 / 53	56 / 48
<b>DIMENSIONS</b>	L: Total length (mm)	1066	1066	1200	1200	1650	1650
	W: Total width (mm)	190	190	190	190	190	190
	H: Height (mm)	230	230	230	230	230	230
	l: Outlet length (mm)	1066	1066	1200	1200	1650	1650
	w: Outlet width (mm)	70	70	70	70	70	70
	h: Outlet height (mm)	0	0	0	0	0	0
Weight (kgr)		10	10	12	12	14	14
Thermal power (kW)		-	-	-	-	-	-
Max current cons. (A)		-	-	-	-	-	-
T outlet - T inlet (°C)		-	-	-	-	-	-
Power supply (V/Hz/N~)		230 / 50 / 1	230 / 50 / 1	230 / 50 / 1	230 / 50 / 1	230 / 50 / 1	230 / 50 / 1
Motor speed (rpm)		1300 / 900	1300 / 900	1300 / 900	1300 / 900	1300 / 900	1300 / 900
Heating stages		-	-	-	-	-	-
Ingress Protection		IP20	IP20	IP20	IP20	IP20	IP20
<b>REMARKS</b>	Motor side	middle	middle	middle	middle	middle	middle
	Wired Remote control	-	-	-	-	-	-
	Infrared control panel	optional	+	optional	+	optional	+
	Filter	-	-	-	-	-	-



**PLASTIC AIR CURTAINS  
ELECTRICALLY HEATED  
WITH PLASTIC CROSS FLOW FAN**

**FAN DIAMETER 110 mm**

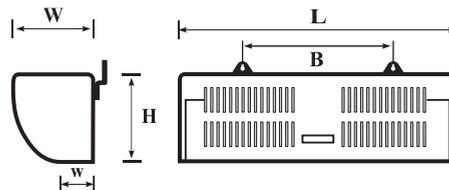


<b>Type</b>		<b>KEH-43</b>	<b>KEH-44</b>	-	<b>KEH-46</b>	-	-
Max door width (m)		1.0	1.2	-	1.6	-	-
Max door height (m)		2.5	2.5	-	2.5	-	-
Max Outlet velocity (m/sec)		8.5 / 7.0	8.5 / 7.0	-	8.5 / 7.0	-	-
Max Air volume (m³/h)		2070 / 1825	2355 / 1940	-	3221 / 2840	-	-
Motor power input (W)		240	240	-	300	-	-
Capacitor (µF)		4	4	-	8	-	-
Noise level in 1 m (dB(A))		58 / 56	58 / 56	-	58 / 56	-	-
<b>DIMENSIONS</b>	L: Total length (mm)	1066	1200	-	1650	-	-
	W: Total width (mm)	190	190	-	190	-	-
	H: Height (mm)	230	230	-	230	-	-
	l: Outlet length (mm)	1066	1200	-	1650	-	-
	w: Outlet width (mm)	70	70	-	70	-	-
	h: Outlet height (mm)	0	0	-	0	-	-
Weight (kg)		10	12	-	14	-	-
Thermal power (kW)		6 / 9	6 / 9	-	9 / 12	-	-
Max current cons. (A)		9 / 13.5	9 / 13.5	-	13.5 / 18	-	-
T outlet - T inlet (°C)		15 - 20 / 20 - 25	15 - 20 / 20 - 25	-	15 - 20 / 20 - 25	-	-
Power supply (V/Hz/N~)		400/50/3L+N	400/50/3L+N	-	400/50/3L+N	-	-
Motor speed (rpm)		1300 / 900	1300 / 900	-	1300 / 900	-	-
Heating stages		4	4	-	4	-	-
Ingress Protection		IP20	IP20	-	IP20	-	-
<b>REMARKS</b>	Motor side	middle	middle	-	middle	-	-
	Wired Remote control	-	-	-	-	-	-
	Infrared control panel	optional	optional	-	optional	-	-
	Filter	-	-	-	-	-	-



**“X” SERIES AIR CURTAINS  
SIMPLE  
WITH PLASTIC CROSS FLOW FAN**

**DIAMETER 100 mm**



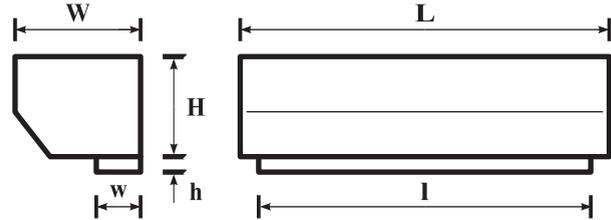
TYPE	L±1mm	B ±1mm
<b>X10</b>	1080	600
<b>X12</b>	1220	600
<b>X14</b>	1510	700
<b>X16</b>	1670	800
<b>X18</b>	1820	900
<b>X20</b>	2020	1000

TYPE	X10	X12	X14	X16	X18	X20	
Max door width (m)	1.0	1.2	1.4	1.6	1.8	2.0	
Max door height (m)	3.0	3.0	3.0	3.0	3.0	3.0	
Max Outlet velocity (m/sec)	9.0 / 5.0	9.0 / 5.0	9.0 / 5.0	9.0 / 5.0	9.0 / 5.0	9.0 / 5.0	
Max Air volume (m <sup>3</sup> /h)	1560 / 850	1810 / 1000	2160 / 1200	2595 / 1440	2800 / 1550	3090 / 1770	
Motor power input (W)	240	240	240	300	660	660	
Capacitor (µF)	4	4	4	8	12	12	
DIMENSIONS	L: Total length (mm)	1080	1220	1510	1670	1820	2020
	W: Total width (mm)	202	202	202	202	202	202
	H: Height (mm)	203	203	203	203	203	203
	w: Outlet width (mm)	54	54	54	54	54	54
Power supply (V/Hz/N~)	230 / 50 / 1	230 / 50 / 1	230 / 50 / 1	230 / 50 / 1	230 / 50 / 1	230 / 50 / 1	
Motor speed (rpm)	1370 / 1100	1370 / 1100	1370 / 1100	1370 / 1100	1370 / 1100	1370 / 1100	
Ingress Protection	IP20	IP20	IP20	IP20	IP20	IP20	
Weight (kg)	11	13	15	17	21	22	



**GENERAL TYPE AIR CURTAINS  
SIMPLE  
WITH PLASTIC CROSS FLOW FAN**

**FAN DIAMETER 120 mm**



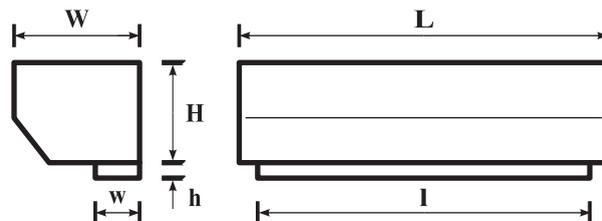
<b>Type</b>		<b>L or R-33 W</b>	<b>K-34 W</b>	<b>K-35 W</b>	<b>K-36 W</b>	<b>K-37 W</b>	<b>K-38 W</b>
Max door width (m)		1.0	1.2	1.4	1.6	1.8	2.0
Max door height (m)		4.0	4.0	4.0	4.0	4.0	4.0
Max Outlet velocity (m/sec)		13.0 / 11.0	13.0 / 11.0	13.0 / 11.0	13.0 / 11.0	13.0 / 11.0	13.0 / 11.0
Max Air volume (m³/h)		2510 / 2125	2800 / 2370	3370 / 2850	3930 / 3330	4500 / 3800	5065 / 4285
Motor power input (W)		350	350	660	660	660	660
Capacitor (µF)		8	8	12	12	12	12
Noise level in 1 m (dB(A))		63 / 62	66 / 64	66 / 64	66 / 64	67 / 64	67 / 64
<b>DIMENSIONS</b>	L: Total length (mm)	1140	1239	1439	1639	1839	2039
	W: Total width (mm)	212	212	212	212	212	212
	H: Height (mm)	205	205	205	205	205	205
	l: Outlet length (mm)	900	1199	1400	1601	1802	2003
	w: Outlet width (mm)	76	76	76	76	76	76
	h: Outlet height (mm)	64	64	64	64	64	64
Weight (kg)		19	22	24	26	28	30
Thermal power (kW)		-	-	-	-	-	-
Max current cons. (A)		-	-	-	-	-	-
T outlet - T inlet (°C)		-	-	-	-	-	-
Power supply (V/Hz/N~)		230 / 50 / 1	230 / 50 / 1	230 / 50 / 1	230 / 50 / 1	230 / 50 / 1	230 / 50 / 1
Motor speed (rpm)		1370 / 1050	1370 / 1050	1370 / 1050	1370 / 1050	1370 / 1050	1370 / 1050
Heating stages		-	-	-	-	-	-
Ingress Protection		IP20	IP20	IP20	IP20	IP20	IP20
<b>REMARKS</b>	Motor side	left / right	middle	middle	middle	middle	middle
	Wired Remote control	+	+	+	+	+	+
	Infrared control panel	optional	optional	optional	optional	optional	optional
	Filter	optional	optional	optional	optional	optional	optional



**GENERAL TYPE AIR CURTAINS  
ELECTRICALLY HEATED  
WITH PLASTIC CROSS FLOW FAN**



**FAN DIAMETER 120 mm**



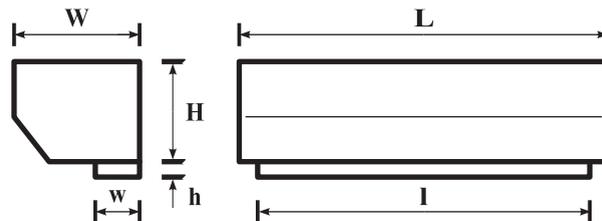
<b>Type</b>		<b>R / LEH-33W</b>	<b>KEH-34W</b>	<b>KEH-35W</b>	<b>R / LEH-36</b>	<b>KEH-36W</b>	<b>R / LEH-37</b>	<b>KEH-37W</b>	<b>KEH-38W</b>
Max door width (m)		1.0	1.2	1.4	1.6	1.6	1.8	1.8	2.0
Max door height (m)		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Max Outlet velocity (m/sec)		12.0 / 10.0	12.0 / 10.0	12.0 / 10.0	12.0 / 10.0	12.0 / 10.0	12.0 / 10.0	12.0 / 10.0	12.0 / 10.0
Max Air volume (m³/h)		2320 / 1930	2590 / 2160	3110 / 2600	4150 / 3460	3630 / 3024	4665 / 3895	4150 / 3460	4675 / 3895
Motor power input (W)		350	350	660	660	660	660	660	660
Capacitor (µF)		8	8	12	12	12	12	12	12
Noise level in 1 m (dB(A))		62 / 60	65 / 62	65 / 62	65 / 62	65 / 62	65 / 62	66 / 62	66 / 62
<b>DIMENSIONS</b>	L: Total length (mm)	1140	1239	1439	1852	1639	2053	1839	2039
	W: Total width (mm)	277	277	277	277	277	277	277	277
	H: Height (mm)	205	205	205	205	205	205	205	205
	l: Outlet length (mm)	900	1199	1400	1601	1601	1802	1802	2003
	w: Outlet width (mm)	76	76	76	76	76	76	76	76
	h: Outlet height (mm)	64	64	64	64	64	64	64	64
Weight (kgr)		28	31	34	39	37	43	39	41
Thermal power (kW)		9 / 12	12 / 15	12 / 15	12 / 15	12 / 15	15 / 18	15 / 18	15 / 18
Max current cons. (A)		13 / 18	18 / 22,5	18 / 22,5	18 / 22,5	18 / 22,5	22,5 / 27	22,5 / 27	22,5 / 27
T outlet - T inlet (°C)		18-20 / 20-24	16-18 / 18-20	15-17 / 17-19	14-16 / 16-18	14-16 / 16-18	15-17 / 19-22	15-17 / 19-22	14-16 / 17-20
Power supply (V/Hz/N~)		400/50/3L+N	400/50/3L+N	400/50/3L+N	400/50/3L+N	400/50/3L+N	400/50/3L+N	400/50/3L+N	400/50/3L+N
Motor speed (rpm)		1380 / 1150	1380 / 1150	1380 / 1150	1380 / 1150	1380 / 1150	1380 / 1150	1380 / 1150	1380 / 1150
Heating stages		4	4	4	4	4	4	4	4
Ingress Protection		IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20
<b>REMARKS</b>	Motor side	middle	middle	middle	middle	middle	middle	middle	middle
	Wired Remote control	+	+	+	+	+	+	+	+
	Infrared control panel	optional	optional	optional	optional	optional	optional	optional	optional
	Filter	optional	optional	optional	optional	optional	optional	optional	optional



**GENERAL TYPE AIR CURTAINS  
HOT WATER HEATED  
WITH PLASTIC CROSS FLOW FAN**



**FAN DIAMETER 120 mm**

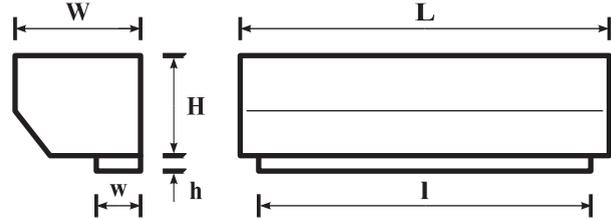
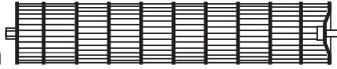


<b>Type</b>		<b>L or RWH-33 W</b>	<b>KWH-34 W</b>	<b>KWH-35 W</b>	<b>KWH-36 W</b>	<b>KWH-37 W</b>	<b>KWH-38 W</b>
Max door width (m)		1.0	1.2	1.4	1.6	1.8	2.0
Max door height (m)		3.5	3.5	3.5	3.5	3.5	3.5
Max Outlet velocity (m/sec)		9.0 / 7.5	9.0 / 7.5	9.0 / 7.5	9.0 / 7.5	9.0 / 7.5	9.0 / 7.5
Max Air volume (m³/h)		1740 / 1450	1950 / 1625	2340 / 1950	2730 / 2275	3125 / 2600	3515 / 2930
Capacity (lt)		0.8	0.8	1.0	1.2	1.4	1.6
Noise level in 1 m (dB(A))		65 / 62	65 / 62	65 / 62	65 / 62	65 / 62	65 / 62
<b>DIMENSIONS</b>	L: Total length (mm)	1140	1239	1439	1639	1839	2039
	W: Total width (mm)	277	277	277	277	277	277
	H: Height (mm)	205	205	205	205	205	205
	l: Outlet length (mm)	900	1199	1400	1601	1802	2003
	w: Outlet width (mm)	76	76	76	76	76	76
	h: Outlet height (mm)	64	64	64	64	64	64
Weight without water (kgr)		26	30	32	35	37	39
*Air Inlet Temperature +15°C      *Water Inlet Temperature +70°C						Flow rate 0.6 (lt/sec) [0.3 lt/sec for L,R]	
Heating power (kW)		12.5 / 11.3	14.1 / 12.8	17.0 / 15.4	20.0 / 17.9	22.4 / 20.3	25.1 / 22.8
Air outlet temperature (°C)		35.8 / 37.7	36.1 / 37.9	36.1 / 37.9	36.1 / 37.9	35.9 / 37.7	35.7 / 37.6
Water outlet temperature (°C)		59.9 / 60.8	64.3 / 64.8	63.1 / 63.8	60.7 / 62.7	60.9 / 61.7	59.8 / 60.8
Pressure drop (water) ΔP (kPa)		3.6	2.9	3.1	3.3	3.4	3.6
*Air Inlet Temperature +15°C      *Water Inlet Temperature +90°C						Flow rate 0.6 (lt/sec) [0.3 lt/sec for L,R]	
Heating power (kW)		17.2 / 15.6	19.5 / 17.7	23.4 / 21.2	28.0 / 24.6	30.9 / 28.0	34.6 / 31.4
Air outlet temperature (°C)		43.7 / 46.3	44.1 / 46.6	44.1 / 46.6	39.8 / 46.5	43.8 / 46.3	43.6 / 46.1
Water outlet temperature (°C)		75.9 / 77.2	82.0 / 82.8	80.4 / 81.3	77.0 / 79.9	77.3 / 78.5	75.9 / 77.2
Pressure drop (water) ΔP (kPa)		3.5	2.8	2.9	3.1	3.3	3.5
<b>REMARKS</b>	Motor side	left / right	middle	middle	middle	middle	middle
	Wired Remote control	+	+	+	+	+	+
	Infrared control panel	optional	optional	optional	optional	optional	optional
	Filter	optional	optional	optional	optional	optional	optional



**INDUSTRIAL TYPE AIR CURTAINS  
SIMPLE  
WITH PLASTIC CROSS FLOW FAN**

**FAN DIAMETER 130 mm**



<b>Type</b>		<b>L or R-22**</b>	<b>L or R-23**</b>	<b>K-24</b>	<b>K-26</b>	<b>K-28</b>
Max door width (m)		1.0	1.2	1.2	1.6	2.0
Max door height (m)		6.0	6.0	6.0	6.0	6.0
Max Outlet velocity (m/sec)		14.0 / 12.0	14.0 / 12.0	14.0 / 12.0	14.0 / 12.0	14.0 / 12.0
Max Air volume (m³/h)		3050 / 2615	3715 / 3185	3035 / 2600	4245 / 3640	5580 / 5280
Motor power input (W)		660	660	660	660	660
Capacitor (µF)		12	12	12	12	15
Noise level in 1 m (dB(A))		68 / 65	68 / 65	68 / 65	68 / 65	68 / 65
<b>DIMENSIONS</b>	L: Total length (mm)	1270	1474	1253	1656	2096
	W: Total width (mm)	231	231	231	231	231
	H: Height (mm)	227	227	227	227	227
	l: Outlet length (mm)	1015	1236	1200	1603	2044
	w: Outlet width (mm)	76	76	76	76	76
	h: Outlet height (mm)	64	64	64	64	64
Weight (kgr)		24	27	27	31	36
Thermal power (kW)		-	-	-	-	-
Max current cons. (A)		-	-	-	-	-
T outlet - T inlet (°C)		-	-	-	-	-
Power supply (V/Hz/N~)		230 / 50 / 1	230 / 50 / 1	230 / 50 / 1	230 / 50 / 1	230 / 50 / 1
Motor speed (rpm)		1370 / 1100	1370 / 1100	1370 / 1100	1370 / 1100	1370 / 1100
Heating stages		-	-	-	-	-
Ingress Protection		IP20	IP20	IP20	IP20	IP20
<b>REMARKS</b>	Motor side	left / right	left / right	middle	middle	middle
	Wired Remote control	+	+	+	+	+
	Infrared control panel	optional	optional	optional	optional	optional
	Filter	optional	optional	optional	optional	optional

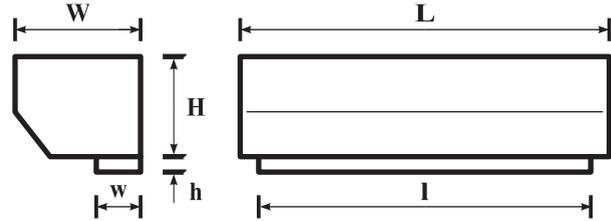
**\*\*Models L or R-22 and L or R-23 have non-standard labeling. It is necessary to pay special attention to the technical characteristics of the said models.**

**ATTENTION**



**INDUSTRIAL TYPE AIR CURTAINS  
ELECTRICALLY HEATED  
WITH PLASTIC CROSS FLOW FAN**

**FAN DIAMETER 130 mm**



<b>Type</b>		<b>R / LEH-22**</b>	<b>R / LEH-23**</b>	<b>R / LEH-27**</b>	<b>KEH-24</b>	<b>KEH-26</b>	<b>KEH-28</b>
Max door width (m)		1.0	1.2	1.8	1.2	1.6	2.0
Max door height (m)		5.0	5.0	5.0	5.0	5.0	5.0
Max Outlet velocity (m/sec)		13.0 / 11.0	13.0 / 11.0	13.0 / 11.0	13.0 / 11.0	13.0 / 11.0	13.0 / 11.0
Max Air volume (m³/h)		2830 / 2400	3450 / 2920	5050 / 4285	2815 / 2380	3940 / 3335	5180 / 4385
Motor power input (W)		660	660	660	660	660	660
Capacitor (µF)		12	12	15	12	12	12
Noise level in 1 m (dB(A))		67 / 64	67 / 64	67 / 64	67 / 64	67 / 64	67 / 64
<b>DIMENSIONS</b>	L: Total length (mm)	1253	1474	2090	1253	1656	2096
	W: Total width (mm)	306	306	306	306	306	306
	H: Height (mm)	227	227	227	227	227	227
	l: Outlet length (mm)	1015	1236	1803	1200	1603	2044
	w: Outlet width (mm)	76	76	76	76	76	76
	h: Outlet height (mm)	64	64	64	64	64	64
Weight (kgr)		36	40	52	40	45	51
Thermal power (kW)		15 / 18	15 / 18	15 / 18	15 / 18	15 / 18	18
Max current cons. (A)		22,5/26	22,5/26	22,5/26	22,5/26	22,5/26	26
T outlet - T inlet (°C)		17-18 / 19-20	17-18 / 19-20	17-18 / 19-20	17-18 / 19-20	17-18 / 19-20	19-20
Power supply (V/Hz/N~)		400/50/3L+N	400/50/3L+N	400/50/3L+N	400/50/3L+N	400/50/3L+N	400/50/3L+N
Motor speed (rpm)		1380 / 1150	1380 / 1150	1380 / 1150	1380 / 1150	1380 / 1150	1380 / 1150
Heating stages		4	4	4	4	4	4
Ingress Protection		IP20	IP20	IP20	IP20	IP20	IP20
<b>REMARKS</b>	Motor side	left / right	left / right	left / right	middle	middle	middle
	Wired Remote control	+	+	+	+	+	+
	Infrared control panel	optional	optional	optional	optional	optional	optional
	Filter	optional	optional	optional	optional	optional	optional

**\*\*Models L or REH-22 and L or REH-23 have non-standard labeling. It is necessary to pay special attention to the technical characteristics of the said models.**

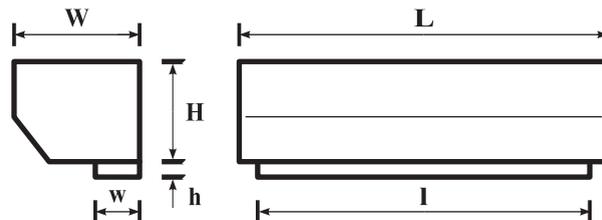
**ATTENTION**



**INDUSTRIAL TYPE AIR CURTAINS  
HOT WATER HEATED  
WITH PLASTIC CROSS FLOW FAN**



**FAN DIAMETER 130 mm**



Type		L or RWH-22**	L or RWH-23**	KWH-24	KWH-26	KWH-28
Max door width (m)		1.0	1.2	1.2	1.6	2.0
Max door height (m)		5.0	5.0	5.0	5.0	5.0
Max Outlet velocity (m/sec)		11.0 / 8.5	11.0 / 8.5	11.0 / 8.5	11.0 / 8.5	11.0 / 8.5
Max Air volume (m³/h)		2425 / 1870	2935 / 2270	2390 / 1845	3350 / 2570	4395 / 3395
Capacity (lt)		1.0	1.28	0.96	1.4	1.88
Noise level in 1 m (dB(A))		64 / 60	64 / 60	67 / 64	67 / 64	67 / 64
DIMENSIONS	L: Total length (mm)	1253	1474	1253	1656	2096
	W: Total width (mm)	306	306	306	306	306
	H: Height (mm)	227	227	227	227	227
	l: Outlet length (mm)	1015	1236	1200	1603	2044
	w: Outlet width (mm)	76	76	76	76	76
	h: Outlet height (mm)	64	64	64	64	64
Weight without water (kgr)		31	34	32	37	48
*Air Inlet Temperature +15°C    *Water Inlet Temperature +70°C				Flow rate 0.6 (lt/sec) [0.3 lt/sec for L,R]		
Heating power (kW)		16.0 / 14.0	19.0 / 17.0	16.0 / 14.0	23.0 / 20.0	29.0 / 26.0
Air outlet temperature (°C)		34 / 37	34 / 36	35 / 38	35 / 37.5	34 / 37
Water outlet temperature (°C)		57 / 58	54.5 / 56	63 / 64	61 / 62	58 / 59.5
Pressure drop (water) ΔP (kPa)		3.5	3.8	2.7	3.0	3.3
*Air Inlet Temperature +15°C    *Water Inlet Temperature +90°C				Flow rate 0.6 (lt/sec) [0.3 lt/sec for L,R]		
Heating power (kW)		22.0 / 19.5	26.0 / 23.0	23.0 / 20.0	31.5 / 27.5	41.0 / 36.0
Air outlet temperature (°C)		41 / 45	41 / 45	43 / 46	42 / 46	42 / 45.5
Water outlet temperature (°C)		72 / 74	68.5 / 71	81 / 82	77 / 79	73 / 75
Pressure drop (water) ΔP (kPa)		3.3	3.6	2.6	2.9	3.2
REMARKS	Motor side	left / right	left / right	middle	middle	middle
	Wired Remote control	+	+	+	+	+
	Infrared control panel	optional	optional	optional	optional	optional
	Filter	optional	optional	optional	optional	optional

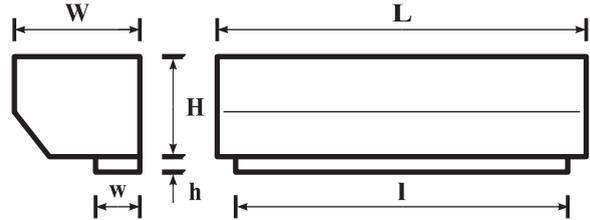
**ATTENTION**  
 \*\*Models L or RWH-22 and L or RWH-23 have non-standard labeling. It is necessary to pay special attention to the technical characteristics of the said models.



**POWER INDUSTRIAL TYPE AIR CURTAINS**  
**SIMPLE & HOT WATER HEATED**  
**WITH PLASTIC CROSS FLOW FAN**



**FAN DIAMETER 180 mm**



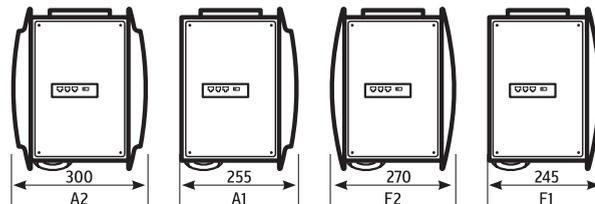
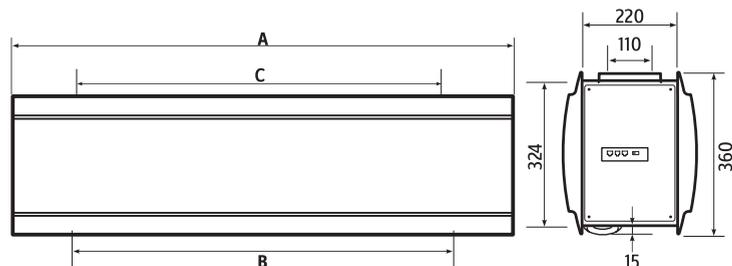
Type		K-83	KWH-83
Max door width (m)		1.0	1.0
Max door height (m)		8.0	8.0
Max Outlet velocity (m/sec)		21.0	18.0
Max Air volume (m³/h)		5600	4800
Capacity (lt)		1.0	1.0
Noise level in 1 m (dB(A))		65	65
DIMENSIONS	L: Total length (mm)	1093	1093
	W: Total width (mm)	391	391
	H: Height (mm)	303	303
	l: Outlet length (mm)	1037	1037
	w: Outlet width (mm)	92	92
	h: Outlet height (mm)	63	63
Weight without water (kgr)		32	35
*Air Inlet Temperature +15°C			Water Inlet Temperature +70°C
Flow rate 0.6 (lt/sec)			
Heating power (kW)		-	19.5
Air outlet temperature (°C)		-	30
Water outlet temperature (°C)		-	62
Pressure drop (water) ΔP (kPa)		-	2.4
*Air Inlet Temperature +15°C			Water Inlet Temperature +90°C
Flow rate 0.6 (lt/sec)			
Heating power (kW)		-	27.0
Air outlet temperature (°C)		-	36.5
Air outlet temperature (°C)		-	79
Pressure drop (water) ΔP (kPa)		-	2.3
REMARKS	Motor side	middle	middle
	Wired Remote control	+	+
	Infrared control panel	+	+
	Filter	-	-



**“C” SERIES AIR CURTAINS  
SIMPLE & HEATED  
WITH PLASTIC CENTRIFUGAL FAN**



**DIAMETER 115 mm**



MODEL	C ±1mm
C-120 / CEH-120	1174
C-160 / CEH-160	1726
C-200 / CEH-200	2290

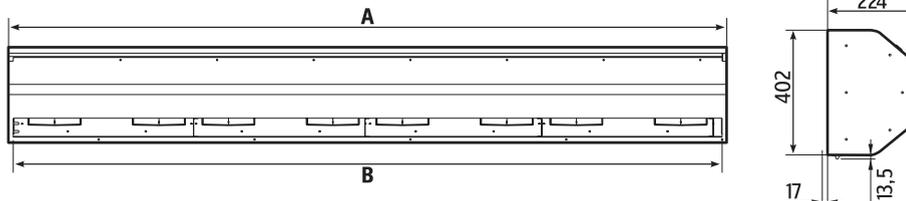
TYPE	C-120	C-160	C-200	CEH-120	CEH-160	CEH-200	
Max door width (m)	1.2	1.6	2.0	1.2	1.6	2.0	
Max door height (m)	4.0	4.0	4.0	4.0	4.0	4.0	
Max Outlet velocity (m/sec)	18.0 / 13.0	18.0 / 13.0	18.0 / 13.0	18.0 / 13.0	18.0 / 13.0	18.0 / 13.0	
Max Air volume (m <sup>3</sup> /h)	2140 / 1545	3210 / 2315	4275 / 3090	2140 / 1545	3210 / 2315	4275 / 3090	
Motor power input (W)	420	630	840	420	630	840	
Capacitor (µF)	12	12	12	12	12	12	
DIMENSIONS	<b>A:</b> Total length (mm)	1300	1852	2417	1300	1852	2417
	<b>B:</b> Air outlet length (mm)	1120	1670	2237	1120	1670	2237
Power supply (V/Hz/N~)	230 / 50 / 1	230 / 50 / 1	230 / 50 / 1	400 / 50 / 3L+N	400 / 50 / 3L+N	400 / 50 / 3L+N	
Max Motor speed (rpm)	2700	2700	2700	2700	2700	2700	
Heating power (kW)	-	-	-	15	18	18	
WEIGHT (kg)	F2	40	55	72	45	63	83
	F1	35	48	63	40	56	74
	A2	45	63	82	52	73	93
	A1	38	52	67	45	63	83



**“ANEMOESSA” SERIES AIR CURTAINS  
SIMPLE & HEATED  
WITH PLASTIC CENTRIFUGAL FAN**



**DIAMETER 115 mm**

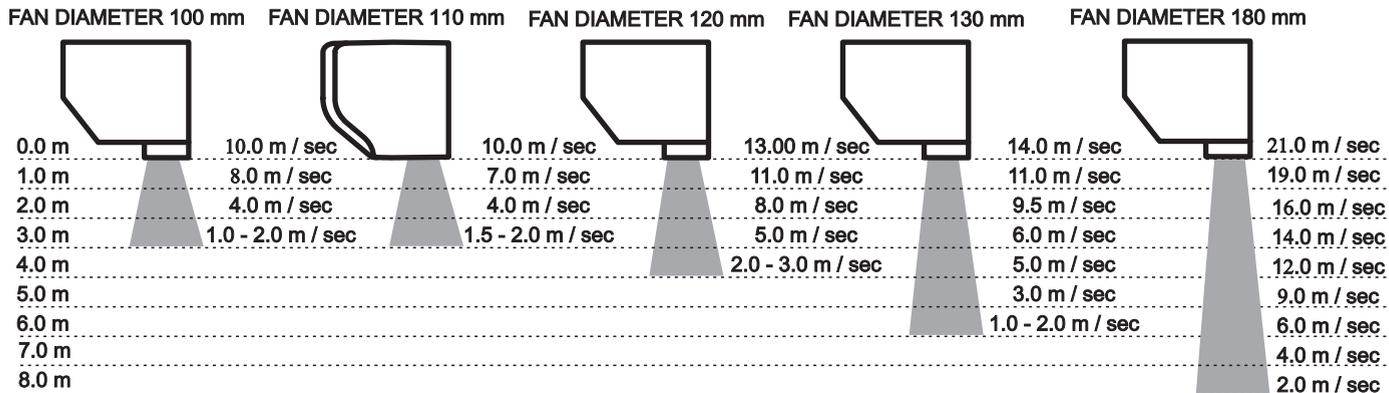


TYPE	AN-120	AN-160	AN-200	ANEH-120	ANEH-160	ANEH-200	
Max door width (m)	1.2	1.6	2.0	1.2	1.6	2.0	
Max door height (m)	4.0	4.0	4.0	4.0	4.0	4.0	
Max Outlet velocity (m/sec)	18.0 / 13.0	18.0 / 13.0	18.0 / 13.0	18.0 / 13.0	18.0 / 13.0	18.0 / 13.0	
Max Air volume (m <sup>3</sup> /h)	2140 / 1545	3210 / 2315	4275 / 3090	2140 / 1545	3210 / 2315	4275 / 3090	
Motor power input (W)	420	630	840	420	630	840	
Capacitor (µF)	12	12	12	12	12	12	
DIMENSIONS	<b>A:</b> Total length (mm)	1188	1746	2304	1188	1746	2304
	<b>B:</b> Air outlet length (mm)	1158	1716	2274	1158	1716	2274
Power supply (V/Hz/N~)	230 / 50 / 1	230 / 50 / 1	230 / 50 / 1	400 / 50 / 3L+N	400 / 50 / 3L+N	400 / 50 / 3L+N	
Max Motor speed (rpm)	2700	2700	2700	2700	2700	2700	
Heating power (kW)	-	-	-	15	18	21	
Weight (kg)	36	52	66	41	61	77	

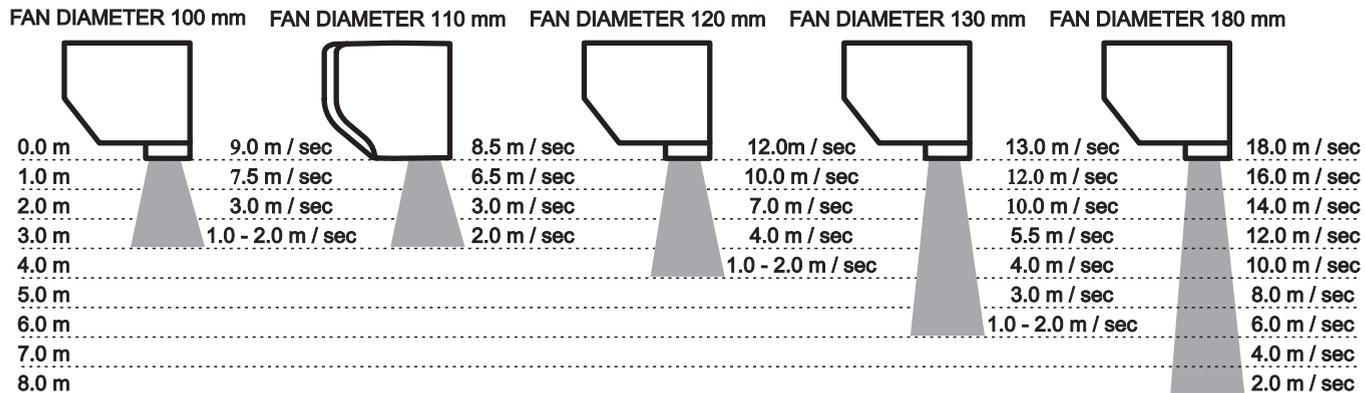


## DIAGRAMS OF HIGH-SPEED CHARACTERISTICS OF AIR CURTAINS

### SIMPLE AIR CURTAINS



### HEATED AIR CURTAINS



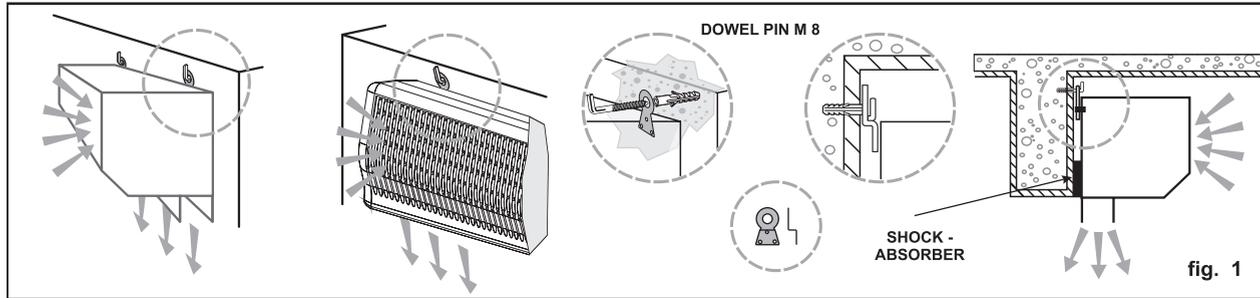
## 2.1 MOUNTING AND ASSEMBLING WAYS



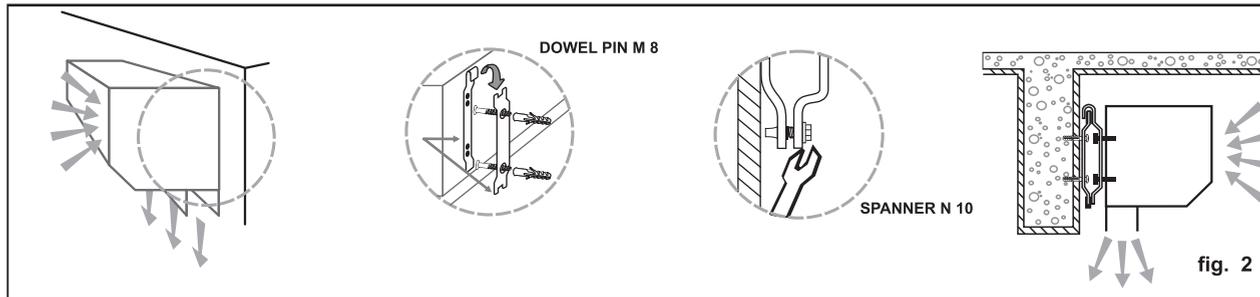
As it was already noted in the beginning of this section, it is recommended to mount “OLEFINI S.A.” Air Curtains with the help of qualified personnel. The most widespread ways of mounting Air Curtains are shown below.

### 1. WALL MOUNT OF AIR CURTAINS

Air Curtains without Heating (simple) with a rotor diameter of 100 mm and Air Curtains with a rotor diameter of 110 mm can be easily mounted with the help of key-hole brackets which are included in the delivery set (fig. 1).



Heated Air Curtains with a rotor diameter of 100 mm and all Air Curtains with a rotor diameter of 120 mm and 130 mm are mounted with the help of special brackets which are included into the delivery set (fig. 2).





## 2. CEILING MOUNT OF AIR CURTAINS

Different ways of fastening Air Curtains (fig. 3, 4) are offered with the given way of mounting. The given support pieces are optional only.

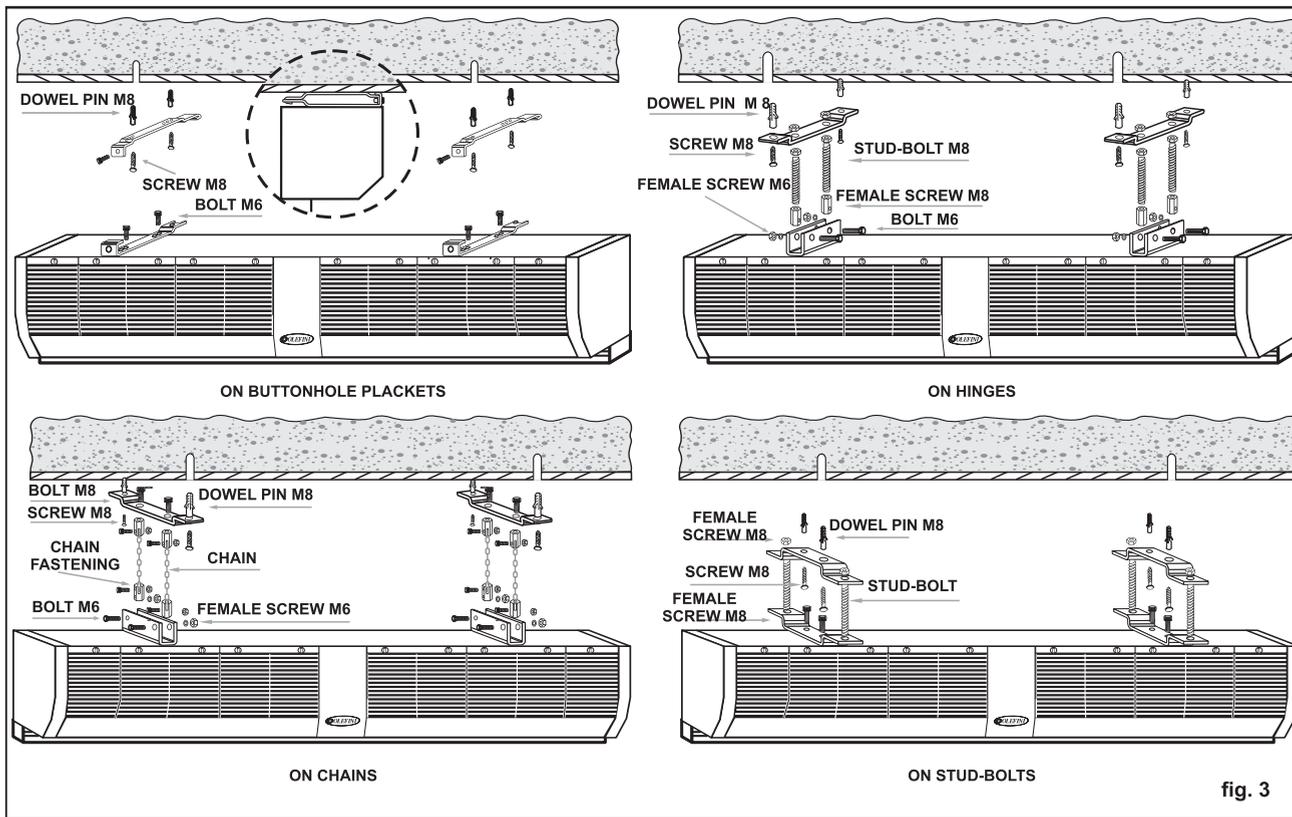


fig. 3

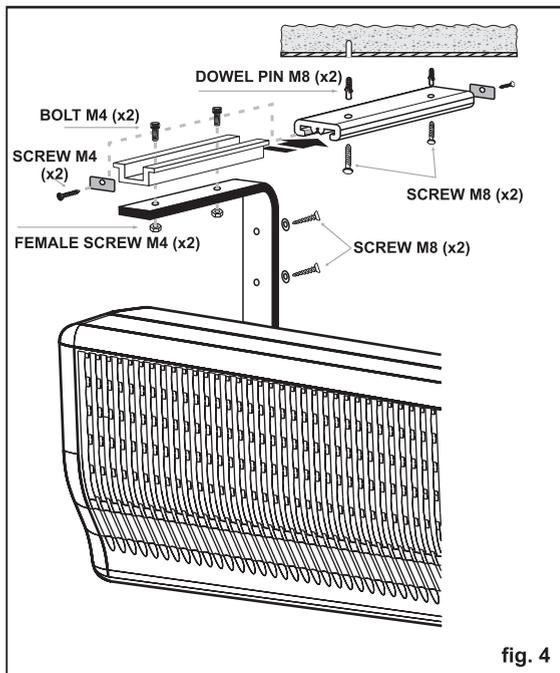


fig. 4

Ceiling mount of air curtains with a rotor diameter of 110 mm (fig. 4).  
The given support pieces are optional only.

### 3. VERTICAL MOUNT OF AIR CURTAINS

Special support pieces are included in the delivery set (fig. 5) for the given way of the Air Curtains mount.

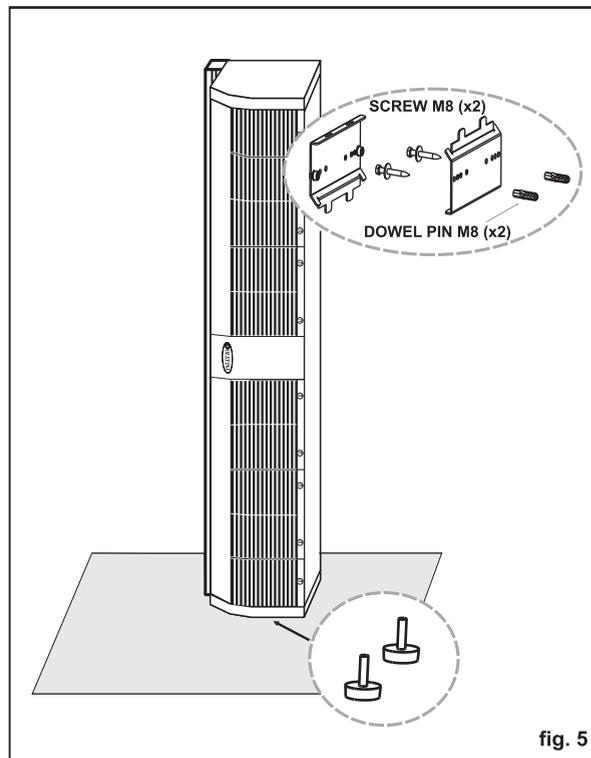
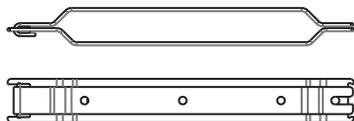
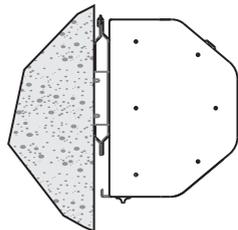


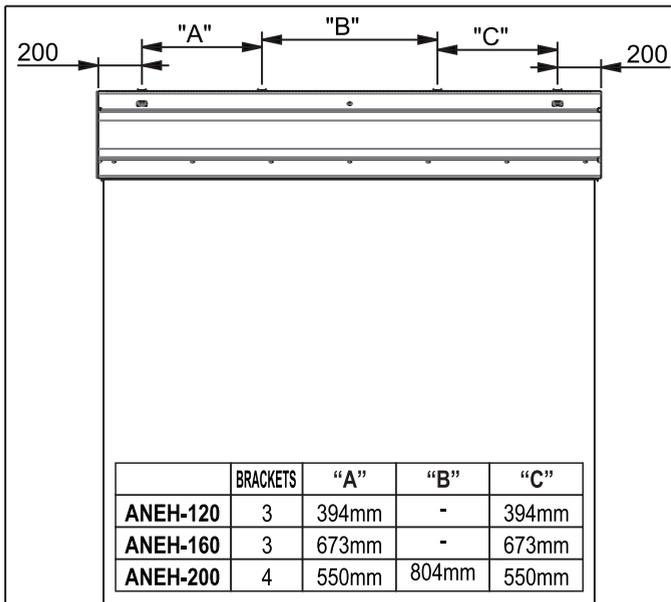
fig. 5



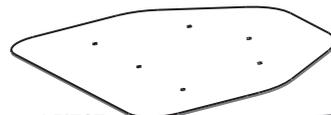
## HORIZONTAL MOUNTING OF "ANEMOESSA" SERIES



MOUNTING BRACKETS SET

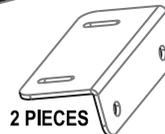


## VERTICAL MOUNTING OF "ANEMOESSA" SERIES



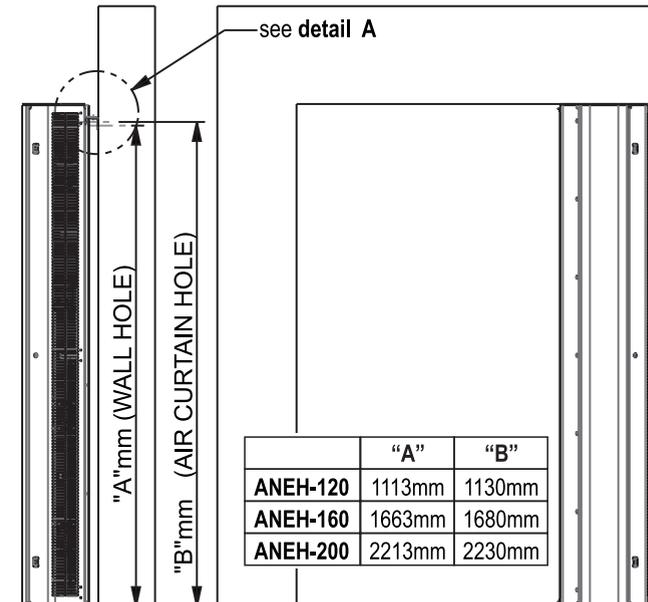
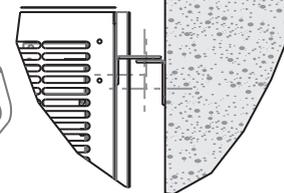
1 PIECE

COMPONENTS FOR VERTICAL MOUNTING



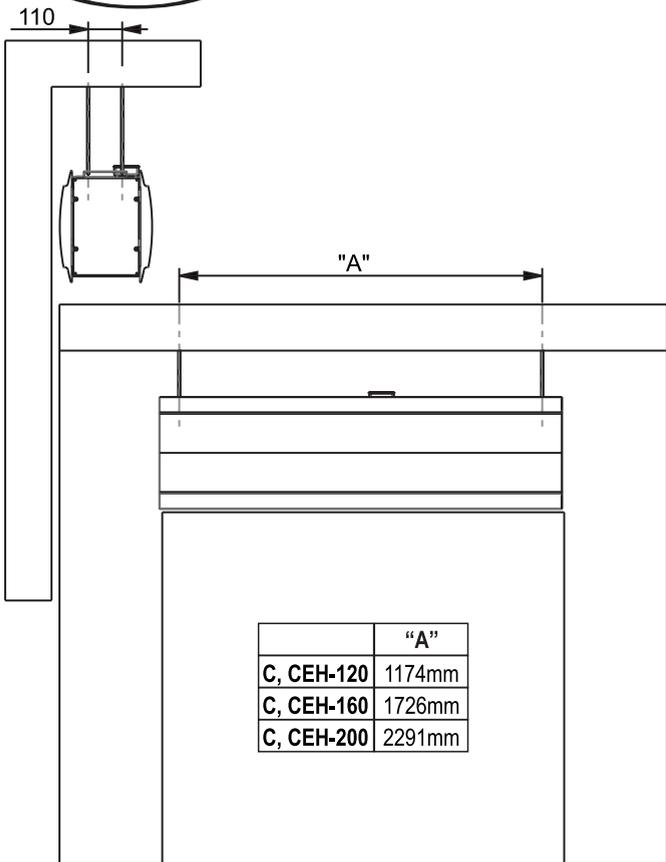
2 PIECES

detail A

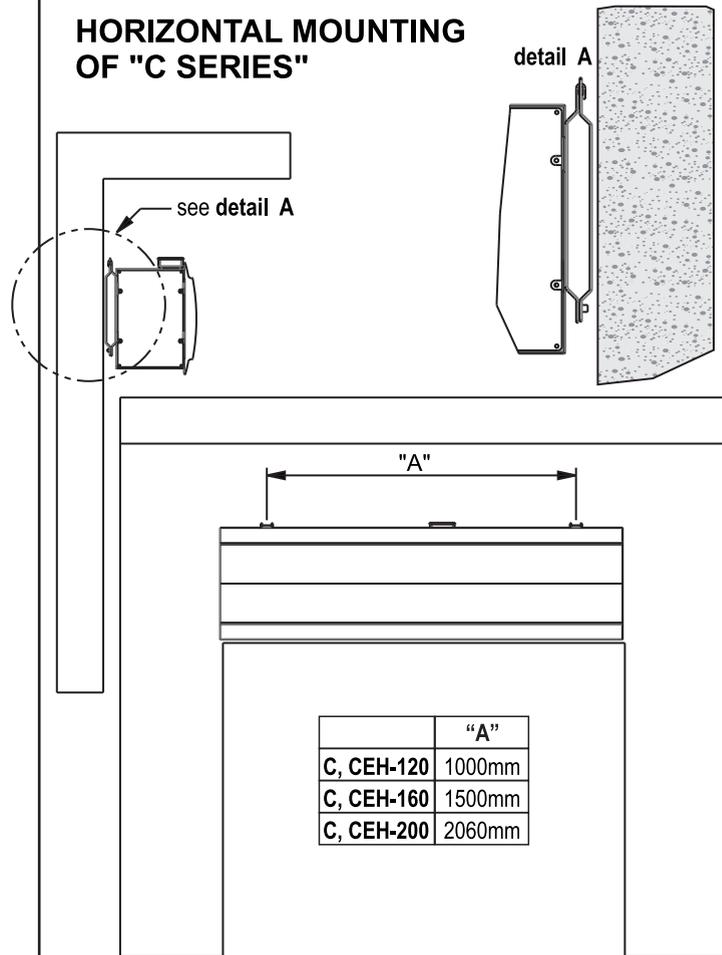




## HORIZONTAL MOUNTING WITH RODS OF "C SERIES"

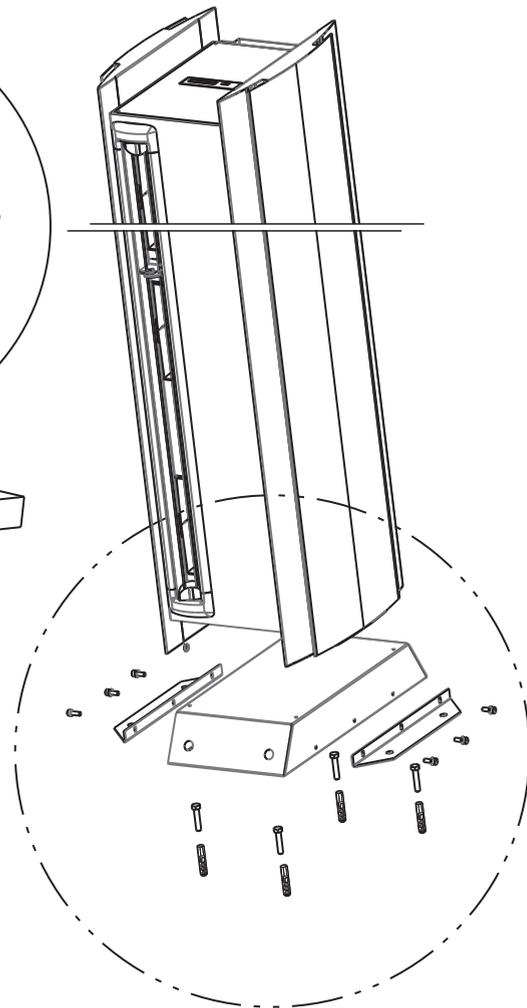
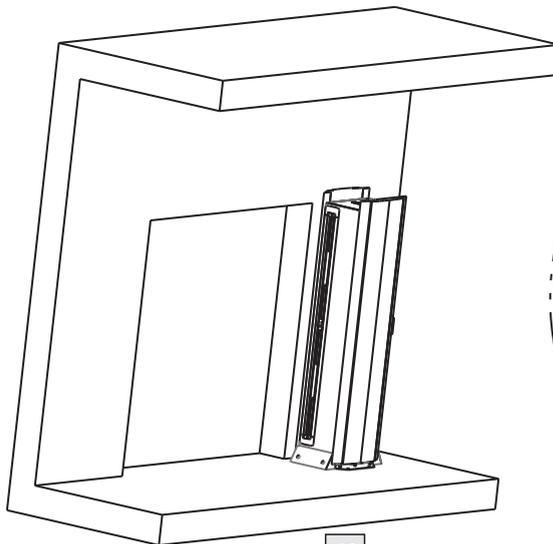
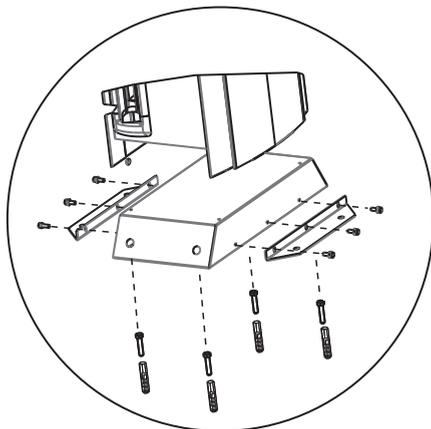
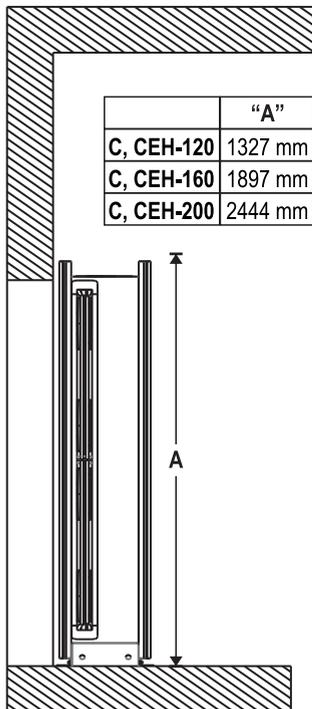


## HORIZONTAL MOUNTING OF "C SERIES"



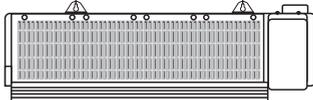


## VERTICAL MOUNTING OF "C" SERIES

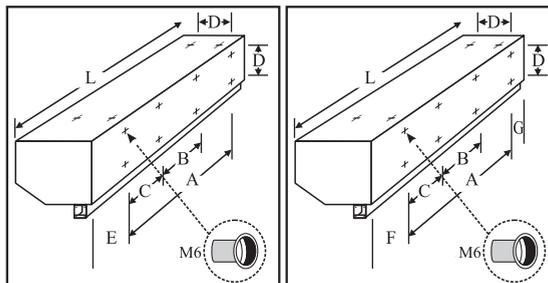




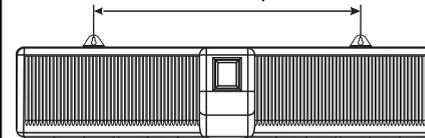
**FAN DIAMETER 100 mm**  
 514 ± 1 mm for MINI 800 S  
 770 ± 1 mm for L / REH-13 S



## AIR CURTAINS MOUNTING POINTS



**FAN DIAMETER 110 mm**  
 673 mm for K-43, KEH-43  
 788 mm for K-44, KEH-44  
 1056 mm for K-46, KEH-46



### FAN DIAMETER 100 mm

MODEL	A ± 1 mm	B mm	C mm	D mm	MOTOR SIDE		BEARING SIDE	
					L ± 1 mm	E mm	F mm	G mm
R,L-11 W	570	-	-	96	845	-	138	138
R,L-12 W	670	-	-		945	-	138	138
R,L-13 W	770	-	-		1045	-	138	138
R,LEH-13 S					1100	-	233	273
R,LEH-13 W	598	-	-	96	1206	153	-	-
K-14 W	900	-	-	115				
KEH, WH-14 W				96				
K-15 W	1000	-	-	115	1406	203	-	-
KEH, WH-15 W				96				
K-16 W	1100	-	-	115	1606	253	-	-
KEH, WH-16 W				96				
K-17 W	1200	500	350	115	1806	303	-	-
KEH, WH-17 W				96				
K-18 W	1300	400	450	115	2006	353	-	-
KEH, WH-18 W				96				

### FAN DIAMETER 180 mm

MODEL	A ± 1 mm	B mm	C mm	D mm	L ± 1 mm	E mm
K,KEH,KWH-83	633	-	-	115	1093	230

### ATTENTION

\*The given models have non-standard labeling.  
 It is necessary to pay special attention to the technical characteristics of these models.

\*\*Same Dimensions with Electrical Heated Models  
 Are for Water Heated Models as well.

### FAN DIAMETER 120 mm

MODEL	A ± 1 mm	B mm	C mm	D mm	MOTOR SIDE		BEARING SIDE	
					L ± 2 mm	E mm	F mm	G mm
R,L-33W,R,LEH-33W	640	-	-	135	1140	-	243	256,5
K-34,KEH, WH-34	1000	-	-		1249	124,50	-	-
K-34 W,KEH, WH-34 W	800	-	-		1230	219,50	-	-
K-35,KEH, WH-35	1100	-	-		1450	175,00	-	-
K-35 W,KEH, WH-35 W	900	-	-		1439	269,50	-	-
R,LEH-36	1600	400	400		1852	-	-	-
K-36,KEH, WH-36	1200	-	-		1651	225,50	-	-
K-36 W,KEH, WH-36 W	1000	-	-		1639	319,50	-	-
K-37	1300	400	450		1852	276,00	-	-
R,LEH-37	1800	450	500		2052	-	-	-
KEH, WH-37	1300	500	400		1852	276,00	-	-
K-37 W,KEH, WH-37 W	1100	500	300		1839	369,50	-	-
K-38	1400	400	500		2053	653,00	-	-
KEH, WH-38	1400	500	450		2053	326,50	-	-
K-38 W,KEH, WH-38 W	1200	600	300		2039	419,50	-	-

### FAN DIAMETER 133 mm

MODEL	A ± 1 mm	B mm	C mm	D mm	MOTOR SIDE		BEARING SIDE	
					L ± 2 mm	E mm	F mm	G mm
R,L-22 R,LEH, WH-22	700	-	-	135	1253	-	277	277
R,L-23 R,LEH, WH-23					920	-	277	277
K-24, KEH, WH-24	787	387	200		1483	233,00	-	-
K-26, KEH, WH-26	1050	550	250		1656	303,00	-	-
R,LEH-27	1803	500	400		2100	-	-	-
K-28	1190	490	350		2098	453,00	-	-
KEH, WH-28	1190	390	400		2096	453,00	-	-

## 2.2 ELECTRICAL CONNECTION DIAGRAMS



### GENERAL STATEMENTS

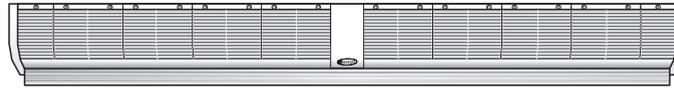
“OLEFINI S.A.” designs and manufactures most of the electronic parts inside it’s Units in order to provide reliable and effective operation of the equipment.

The Test Centres of “OLEFINI S.A.” performs full check of all the equipment produced. Air Curtains are tested by more than 20 parameters, such as an overload of the motor and tubular electric heaters, rotor balancing and the Air Curtain as a whole device , noise and vibrations level, reliability of electric components and many other things according to CE standards.

Also company follows ISO9001: 2015 Guidelines.

The present section contains all Electrical Connection Diagrams for all OLEFINI Air Curtains.

It is necessary to use bimetallic thermostats when connecting room thermostats to the Air Curtains.



### ATTENTION

- \*Use only wired remote control unit to operate Heated Air Curtains.
- \*It is strictly forbidden to switch off the Air Curtain through the knife electric switch.
- \*Only special cables can be used in cascade Air Curtains.
- \*Extraneous subjects (dust, dirt etc.) on the heating elements of the Air Curtains with electric heating can provoke inflammation, therefore it is necessary to carefully observe all the maintenance and service recommendations (see p. 15).
- \*In case of non-standard length of the power cables it is necessary to consult the service centre of the seller firm.

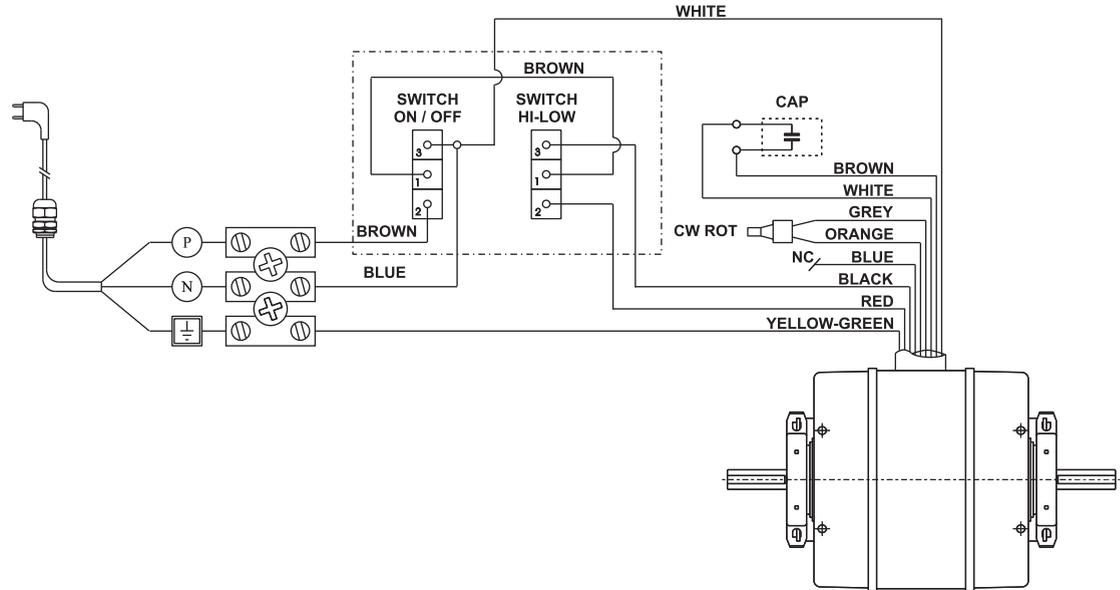


**COMMERCIAL TYPE  
AIR CURTAINS**

**FAN DIAMETER  
100 mm**

P, N	SUPPLY LINE 230V, 1N, 50Hz
CW ROT	CW ROTATION

MOTOR TYPE	
OLEFINI 31-873	
230 V	50 Hz
0.5 A	1 / 12 HP
CAP 4 μF, 400 V	
R.P.M. 1380 / 1150	



ATTENTION:

FOR CCW ROTATION  
CHANGE BROWN WITH ORANGE

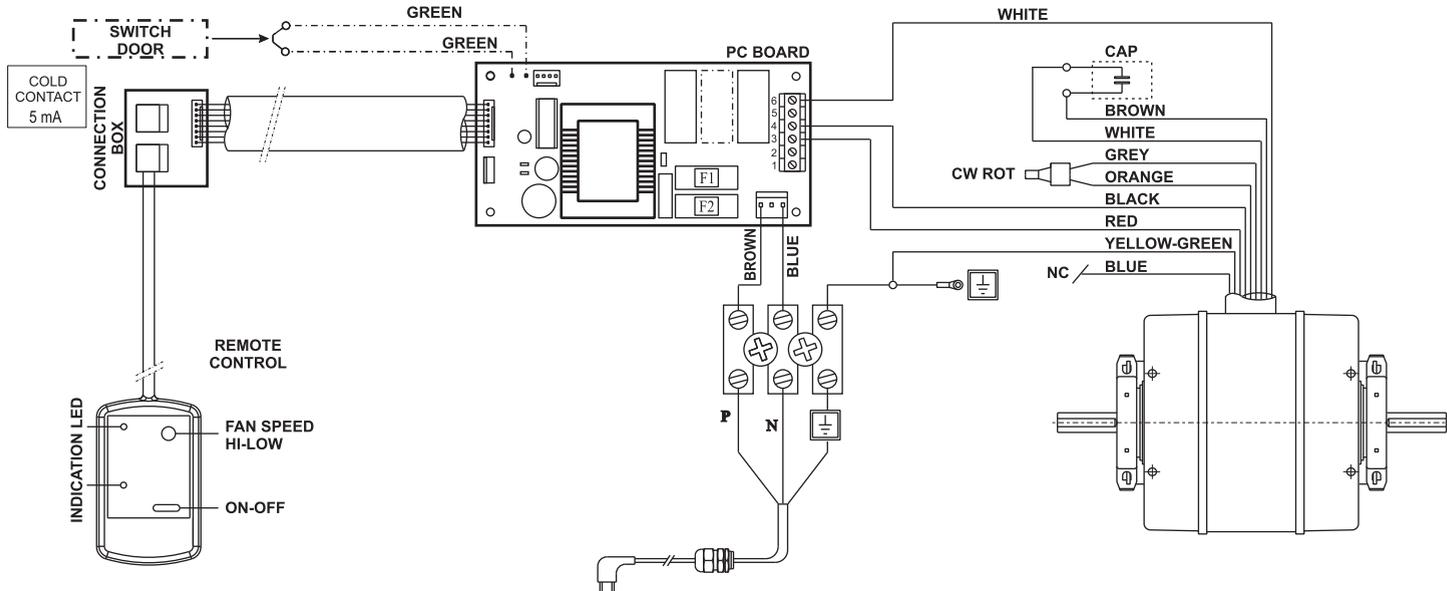
**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS L-11 W, R-11 W, L-12 W, R-12 W, L-13 W, R-13 W  
(WITH SWITCHES)**



**COMMERCIAL TYPE  
AIR CURTAINS  
FAN DIAMETER  
100 mm**

P, N	SUPPLY LINE 230V, 1N, 50Hz
F 1, F 2	FUSE (F 1: 0.5 A, F 2: 6.0 A)
NC	WITHOUT CONTACT
CW ROT	CW ROTATION

MOTOR TYPE	
OLEFINI 31-873	
230 V	50 Hz
0.5 A	1 / 12 HP
CAP 4 µF, 400 V	
R.P.M. 1380 / 1150	



**ATTENTION:**

- 1). FOR CCW ROTATION  
CHANGE BROWN WITH ORANGE
- 2). DOOR SWITCH IS OPTIONAL

**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS L-11 W, R-11 W, L-12 W, R-12 W, L-13 W, R-13 W  
(ELECTRONIC CONTROL) (CB)**

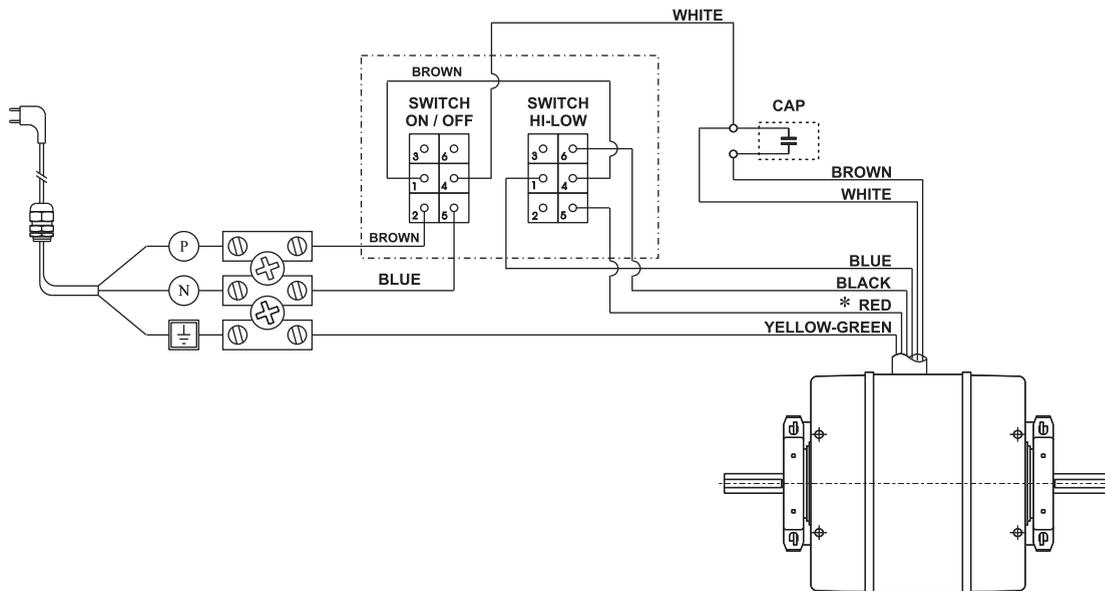


**COMMERCIAL TYPE  
AIR CURTAINS**

**FAN DIAMETER  
100 mm**

P, N	SUPPLY LINE 230V, 1N, 50Hz
------	----------------------------

MOTOR TYPE	
OLEFINI 31-961	
230 V	50 Hz
1.1 A	1 / 5 HP
CAP 4 µF, 400 V	
R.P.M. 1380 / 1150	



**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS K-14 W, K-15 W, K-16 W, K-17 W, K-18 W  
(WITH SWITCHES)**

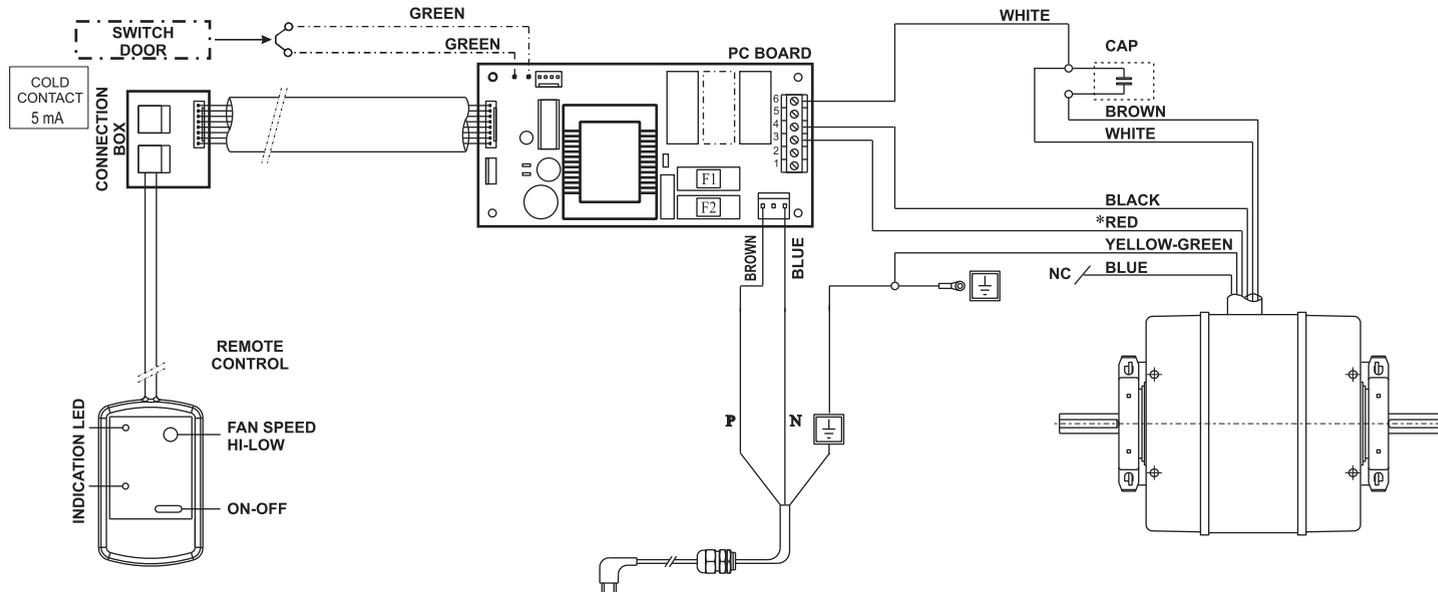
\* IN AIR CURTAINS : K-17 W, K-18 W  
CONNECT BLUE SPEED  
FOR LOW



**COMMERCIAL TYPE  
AIR CURTAINS  
FAN DIAMETER  
100 mm**

P, N	SUPPLY LINE 230V, 1N, 50Hz
F 1, F 2	FUSE (F 1: 0.5 A, F 2: 6.0 A)
NC	WITHOUT CONTACT

MOTOR TYPE	
OLEFINI 31-961	
230 V	50 Hz
1.1 A	1 / 5 HP
CAP 4 µF, 400 V	
R.P.M. 1380 / 1150	



ATTENTION:

- 1). DOOR SWITCH IS OPTIONAL

**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS K-14 W, K-15 W, K-16 W, K-17 W, K-18 W  
(ELECTRONIC CONTROL) (CB)**

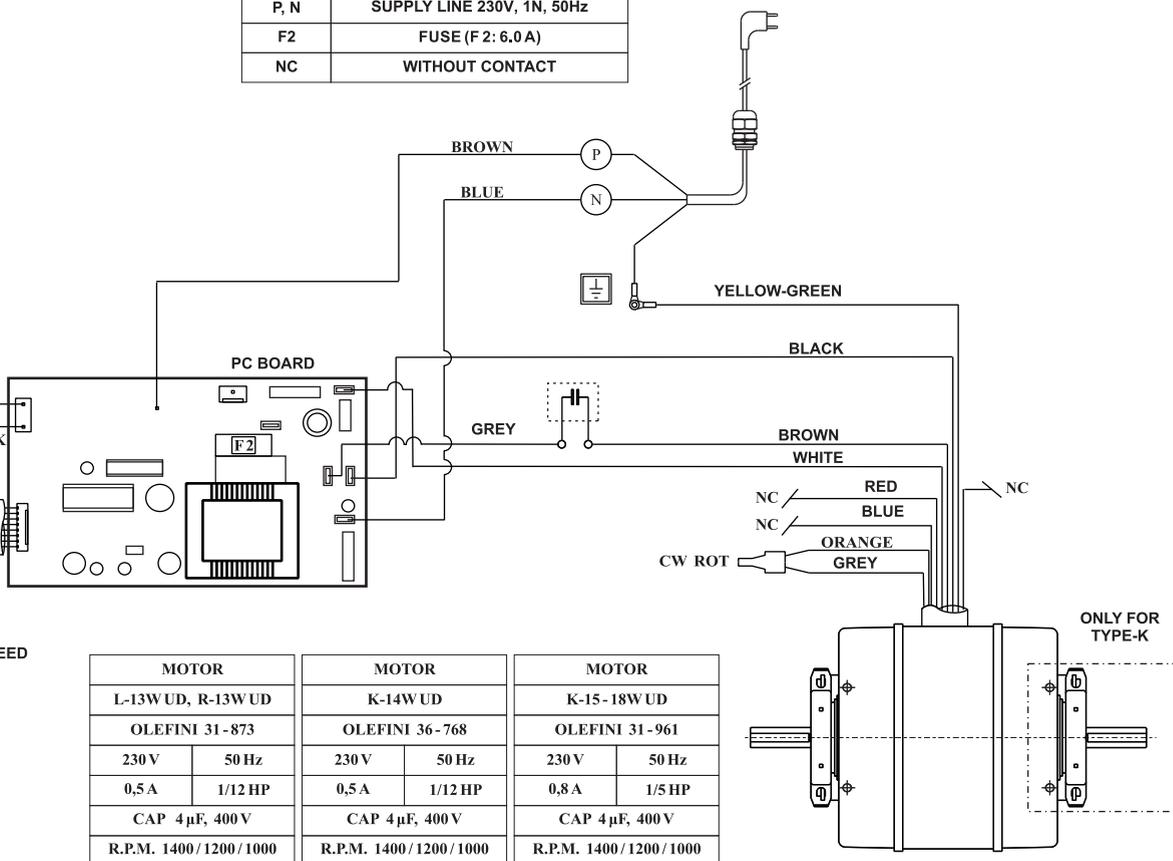
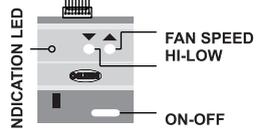
\* IN AIR CURTAINS : K-17 W, K-18 W  
CONNECT BLUE SPEED  
FOR LOW



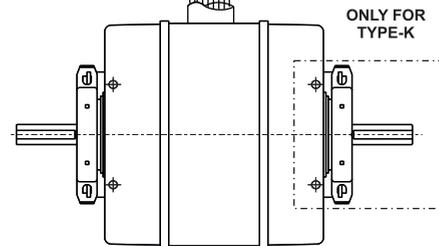
**COMMERCIAL TYPE  
AIR CURTAINS  
FAN DIAMETER  
100 mm**

P, N	SUPPLY LINE 230V, 1N, 50Hz
F2	FUSE (F 2: 6.0 A)
NC	WITHOUT CONTACT

COLD CONTACT  
5 mA



MOTOR		MOTOR		MOTOR	
L-13W UD, R-13W UD		K-14W UD		K-15-18W UD	
OLEFINI 31-873		OLEFINI 36-768		OLEFINI 31-961	
230V	50 Hz	230V	50 Hz	230V	50 Hz
0,5 A	1/12 HP	0,5 A	1/12 HP	0,8 A	1/5 HP
CAP 4 µF, 400V		CAP 4 µF, 400V		CAP 4 µF, 400V	
R.P.M. 1400/1200/1000		R.P.M. 1400/1200/1000		R.P.M. 1400/1200/1000	

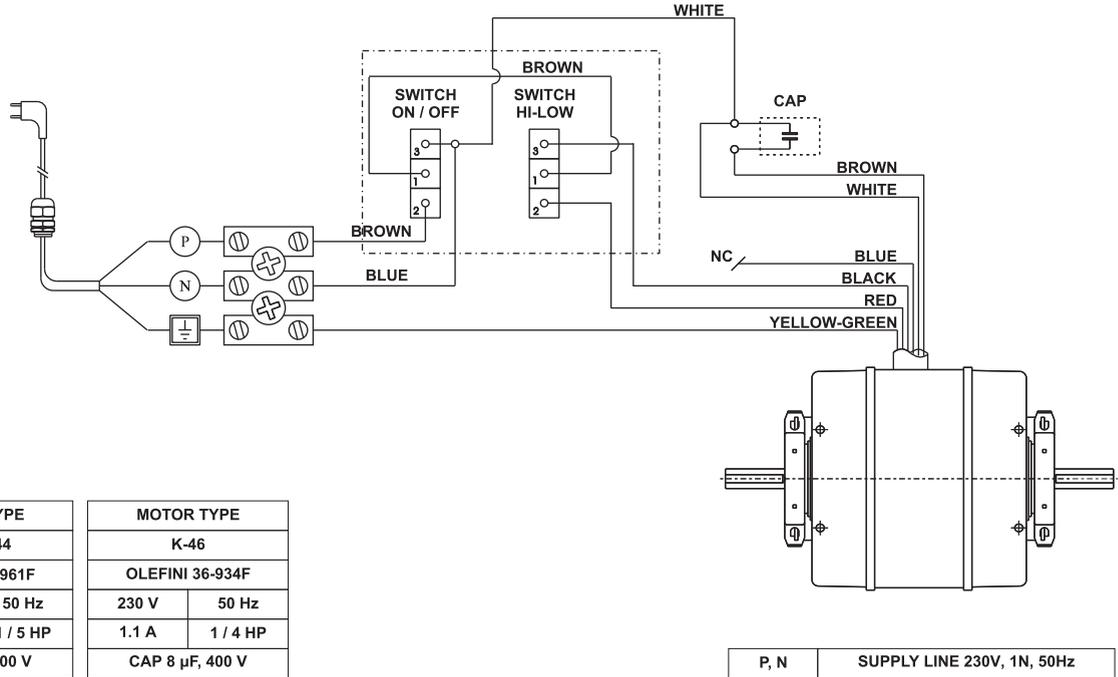


**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS L-13W UD, R-13W UD,  
K-14W UD, K-15 W UD, K-16 W UD, K-17 W UD, K-18 W UD**



**PLASTIC  
AIR CURTAINS**

**FAN DIAMETER  
110 mm**



MOTOR TYPE	
K-43, K-44	
OLEFINI 34-961F	
230 V	50 Hz
1.0 A	1 / 5 HP
CAP 4 µF, 400 V	
R.P.M. 1380 / 1150	

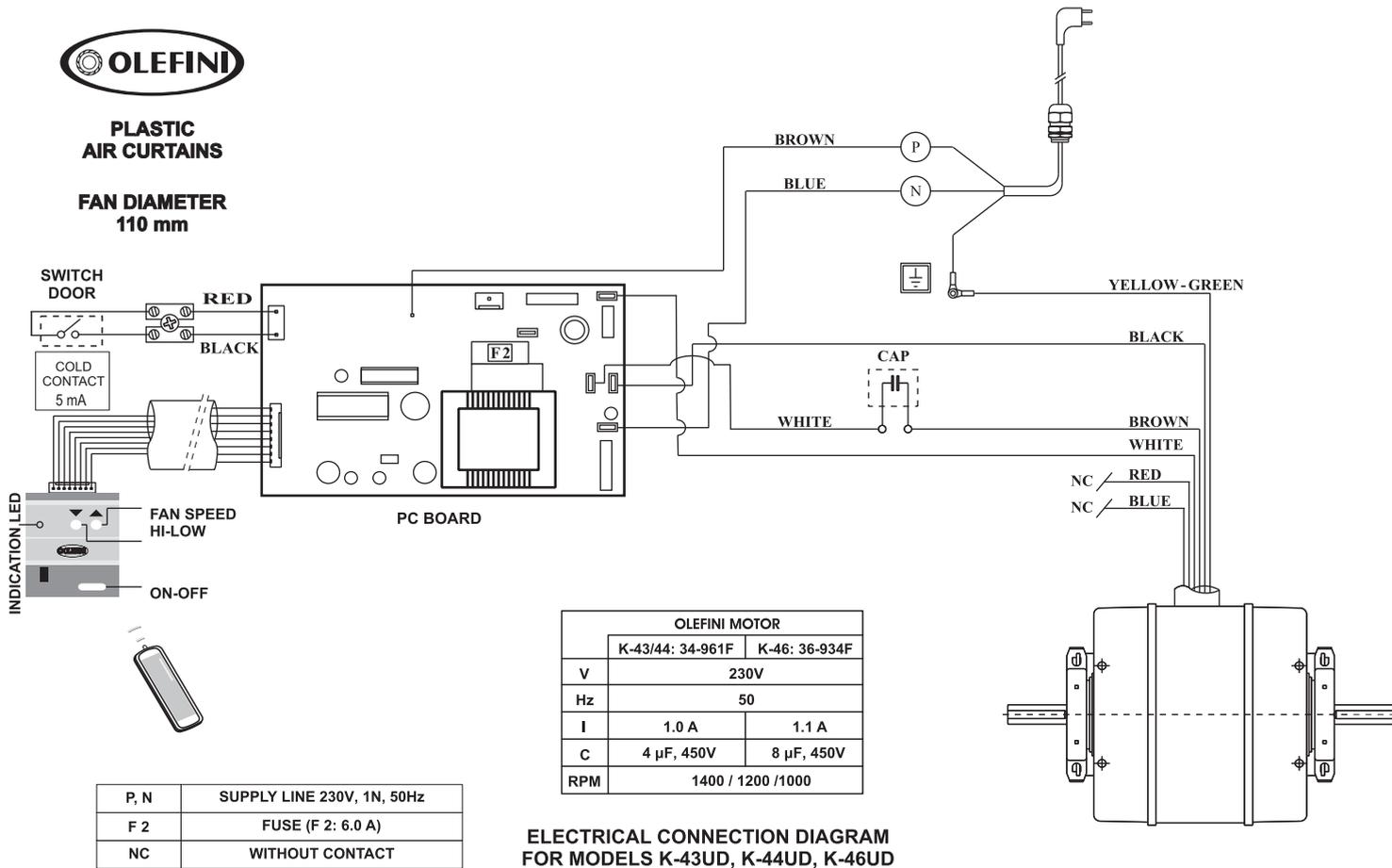
MOTOR TYPE	
K-46	
OLEFINI 36-934F	
230 V	50 Hz
1.1 A	1 / 4 HP
CAP 8 µF, 400 V	
R.P.M. 1380 / 1150	

**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS K-43, K-44, K-46  
(WITH SWITCHES)**



**PLASTIC  
AIR CURTAINS**

**FAN DIAMETER  
110 mm**



	OLEFINI MOTOR	
	K-43/44: 34-961F	K-46: 36-934F
V	230V	
Hz	50	
I	1.0 A	1.1 A
C	4 $\mu$ F, 450V	8 $\mu$ F, 450V
RPM	1400 / 1200 / 1000	

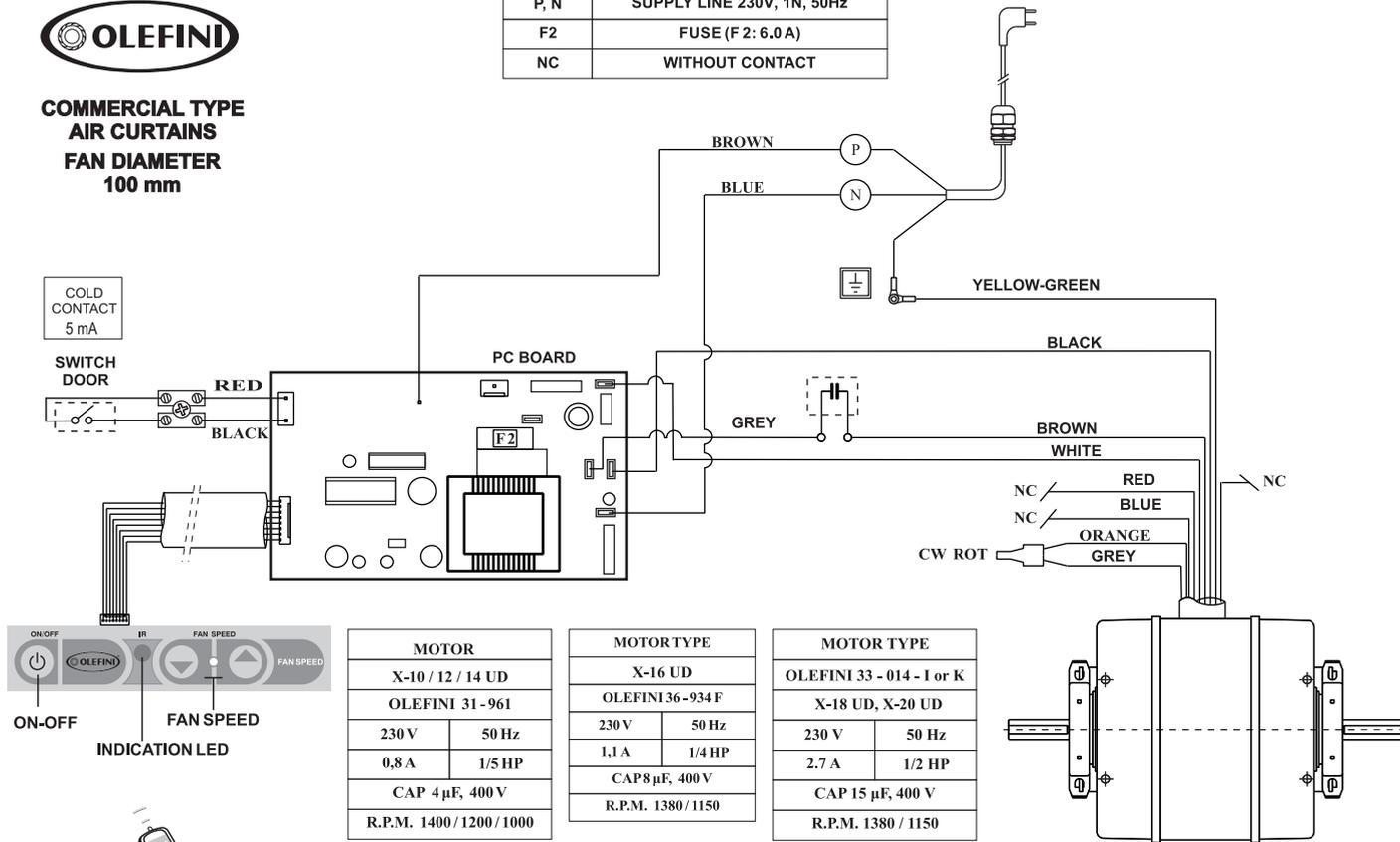
P, N	SUPPLY LINE 230V, 1N, 50Hz
F 2	FUSE (F 2: 6.0 A)
NC	WITHOUT CONTACT

**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS K-43UD, K-44UD, K-46UD**



**COMMERCIAL TYPE  
AIR CURTAINS  
FAN DIAMETER  
100 mm**

P, N	SUPPLY LINE 230V, 1N, 50Hz
F2	FUSE (F 2: 6,0 A)
NC	WITHOUT CONTACT



GOLD CONTACT  
5 mA

SWITCH DOOR

RED  
BLACK

PC BOARD

F2

BROWN  
BLUE

YELLOW-GREEN

BLACK

GREY

BROWN  
WHITE

NC / RED  
NC / BLUE  
ORANGE  
GREY

CW ROT

NC



ON-OFF

FAN SPEED  
INDICATION LED

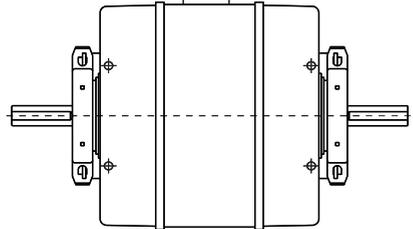


INFRARED  
REMOTE  
CONTROL

MOTOR	
X-10 / 12 / 14 UD	
OLEFINI 31-961	
230 V	50 Hz
0,8 A	1/5 HP
CAP 4 µF, 400 V	
R.P.M. 1400 / 1200 / 1000	

MOTOR TYPE	
X-16 UD	
OLEFINI 36-934 F	
230 V	50 Hz
1,1 A	1/4 HP
CAP 8 µF, 400 V	
R.P.M. 1380 / 1150	

MOTOR TYPE	
OLEFINI 33 - 014 - I or K	
X-18 UD, X-20 UD	
230 V	50 Hz
2,7 A	1/2 HP
CAP 15 µF, 400 V	
R.P.M. 1380 / 1150	



**ELECTRICAL CONNECTION DIAGRAM  
X-10 UD, X-12 UD, X-14 UD, X-16 UD, X-18 UD, X-20 UD**

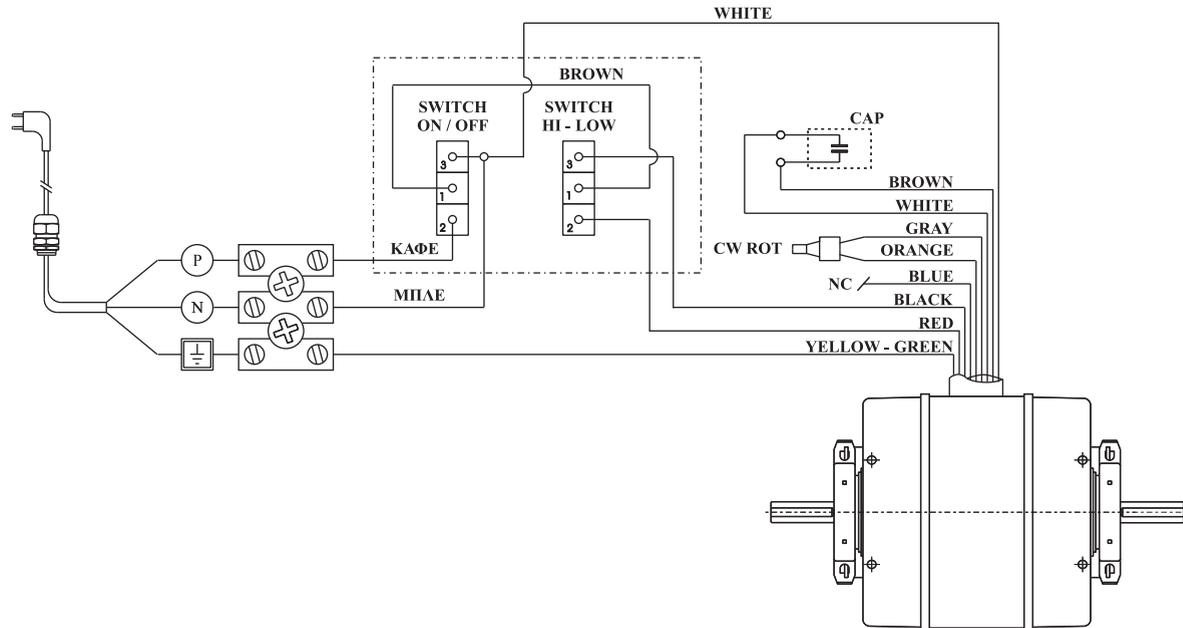


**“X” SERIES AIR CURTAINS  
SIMPLE  
FAN DIAMETER  
100 mm**

P, N	SUPPLY LINE 230V, 50Hz
NC	WITHOUT CONTACT
CW ROT	ΔΕΞΙΟΣΤΡΟΦΗ ΠΕΡΙΣΤΡΟΦΗ

MOTOR TYPE	
OLEFINI 31 - 961	
230 V	50 Hz
1.0 A	1/5 HP
CAP 4 μF, 400 V	
R.P.M. 1380 / 1150	

MOTOR TYPE	
X-16	
OLEFINI 36-934 F	
230 V	50 Hz
1,1 A	1/4 HP
CAP 8 μF, 400 V	
R.P.M. 1380/1150	



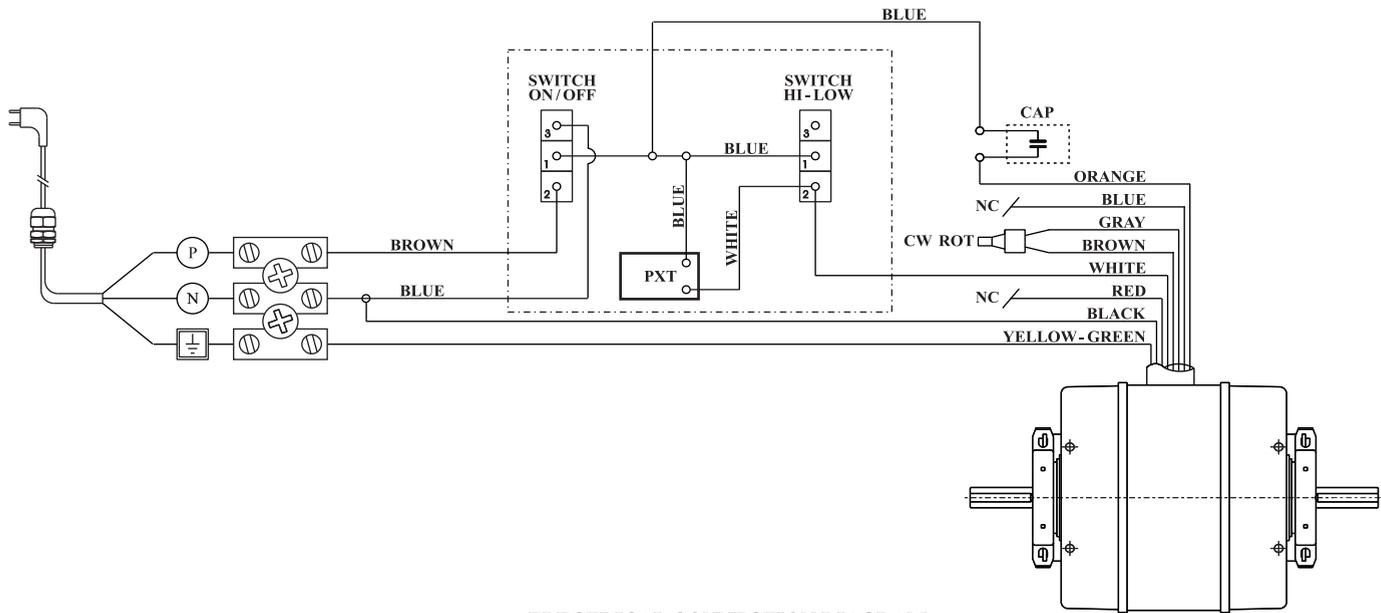
**ELECTRICAL CONNECTION DIAGRAM  
X-10 , X-12 , X-14 , X-16 (ON-OFF)**



**“X” SERIES AIR CURTAINS**  
**SIMPLE**  
**FAN DIAMETER**  
**100 mm**

P, N	SUPPLY LINE 230V, 50Hz
PXT	SPEED CONTROLLER
NC	WITHOUT CONTACT
CW ROT	ΔΕΞΙΟΣΤΡΟΦΗ ΠΕΡΙΣΤΡΟΦΗ

MOTOR TYPE	
OLEFINI 33 - 014 - I or K	
230 V	50 Hz
2.7 A	1/2 HP
CAP 15 μF, 400 V	
R.P.M. 1380 / 1150	



**ELECTRICAL CONNECTION DIAGRAM**  
**FOR MODELS X-18 , X-20 (ON-OFF)**



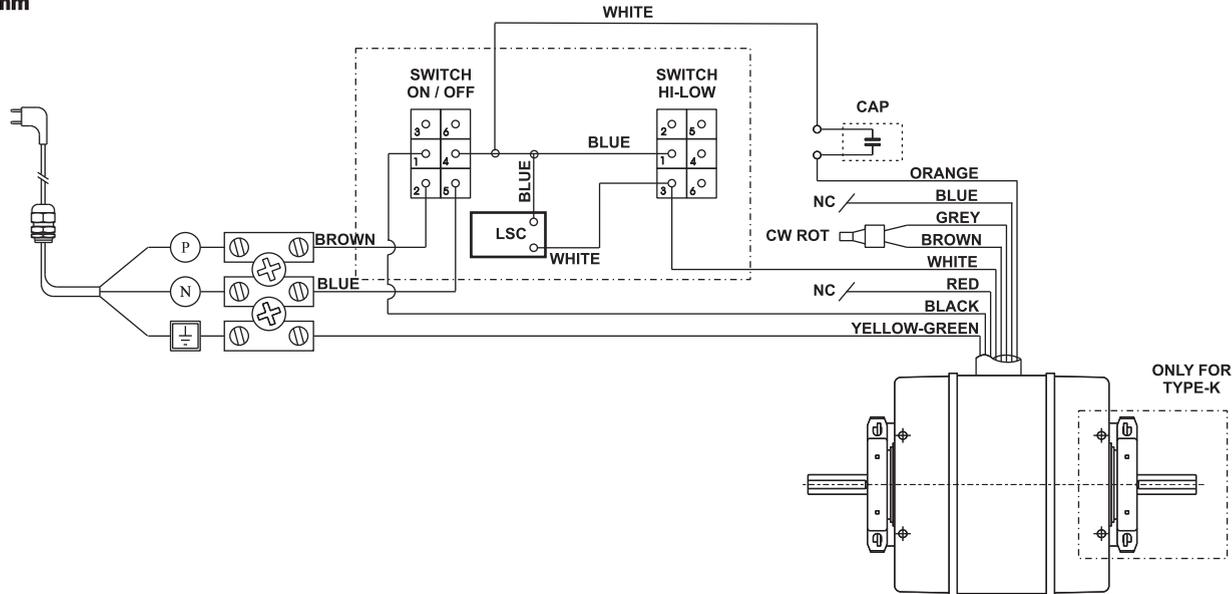
**AIR CURTAINS  
GENERAL TYPE**

**FAN DIAMETER  
120 mm**

P, N	SUPPLY LINE 230V, 1N, 50Hz
NC	WITHOUT CONTACT
CW ROT	CW ROTATION
LSC	LOW SPEED CONTROL

MOTOR TYPE	
L, R-33 , K-34 W	
OLEFINI 35-920 A	
230 V	50 Hz
1.1 A	1 / 4 HP
CAP 8 µF, 400 V	
R.P.M. 1380 / 1150	

MOTOR TYPE	
OLEFINI 33 - 014 - I or K	
230 V	50 Hz
2.7 A	1/2 HP
CAP 15 µF, 400 V	
R.P.M. 1380 / 1150	



**ATTENTION:**

FOR CCW ROTATION  
CHANGE BROWN WITH ORANGE

**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS L-33 W, R-33 W, K-34 W, K-35 W, K-36 W  
(WITH SWITCHES)**

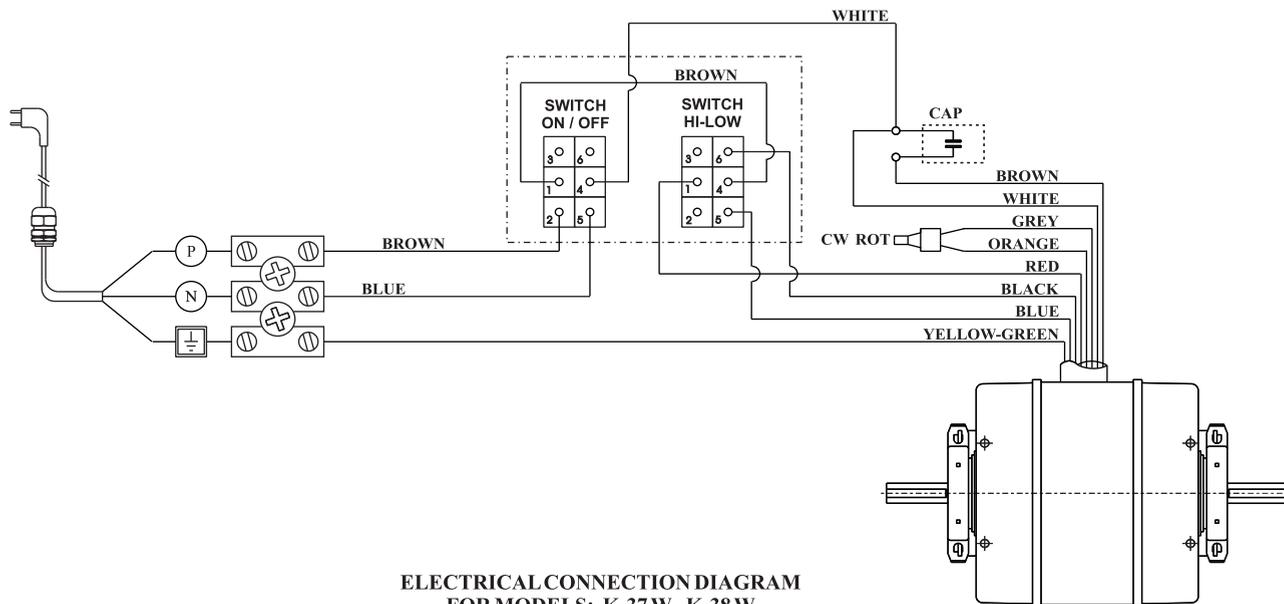


P, N	SUPPLY LINE 230V, 1N, 50Hz
NC	WITHOUT CONTACT

MOTOR TYPE	
OLEFINI 33 - 014 - I or K	
230 V	50 Hz
2.7 A	1/2 HP
CAP 15 $\mu$ F, 400 V	
R.P.M. 1380 / 1150	

**AIR CURTAINS  
GENERAL TYPE**

**FAN DIAMETER  
120 mm**



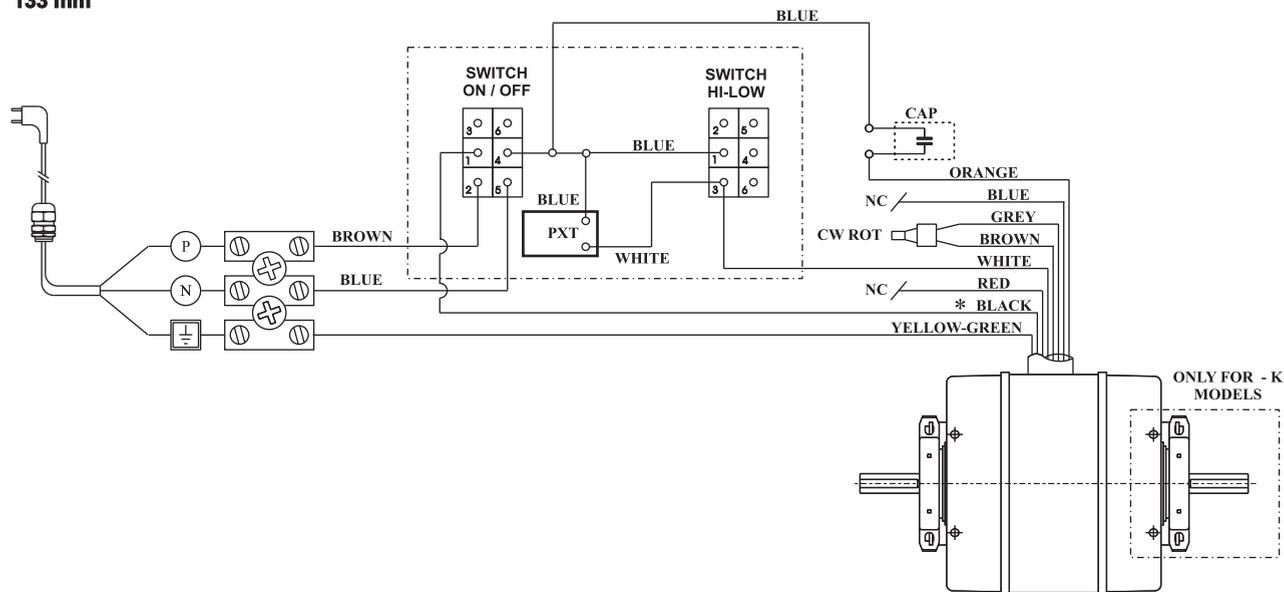
**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS: K-37W, K-38W  
(WITH SWITCHES)**



**AIR CURTAINS  
INDUSTRIAL TYPE**

**FAN DIAMETER  
133 mm**

P, N	SUPPLY POWER 230V, 50Hz	MOTOR	
PXT	SPEED CONTROLLER	R, L	
NC	NOT CONNECTED	OLEFINI 33 - 015	
CW ROT	DIRECTION OF ROTATION	230 V	50 Hz
		2.7 A	1/2 HP
		CAP 12 $\mu$ F, 400 V	
		R.P.M. 1380 / 1150	



**ELECTRICAL CONNECTION**  
L-22 , R-22 , L-23 , R-23  
( WITH SWITCHES )



**AIR CURTAINS  
GENERAL TYPE AND  
INDUSTRIAL TYPE  
FAN DIAMETER**

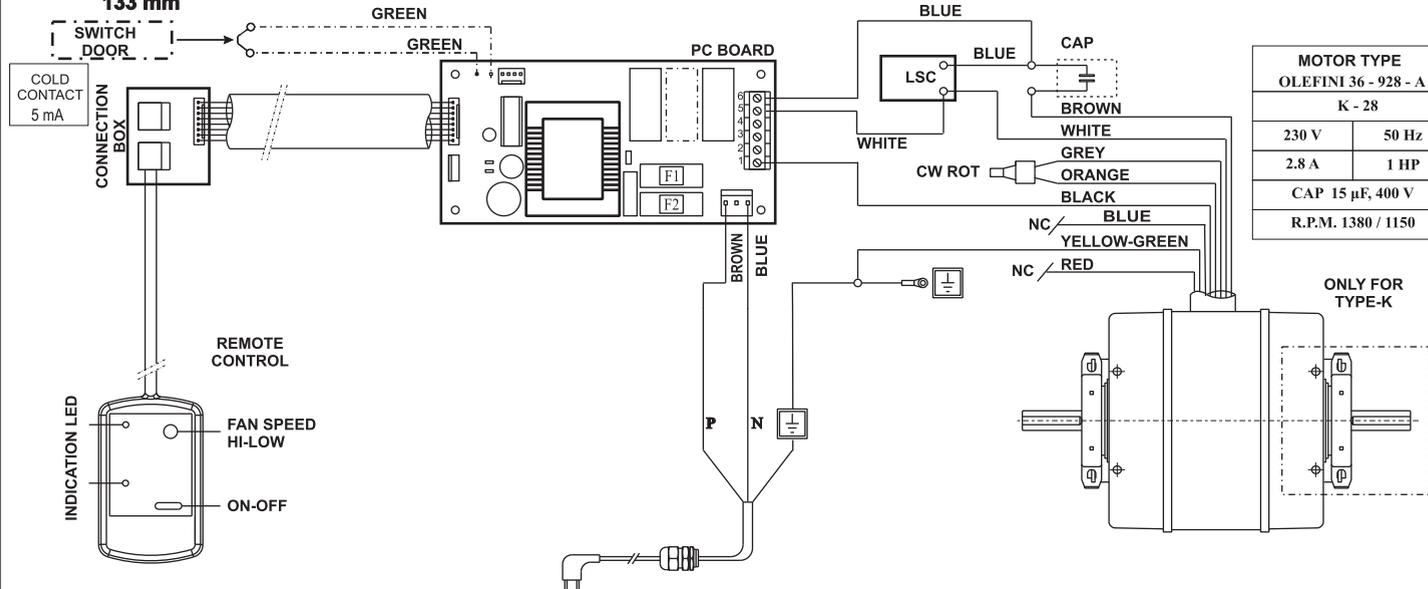
**120 mm  
133 mm**

P, N	SUPPLY LINE 230V, 1N, 50Hz
F 1, F 2	FUSE (F 1: 0.5 A, F 2: 6.0 A)
NC	WITHOUT CONTACT
CW ROT	CW ROTATION
LSC	LOW SPEED CONTROL

MOTOR TYPE OLEFINI 33-015	
FOR R,L-22 / 23	
230 V	50 Hz
2.7 A	1 / 2 HP
CAP 12 µF, 400 V	
R.P.M. 1380 / 1150	

MOTOR TYPE OLEFINI 33 - 014 - I or K	
FOR K-35W, 24	
230 V	50 Hz
2.7 A	1 / 2 HP
CAP 15 µF, 400 V	
R.P.M. 1380 / 1150	

MOTOR TYPE OLEFINI 35 - 920 - A	
FOR R,L-33W, K-34W	
230 V	50 Hz
1.1 A	1/4 HP
CAP 8 µF, 400 V	
R.P.M. 1380 / 1150	



MOTOR TYPE OLEFINI 36 - 928 - A	
K - 28	
230 V	50 Hz
2.8 A	1 HP
CAP 15 µF, 400 V	
R.P.M. 1380 / 1150	

**ATTENTION:**

- 1). FOR CCW ROTATION  
CHANGE BROWN WITH ORANGE
- 2). DOOR SWITCH IS OPTIONAL

**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS : L-33 W, R-33 W, L-22, R-22, L-23, R-23  
K-34 W, K-35 W, K-36 W, K-24, K-28  
(ELECTRONIC CONTROL) CB**

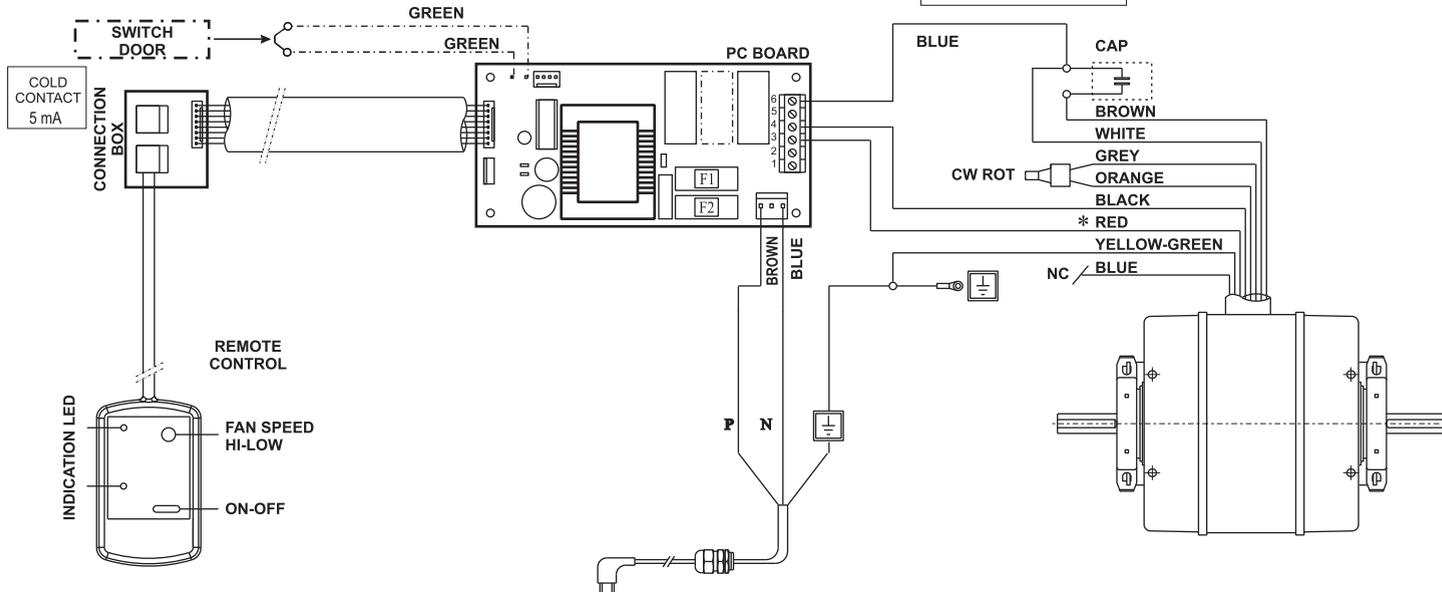


**AIR CURTAINS  
GENERAL TYPE AND  
INDUSTRIAL TYPE**

**FAN DIAMETER  
120 mm  
133 mm**

P, N	SUPPLY LINE 230V, 1N, 50Hz
F 1, F 2	FUSE (F 1: 0.5 A, F 2: 6.0 A)
NC	WITHOUT CONTACT
CW ROT	CW ROTATION

MOTOR TYPE	
OLEFINI 33 - 014 - I or K	
230 V	50 Hz
2.7 A	1/2 HP
CAP 15 µF, 400 V	
R.P.M. 1380 / 1150	



**ATTENTION:**

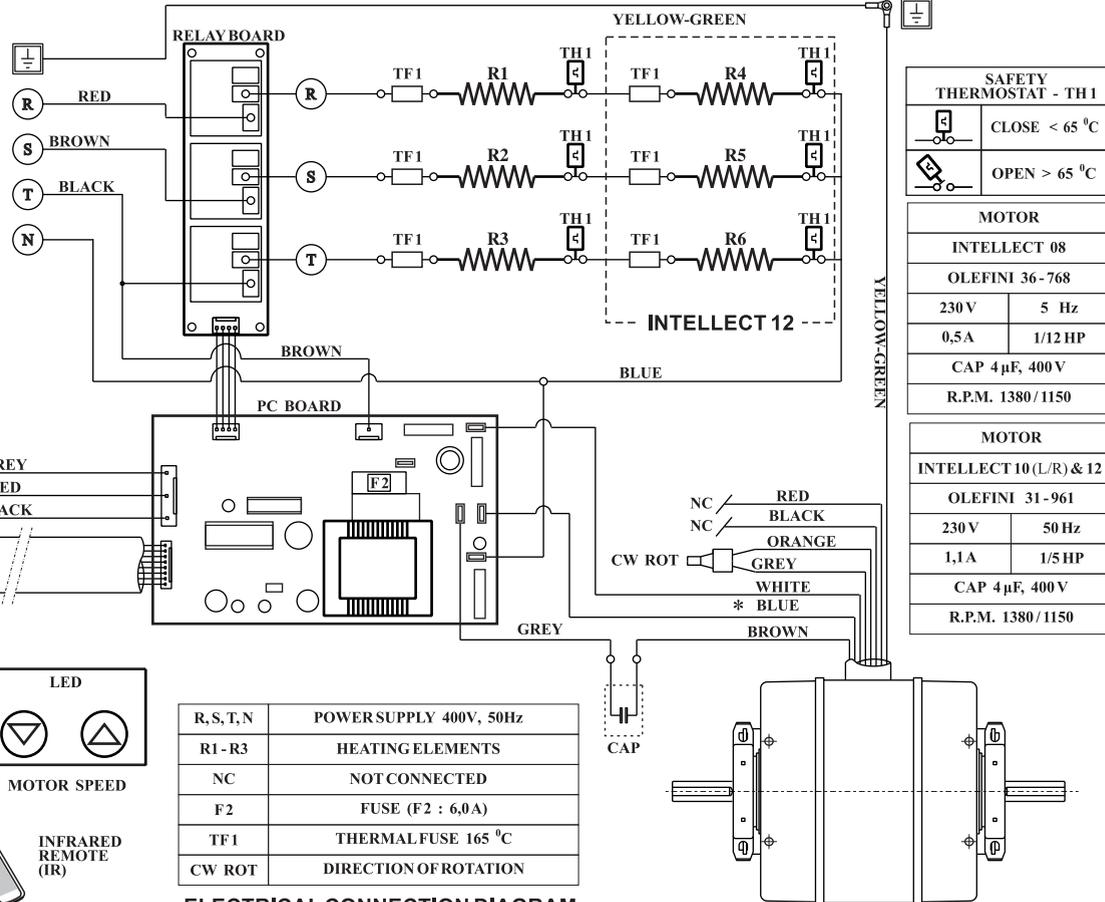
- 1). DOOR SWITCH IS OPTIONAL

**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS K-37 W, K-38 W, K-26  
(ELECTRONIC CONTROL) CB**

\* IN AIR CURTAINS: K-37 W, K-38 W  
CONNECT BLUE SPEED  
FOR LOW



**COMMERCIAL TYPE  
AIR CURTAINS  
ELECTRICALLY HEATED  
FAN DIAMETER  
110 mm**



SAFETY THERMOSTAT - TH 1	
	CLOSE < 65 °C
	OPEN > 65 °C

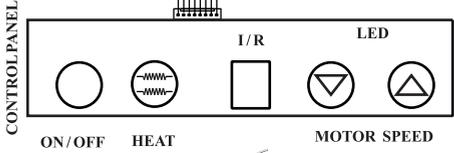
MOTOR	
INTELLECT 08	
OLEFINI 36-768	
230 V	5 Hz
0,5A	1/12 HP
CAP 4 µF, 400V	
R.P.M. 1380/1150	

MOTOR	
INTELLECT 10 (L/R) & 12	
OLEFINI 31-961	
230V	50 Hz
1,1A	1/5 HP
CAP 4 µF, 400V	
R.P.M. 1380/1150	

R, S, T, N	POWERSUPPLY 400V, 50Hz
R1 - R3	HEATINGELEMENTS
NC	NOT CONNECTED
F2	FUSE (F2 : 6,0A)
TF1	THERMALFUSE 165 °C
CW ROT	DIRECTION OF ROTATION

**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS: INTELLECT 08 (L or R), INTELLECT 10 (L or R),  
INTELLECT 12 (6kW)**

**\* IN UNIT INTELLECT 08 R,L  
CONNECT BLACK SPEED**



**ATTENTION:**  
1). FOR CCW ROTATION  
CHANGE BROWN WITH ORANGE



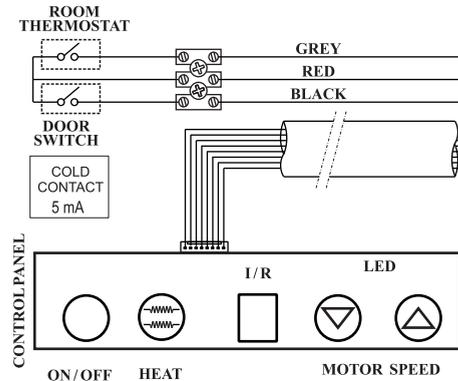


**COMMERCIAL TYPE  
AIR CURTAINS  
ELECTRICALLY HEATED  
FAN DIAMETER  
110 mm**

MOTOR TYPE		MOTOR TYPE	
INTELLECT 20		INTELLECT 16	
OLEFINI 33 - 014 - I or K		OLEFINI 36-934	
230 V	50 Hz	230 V	50 Hz
2.7 A	1 / 2 HP	1.1 A	1 / 4 HP
CAP 15 µF, 400 V		CAP 8 µF, 400 V	
R.P.M. 1380 / 1150		R.P.M. 1380 / 1150	

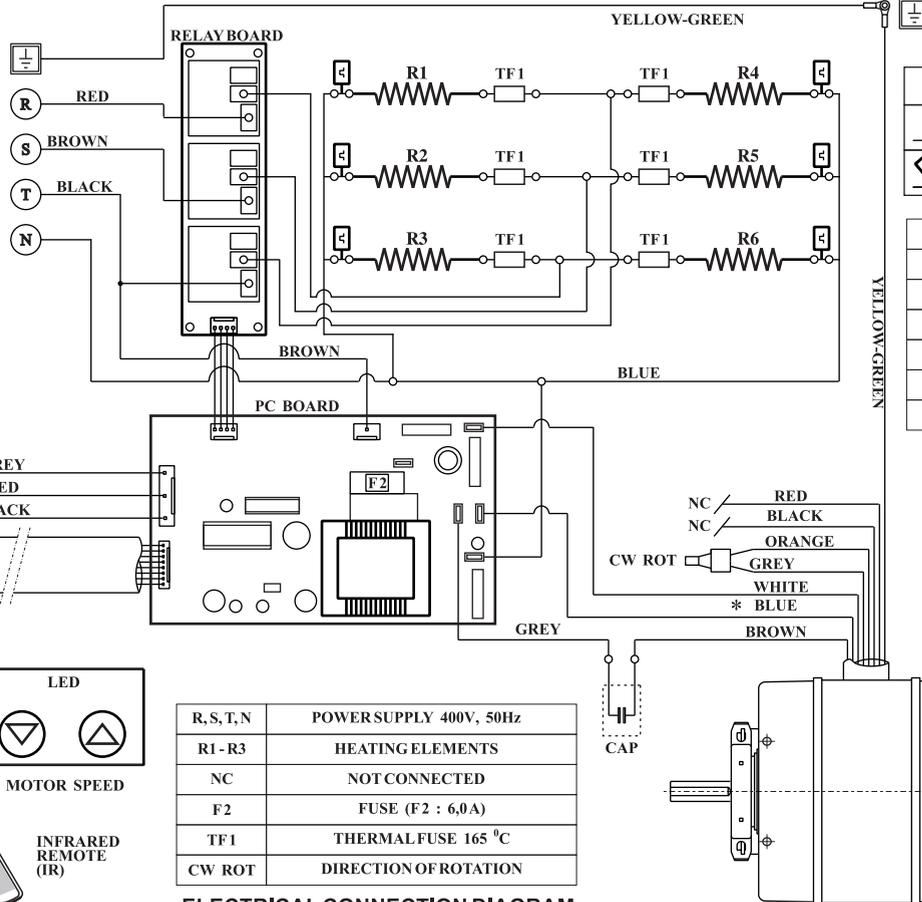
SAFETY THERMOSTAT - TH 1	
	CLOSE < 65 °C
	OPEN > 65 °C

MOTOR TYPE	
INTELLECT 12	
OLEFINI 31-961	
230 V	50 Hz
1,1 A	1/5 HP
CAP 4 µF, 400 V	
R.P.M. 1380 / 1150	



ATTENTION:

- FOR CCW ROTATION CHANGE BROWN WITH ORANGE



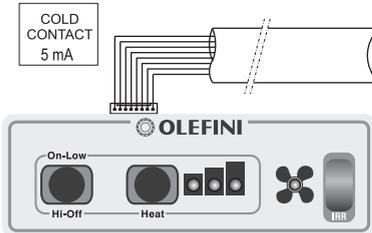
R, S, T, N	POWER SUPPLY 400V, 50Hz
R1 - R3	HEATING ELEMENTS
NC	NOT CONNECTED
F2	FUSE (F2 : 6,0A)
TF1	THERMAL FUSE 165 °C
CW ROT	DIRECTION OF ROTATION

**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS:  
INTELLECT 12 (9kW), INTELLECT 16, INTELLECT 20**

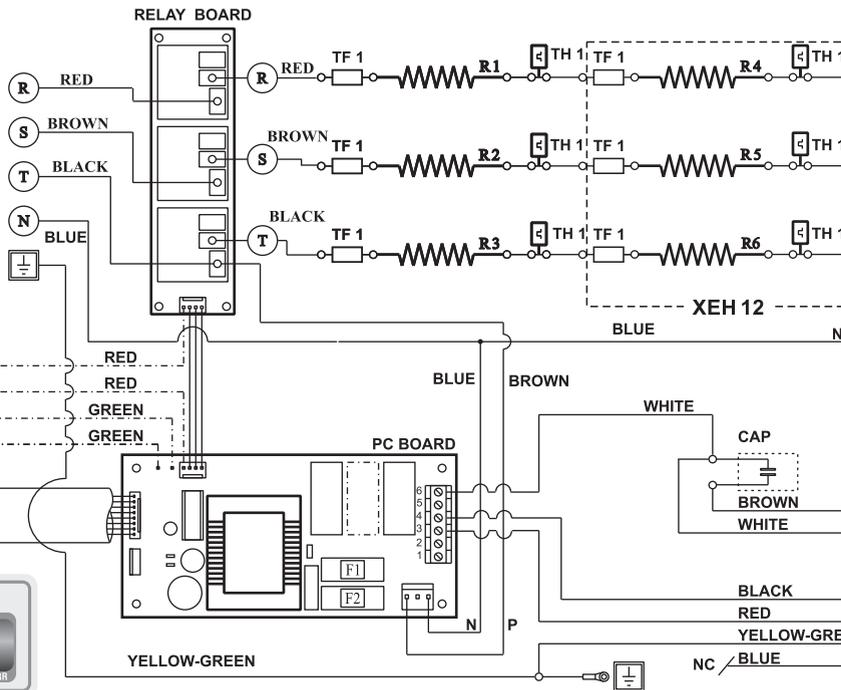
\* IN UNIT INTELLECT 20  
CONNECT BLACK SPEED



**PLASTIC  
AIR CURTAINS  
ELECTRICALLY HEATED  
FAN DIAMETER  
110 mm**



<b>MOTOR TYPE</b>	
XEH -10 R/L, 12	
OLEFINI 31 -961	
230 V	50 Hz
1,1 A	1/5 HP
CAP 4 µF, 400 V	
R.P.M. 1380 /1150	

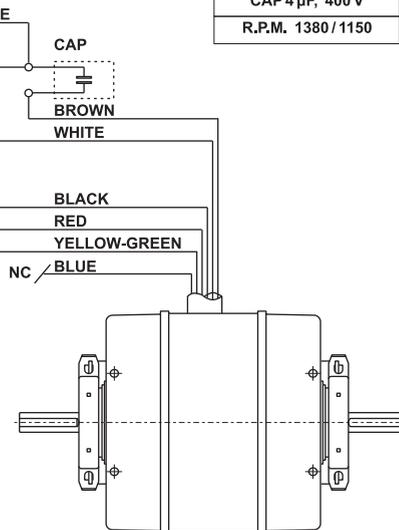


<b>THERMOSTAT-TH 1</b>	
	CLOSE < 65 °C
	OPEN > 65 °C

<b>MOTOR TYPE</b>	
XEH -08 R/L	
OLEFINI 36 -768	
230 V	50 Hz
0,5 A	1 1/2 HP
CAP 4 µF, 400 V	
R.P.M. 1380 /1150	

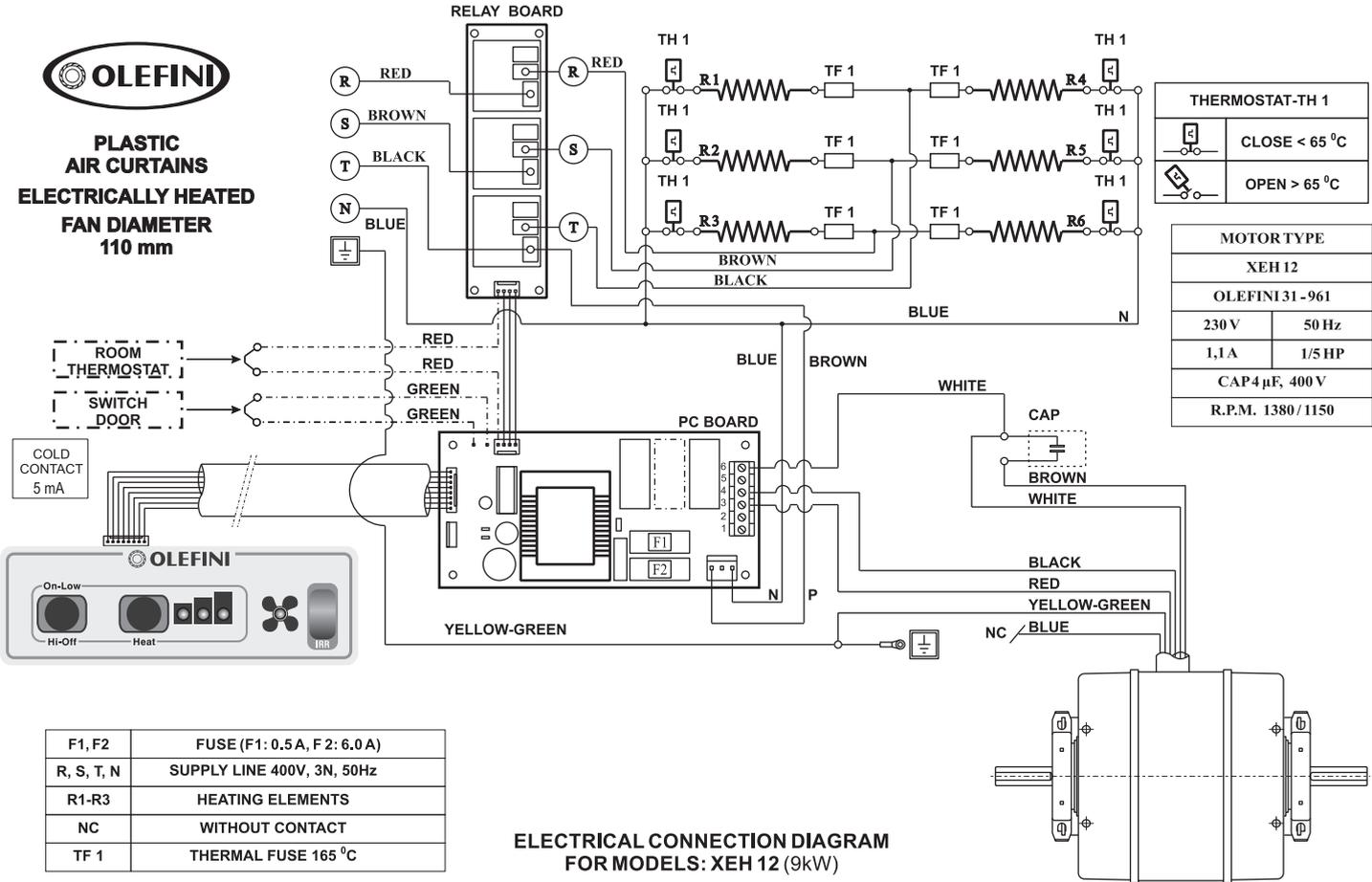
F1, F2	FUSE (F1: 0,5A, F2: 6,0A)
R, S, T, N	SUPPLY LINE 400V, 3N, 50Hz
R1-R3	HEATING ELEMENTS
NC	WITHOUT CONTACT
TF 1	THERMAL FUSE 165 °C

**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS: XEH 08 (RorL), XEH 10 (RorL) (6kW),  
XEH 12 (6kW)**





**PLASTIC  
AIR CURTAINS  
ELECTRICALLY HEATED  
FAN DIAMETER  
110 mm**

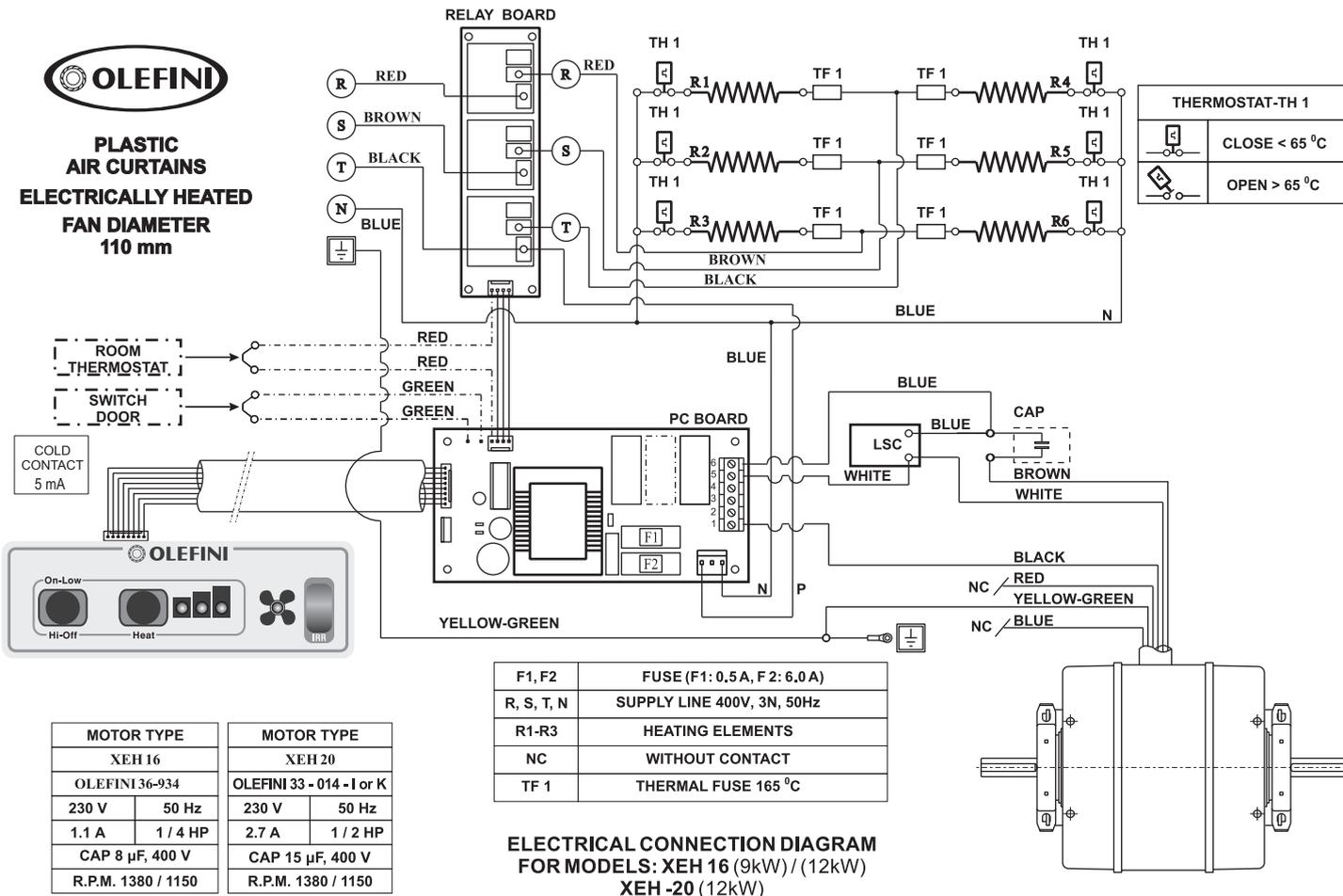


F1, F2	FUSE (F1: 0,5 A, F2: 6.0 A)
R, S, T, N	SUPPLY LINE 400V, 3N, 50Hz
R1-R3	HEATING ELEMENTS
NC	WITHOUT CONTACT
TF 1	THERMAL FUSE 165 °C

**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS: XEH 12 (9kW)**



**PLASTIC  
AIR CURTAINS  
ELECTRICALLY HEATED  
FAN DIAMETER  
110 mm**



THERMOSTAT-TH 1	
	CLOSE < 65 °C
	OPEN > 65 °C

COLD CONTACT  
5 mA

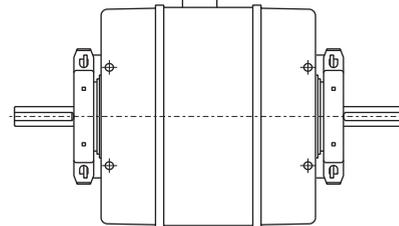


MOTOR TYPE	
XEH 16	
OLEFINI 36-934	
230 V	50 Hz
1.1 A	1 / 4 HP
CAP 8 µF, 400 V	
R.P.M. 1380 / 1150	

MOTOR TYPE	
XEH 20	
OLEFINI 33 - 014 - I or K	
230 V	50 Hz
2.7 A	1 / 2 HP
CAP 15 µF, 400 V	
R.P.M. 1380 / 1150	

F1, F2	FUSE (F1: 0.5A, F2: 6.0A)
R, S, T, N	SUPPLY LINE 400V, 3N, 50Hz
R1-R3	HEATING ELEMENTS
NC	WITHOUT CONTACT
TF 1	THERMAL FUSE 165 °C

**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS: XEH 16 (9kW) / (12kW)  
XEH -20 (12kW)**



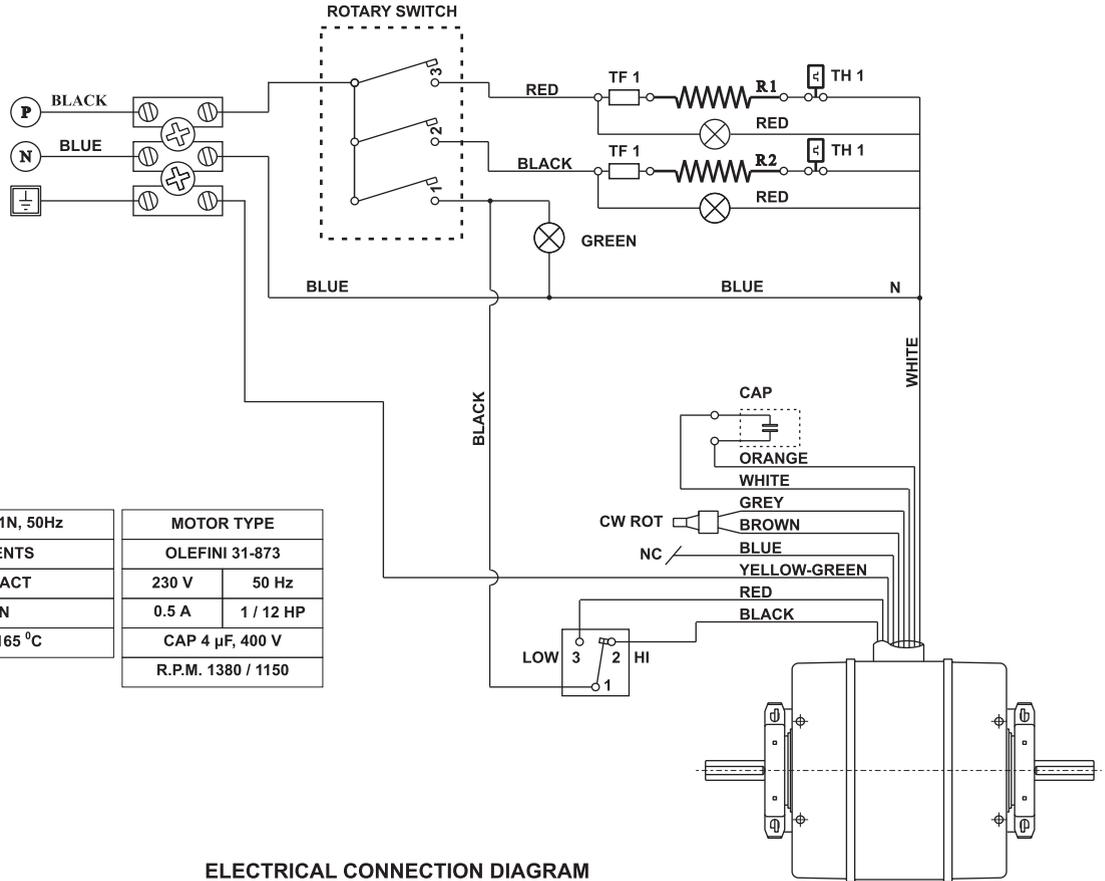


**COMMERCIAL TYPE  
AIR CURTAINS  
ELECTRICALLY HEATED  
FAN DIAMETER  
100 mm**

THERMOSTAT-TH 1	
	CLOSE < 65 °C
	OPEN > 65 °C

P, N	SUPPLY LINE 230V, 1N, 50Hz
R1-R2	HEATING ELEMENTS
NC	WITHOUT CONTACT
CW ROT	CW ROTATION
TF 1	THERMAL FUSE 165 °C

MOTOR TYPE	
OLEFINI 31-873	
230 V	50 Hz
0.5 A	1 / 12 HP
CAP 4 µF, 400 V	
R.P.M. 1380 / 1150	

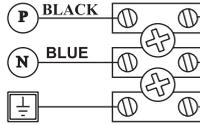


**ELECTRICAL CONNECTION DIAGRAM  
FOR MODEL MINI 800S**



**COMMERCIAL TYPE  
AIR CURTAINS  
ELECTRICALLY HEATED  
FAN DIAMETER  
110 mm**

SAFETY THERMOSTAT - TH 1	
	CLOSE < 65 °C
	OPEN > 65 °C



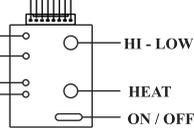
ROOM THERMOSTAT



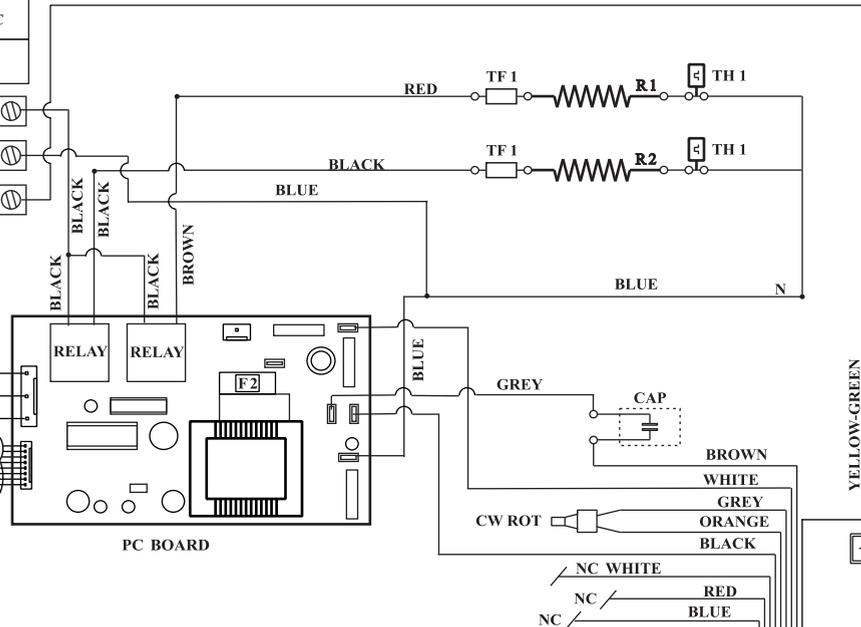
DOOR SWITCH

COLD CONTACT 5 mA  
CONTROL PANEL

INDICATION LEDS

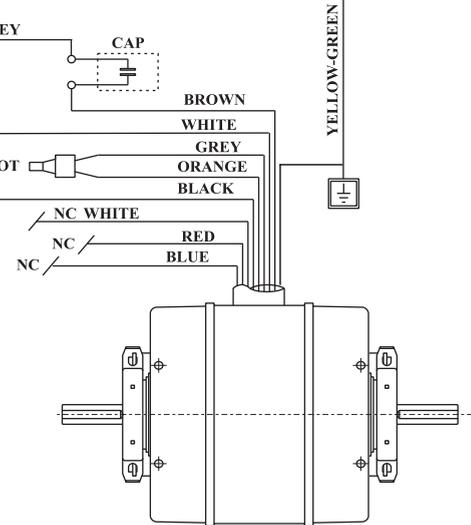


F2	FUSE (F2: 6.0 A)
P, N	POWER SUPPLY 1N , 230V, 50Hz
R1 - R2	HEATING ELEMENTS
NC	NOT CONNECTED
TF 1	THERMAL FUSES 165 °C



MOTOR	
OLEFINI 31 - 873	
230 V	50 Hz
0.5 A	1/12 HP
CAP 4 µF, 400 V	
R.P.M. 1380 / 1150	

**ELECTRICAL CONNECTION  
DIAGRAM FOR MINI-800S IR**





**COMMERCIAL TYPE  
AIR CURTAINS  
ELECTRICALLY HEATED  
FAN DIAMETER  
100 mm**

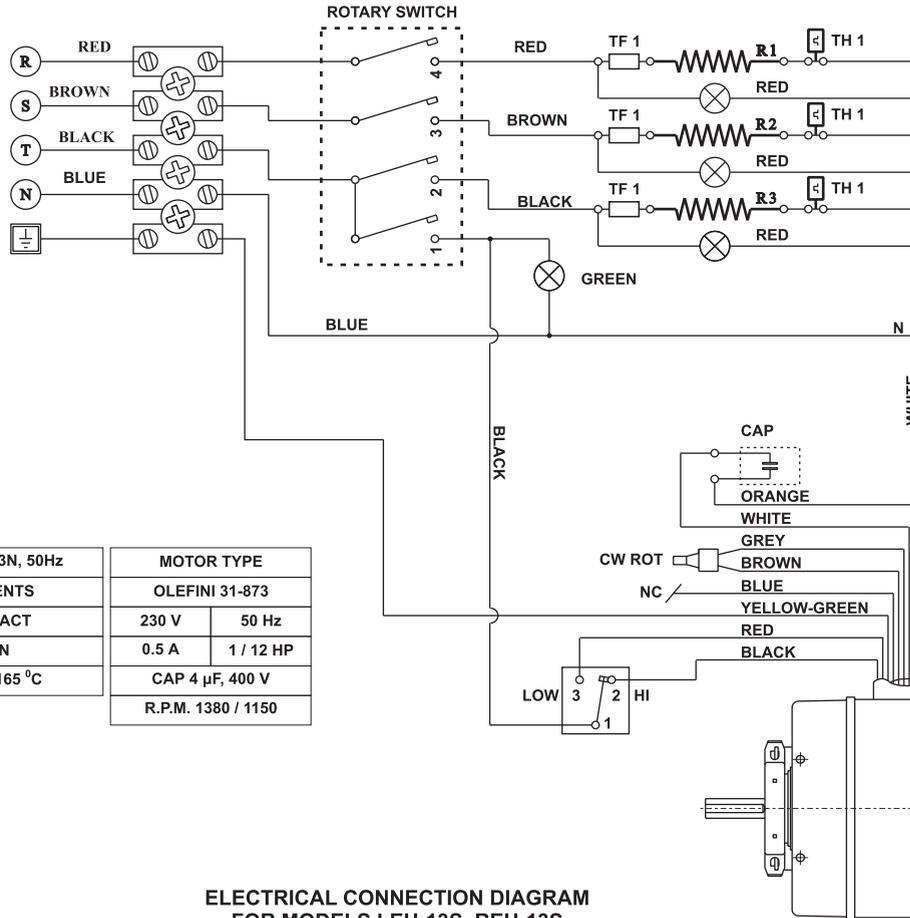
THERMOSTAT-TH 1	
	CLOSE < 65 °C
	OPEN > 65 °C

R, S, T, N	SUPPLY LINE 400V, 3N, 50Hz
R1-R3	HEATING ELEMENTS
NC	WITHOUT CONTACT
CW ROT	CW ROTATION
TF 1	THERMAL FUSE 165 °C

MOTOR TYPE	
OLEFINI 31-873	
230 V	50 Hz
0.5 A	1 / 12 HP
CAP 4 µF, 400 V	
R.P.M. 1380 / 1150	

**ATTENTION:**

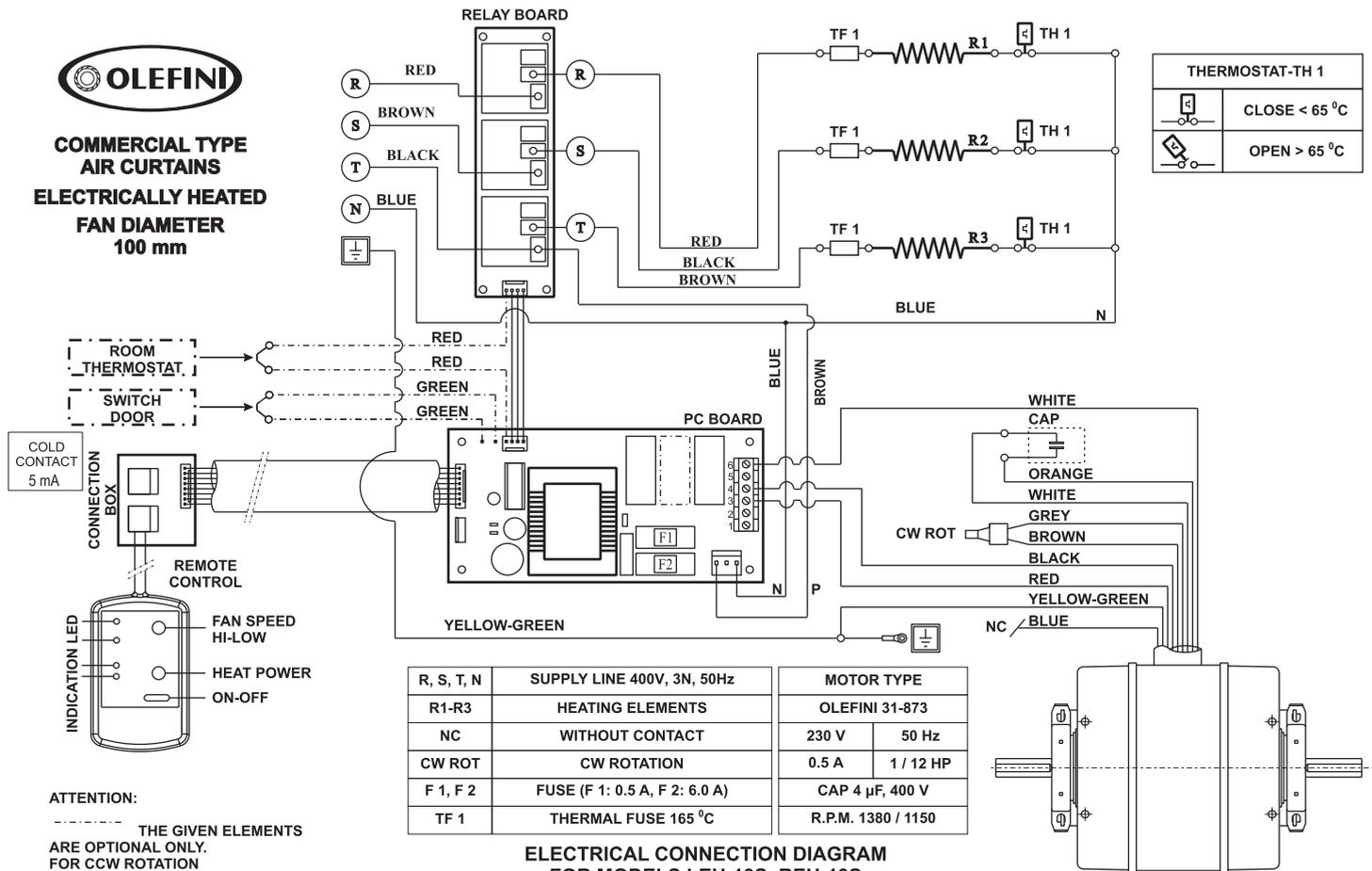
FOR CCW ROTATION  
CHANGE BROWN WITH ORANGE



**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS LEH-13S, REH-13S  
(WITH SWITCHES)**



**COMMERCIAL TYPE  
AIR CURTAINS  
ELECTRICALLY HEATED  
FAN DIAMETER  
100 mm**



THERMOSTAT-TH 1	
	CLOSE < 65 °C
	OPEN > 65 °C

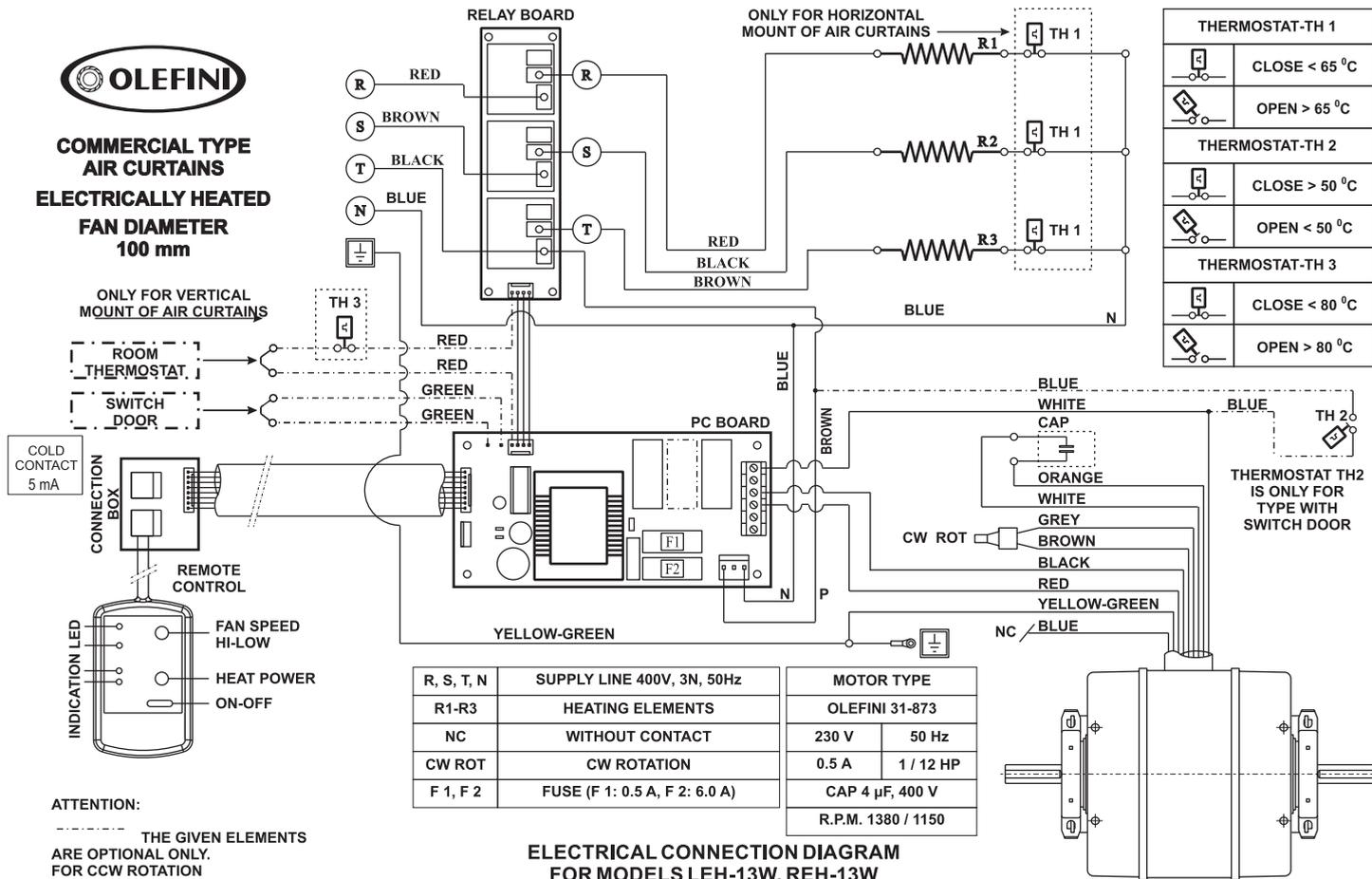
R, S, T, N	SUPPLY LINE 400V, 3N, 50Hz	MOTOR TYPE	
R1-R3	HEATING ELEMENTS	OLEFINI 31-873	
NC	WITHOUT CONTACT	230 V	50 Hz
CW ROT	CW ROTATION	0.5 A	1 / 12 HP
F 1, F 2	FUSE (F 1: 0.5 A, F 2: 6.0 A)	CAP 4 μF, 400 V	
TF 1	THERMAL FUSE 165 °C	R.P.M. 1380 / 1150	

**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS LEH-13S, REH-13S  
(ELECTRONIC CONTROL) CB**

**ATTENTION:**  
----- THE GIVEN ELEMENTS  
ARE OPTIONAL ONLY.  
FOR CCW ROTATION  
CHANGE BROWN WITH ORANGE



**COMMERCIAL TYPE  
AIR CURTAINS  
ELECTRICALLY HEATED  
FAN DIAMETER  
100 mm**



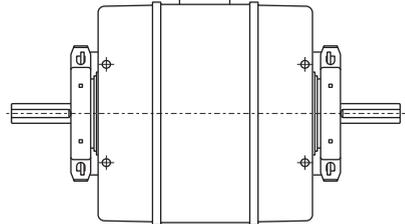
THERMOSTAT-TH 1	
	CLOSE < 65 °C
	OPEN > 65 °C
THERMOSTAT-TH 2	
	CLOSE > 50 °C
	OPEN < 50 °C
THERMOSTAT-TH 3	
	CLOSE < 80 °C
	OPEN > 80 °C

R, S, T, N	SUPPLY LINE 400V, 3N, 50Hz
R1-R3	HEATING ELEMENTS
NC	WITHOUT CONTACT
CW ROT	CW ROTATION
F 1, F 2	FUSE (F 1: 0.5 A, F 2: 6.0 A)

MOTOR TYPE	
OLEFINI 31-873	
230 V	50 Hz
0.5 A	1 / 12 HP
CAP 4 μF, 400 V	
R.P.M. 1380 / 1150	

**ATTENTION:**  
----- THE GIVEN ELEMENTS  
ARE OPTIONAL ONLY.  
FOR CCW ROTATION  
CHANGE BROWN WITH ORANGE

**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS LEH-13W, REH-13W  
(ELECTRONIC CONTROL) CB**



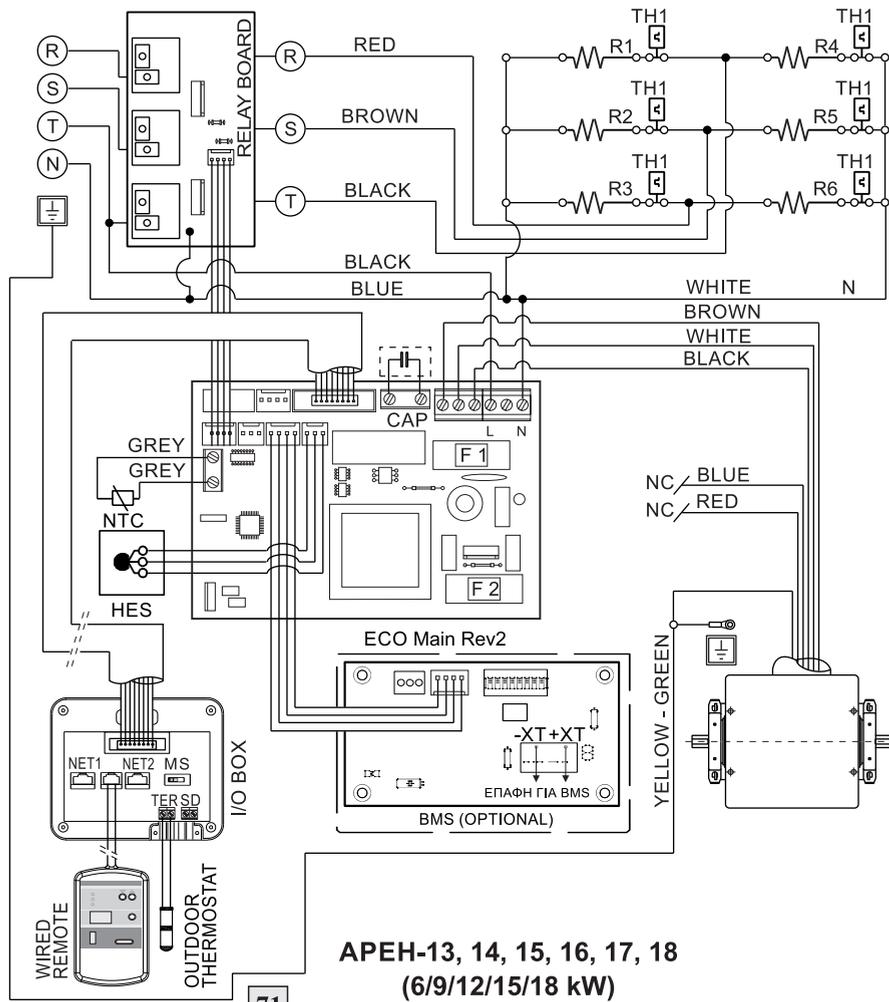




**GENERAL TYPE  
AIR CURTAINS  
ELECTRICALLY HEATED  
FAN DIAMETER  
120 mm**

THERMOSTAT - TH 1	
	CLOSE CONTACT < 65°C
	OPEN CONTACT > 65°C

R, S, T, N	POWER SUPPLY 400V, 3N, 50Hz
R1 - R6	HEATERS
NTC	THERMISTOR
HES	HALL EFFECT SENSORI
NC	NOT CONNECTED
CAP	CAPACITOR
F 1, F 2	FUSES ( F 1: 0,5A, F 2: 6,0A)
SD	DOOR SWITCH COLD CONTACT 5 mA
TER	OUTDOOR THERMOSTAT
NET1, 2	UTP CABLE FOR CASCADE



**APEH-13, 14, 15, 16, 17, 18  
(6/9/12/15/18 kW)**

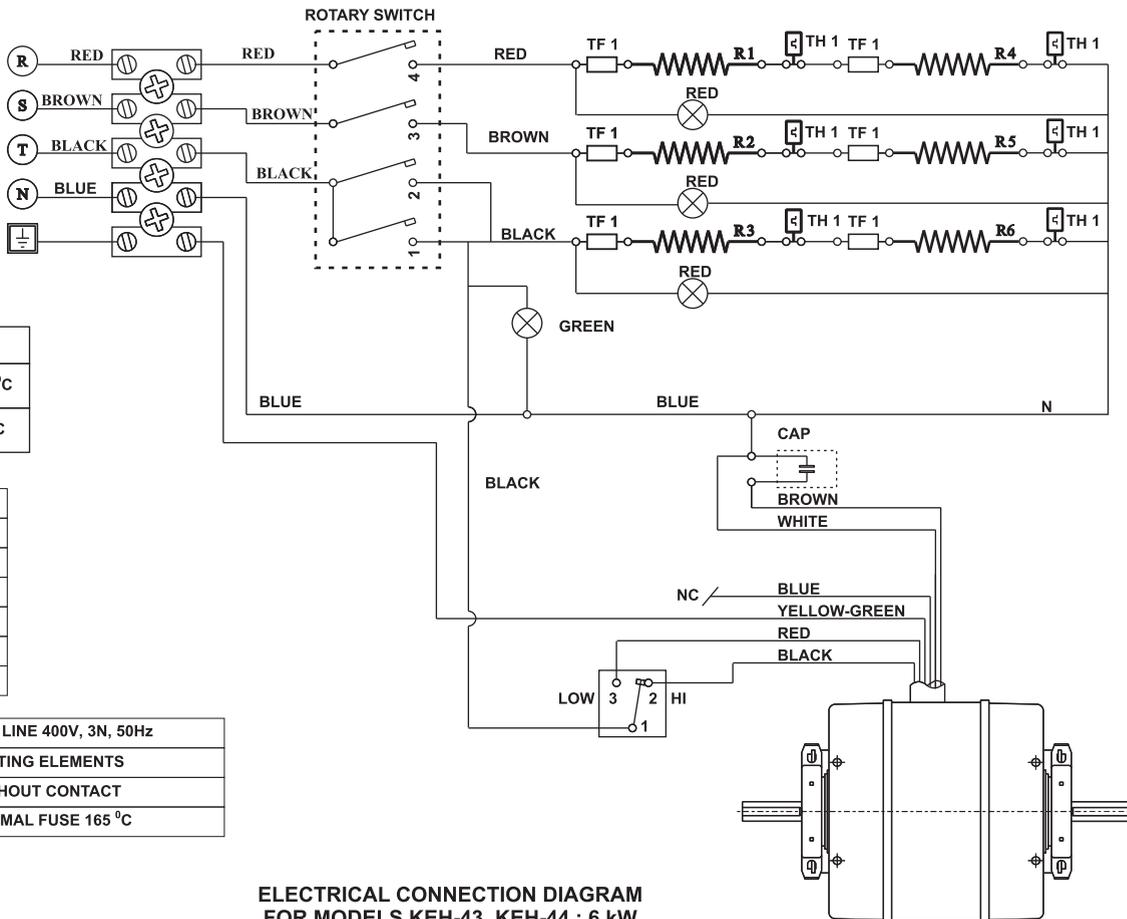


**PLASTIC  
AIR CURTAINS  
ELECTRICALLY HEATED  
FAN DIAMETER  
110 mm**

THERMOSTAT-TH 1	
	CLOSE < 65 °C
	OPEN > 65 °C

MOTOR TYPE	
KEH-43, KEH-44	
OLEFINI 34-961F	
230 V	50 Hz
1.0 A	1 / 5 HP
CAP 4 µF, 400 V	
R.P.M. 1380 / 1150	

R, S, T, N	SUPPLY LINE 400V, 3N, 50Hz
R1-R3	HEATING ELEMENTS
NC	WITHOUT CONTACT
TF 1	THERMAL FUSE 165 °C



**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS KEH-43, KEH-44 : 6 kW  
(WITH SWITCHES)**



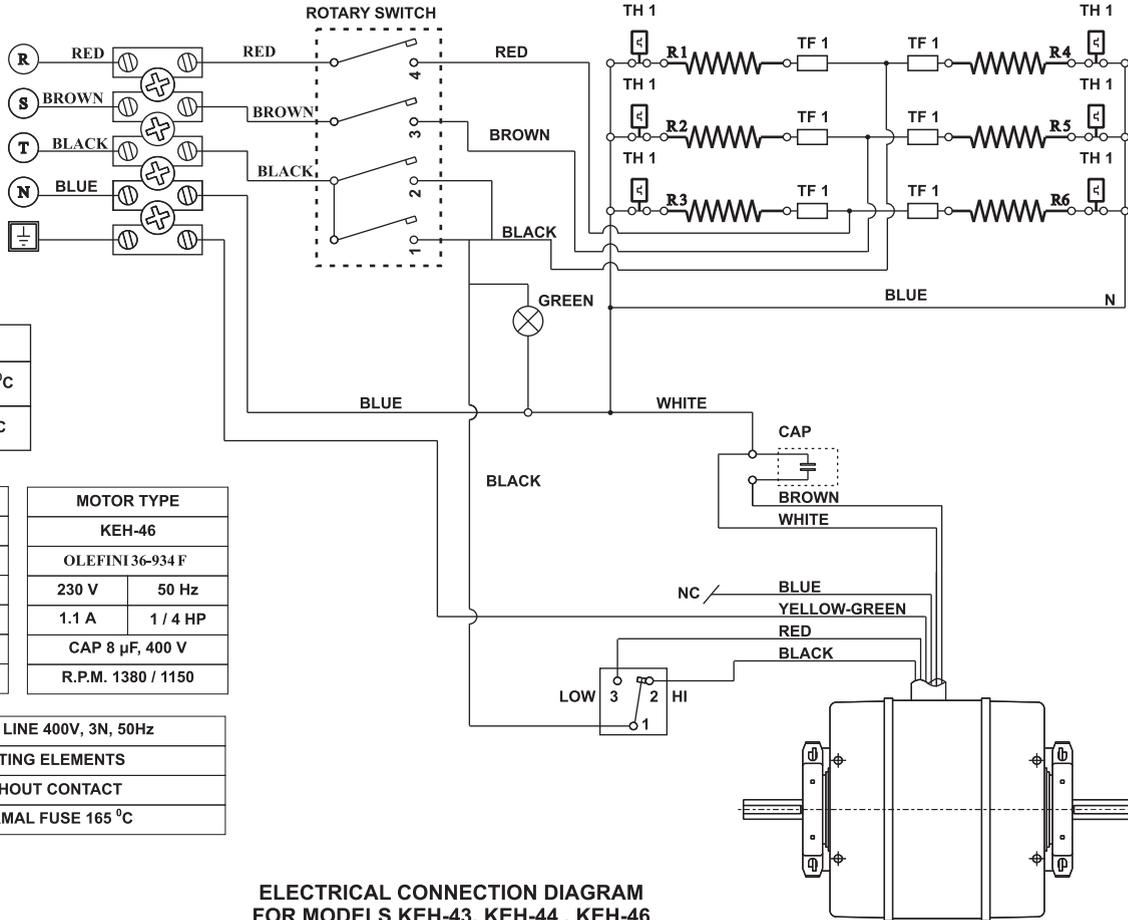
**PLASTIC  
AIR CURTAINS  
ELECTRICALLY HEATED  
FAN DIAMETER  
110 mm**

THERMOSTAT-TH 1	
	CLOSE < 65 °C
	OPEN > 65 °C

MOTOR TYPE	
KEH-43, KEH-44	
OLEFINI 34-961F	
230 V	50 Hz
1.0 A	1 / 5 HP
CAP 4 µF, 400 V	
R.P.M. 1380 / 1150	

MOTOR TYPE	
KEH-46	
OLEFINI 36-934 F	
230 V	50 Hz
1.1 A	1 / 4 HP
CAP 8 µF, 400 V	
R.P.M. 1380 / 1150	

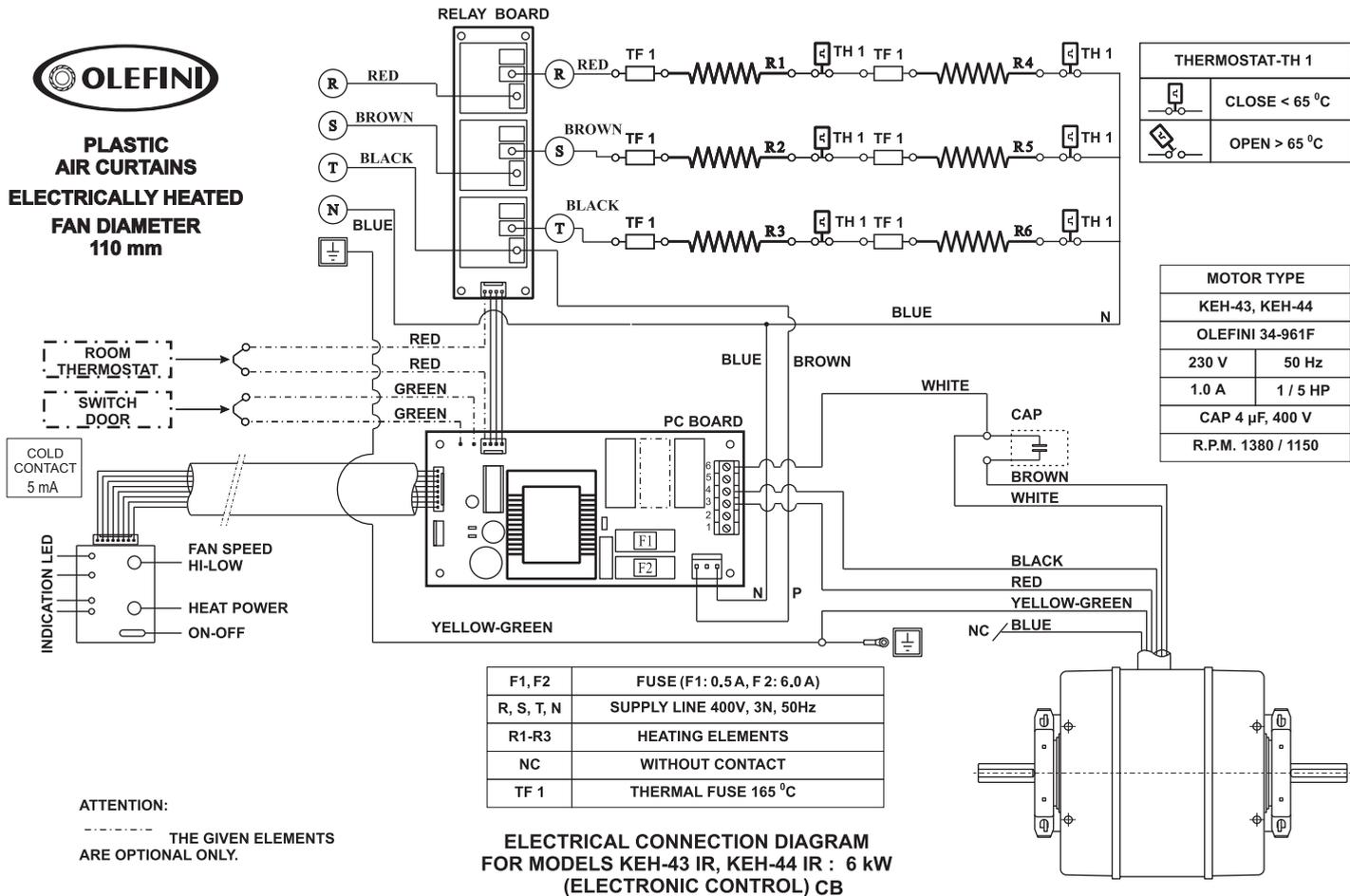
R, S, T, N	SUPPLY LINE 400V, 3N, 50Hz
R1-R3	HEATING ELEMENTS
NC	WITHOUT CONTACT
TF 1	THERMAL FUSE 165 °C



**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS KEH-43, KEH-44 , KEH-46  
9 kW (WITH SWITCHES)**



**PLASTIC  
AIR CURTAINS  
ELECTRICALLY HEATED  
FAN DIAMETER  
110 mm**



THERMOSTAT-TH 1	
	CLOSE < 65 °C
	OPEN > 65 °C

MOTOR TYPE	
KEH-43, KEH-44	
OLEFINI 34-961F	
230 V	50 Hz
1.0 A	1 / 5 HP
CAP 4 µF, 400 V	
R.P.M. 1380 / 1150	

F1, F2	FUSE (F1: 0.5A, F2: 6.0A)
R, S, T, N	SUPPLY LINE 400V, 3N, 50Hz
R1-R3	HEATING ELEMENTS
NC	WITHOUT CONTACT
TF 1	THERMAL FUSE 165 °C

**ATTENTION:**  
----- THE GIVEN ELEMENTS  
ARE OPTIONAL ONLY.

**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS KEH-43 IR, KEH-44 IR : 6 kW  
(ELECTRONIC CONTROL) CB**



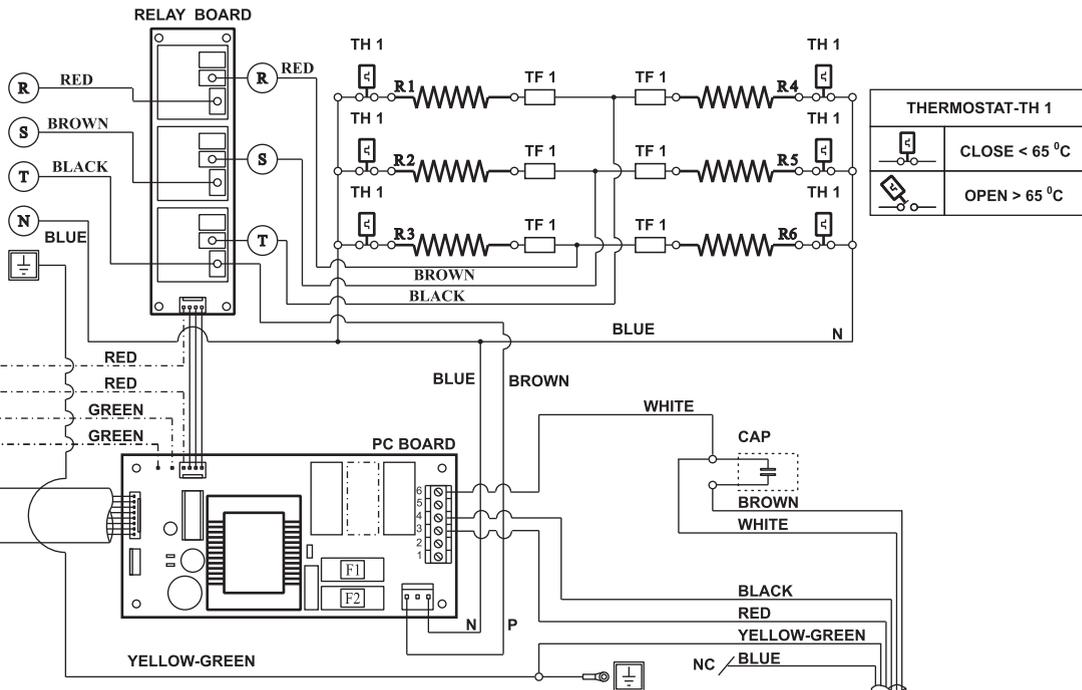
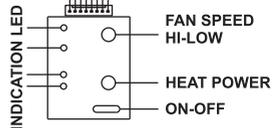
**PLASTIC  
AIR CURTAINS  
ELECTRICALLY HEATED  
FAN DIAMETER  
110 mm**

ATTENTION:

THE GIVEN ELEMENTS  
ARE OPTIONAL ONLY.



COLD CONTACT  
5 mA

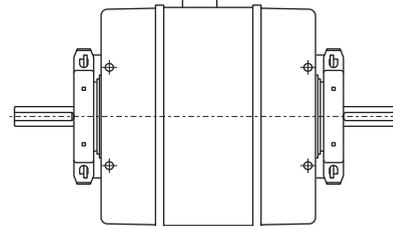


MOTOR TYPE	
KEH-43, KEH-44	
OLEFINI 34-961F	
230 V	50 Hz
1.0 A	1 / 5 HP
CAP 4 µF, 400 V	
R.P.M. 1380 / 1150	

MOTOR TYPE	
KEH-46	
OLEFINI 36-934 F	
230 V	50 Hz
1.1 A	1 / 4 HP
CAP 8 µF, 400 V	
R.P.M. 1380 / 1150	

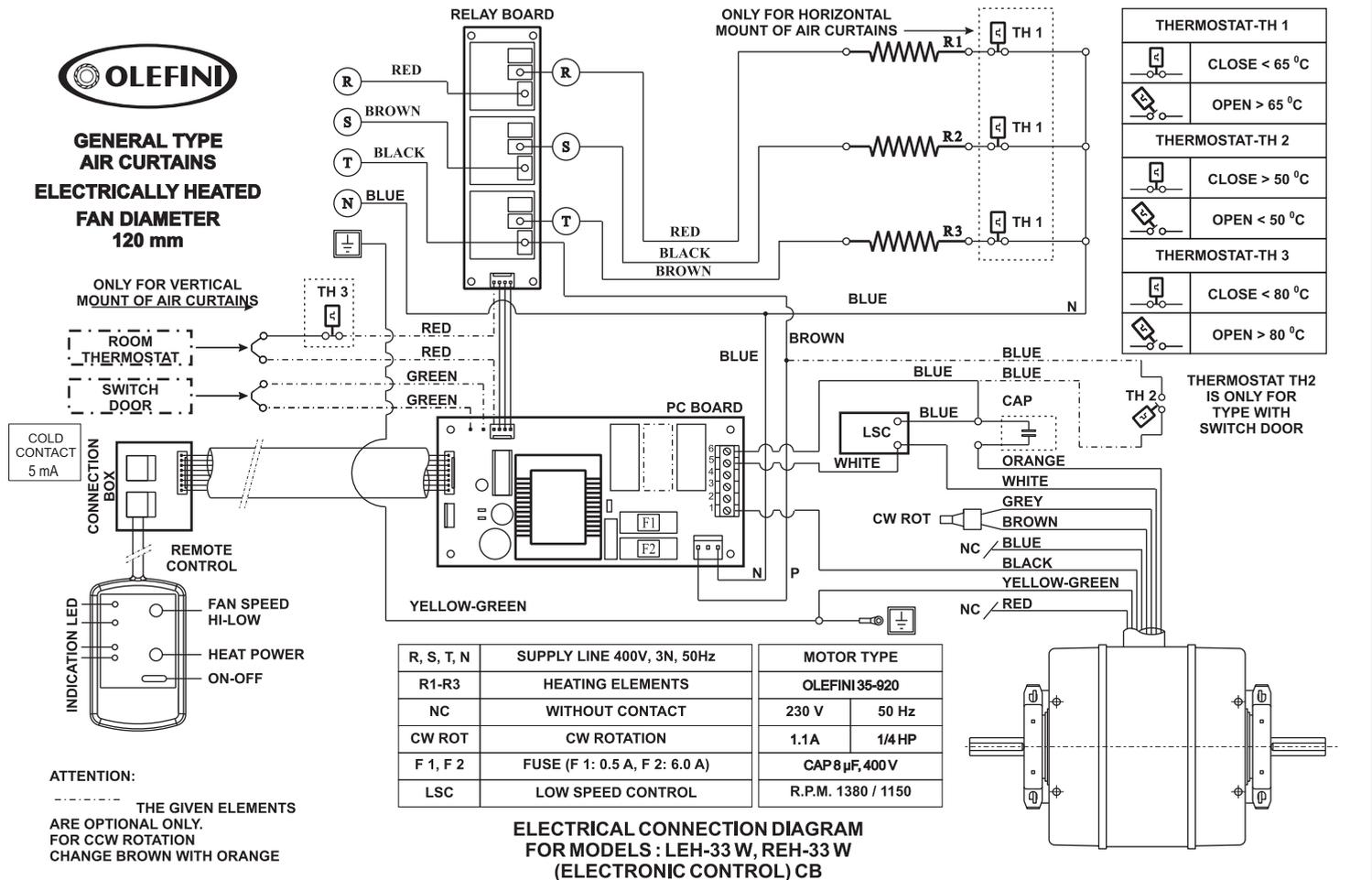
F1, F2	FUSE (F1: 0.5A, F2: 6.0A)
R, S, T, N	SUPPLY LINE 400V, 3N, 50Hz
R1-R3	HEATING ELEMENTS
NC	WITHOUT CONTACT
TF 1	THERMAL FUSE 165 °C

**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS KEH-43 IR, KEH-44 IR, KEH-46 IR  
9 kW & 12 kW  
(ELECTRONIC CONTROL) CB**





**GENERAL TYPE  
AIR CURTAINS  
ELECTRICALLY HEATED  
FAN DIAMETER  
120 mm**



THERMOSTAT-TH 1	
	CLOSE < 65 °C
	OPEN > 65 °C
THERMOSTAT-TH 2	
	CLOSE > 50 °C
	OPEN < 50 °C
THERMOSTAT-TH 3	
	CLOSE < 80 °C
	OPEN > 80 °C

THERMOSTAT TH2 IS ONLY FOR TYPE WITH SWITCH DOOR

R, S, T, N	SUPPLY LINE 400V, 3N, 50Hz	MOTOR TYPE	
R1-R3	HEATING ELEMENTS	OLEFINI 35-920	
NC	WITHOUT CONTACT	230 V	50 Hz
CW ROT	CW ROTATION	1.1A	1/4 HP
F 1, F 2	FUSE (F 1: 0.5 A, F 2: 6.0 A)	CAP 8 μF, 400V	
LSC	LOW SPEED CONTROL	R.P.M. 1380 / 1150	

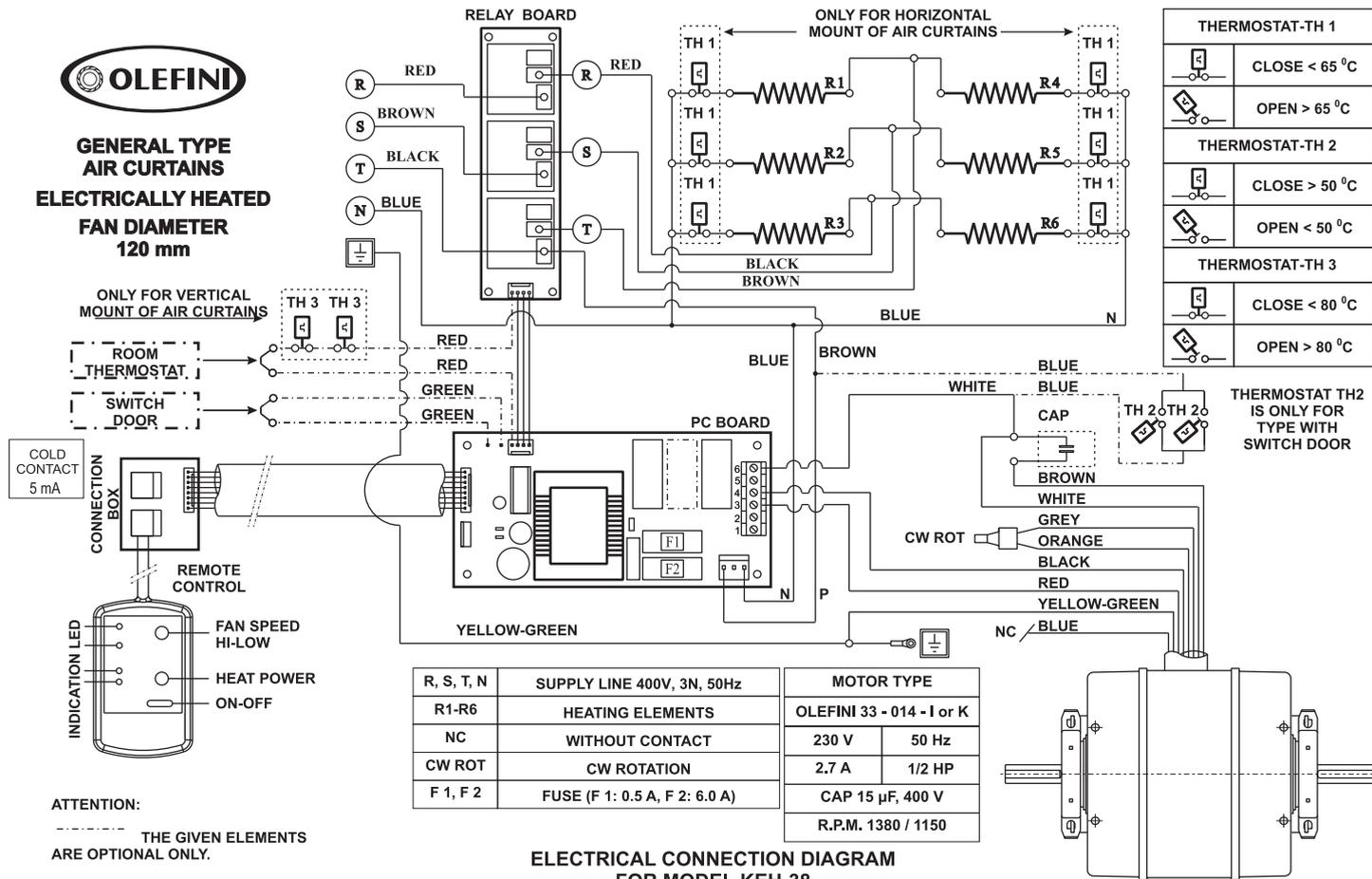
**ATTENTION:**  
----- THE GIVEN ELEMENTS ARE OPTIONAL ONLY. FOR CCW ROTATION CHANGE BROWN WITH ORANGE

**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS : LEH-33 W, REH-33 W  
(ELECTRONIC CONTROL) CB**





**GENERAL TYPE  
AIR CURTAINS  
ELECTRICALLY HEATED  
FAN DIAMETER  
120 mm**



THERMOSTAT-TH 1	
	CLOSE < 65 °C
	OPEN > 65 °C
THERMOSTAT-TH 2	
	CLOSE > 50 °C
	OPEN < 50 °C
THERMOSTAT-TH 3	
	CLOSE < 80 °C
	OPEN > 80 °C

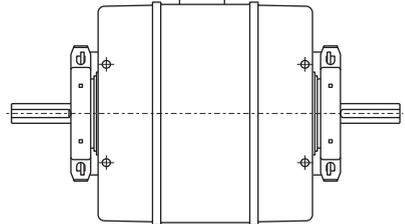
THERMOSTAT TH2 IS ONLY FOR TYPE WITH SWITCH DOOR

R, S, T, N	SUPPLY LINE 400V, 3N, 50Hz
R1-R6	HEATING ELEMENTS
NC	WITHOUT CONTACT
CW ROT	CW ROTATION
F 1, F 2	FUSE (F 1: 0.5 A, F 2: 6.0 A)

MOTOR TYPE	
OLEFINI 33 - 014 - I or K	
230 V	50 Hz
2.7 A	1/2 HP
CAP 15 µF, 400 V	
R.P.M. 1380 / 1150	

**ATTENTION:**  
----- THE GIVEN ELEMENTS ARE OPTIONAL ONLY.

**ELECTRICAL CONNECTION DIAGRAM  
FOR MODEL KEH-38  
(ELECTRONIC CONTROL) CB**



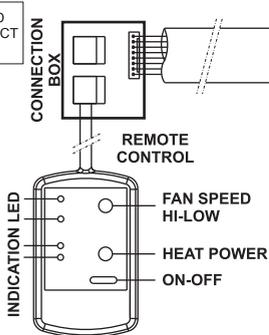


**INDUSTRIAL TYPE  
AIR CURTAINS  
ELECTRICALLY HEATED  
FAN DIAMETER  
133 mm**

ONLY FOR VERTICAL  
MOUNT OF AIR CURTAINS

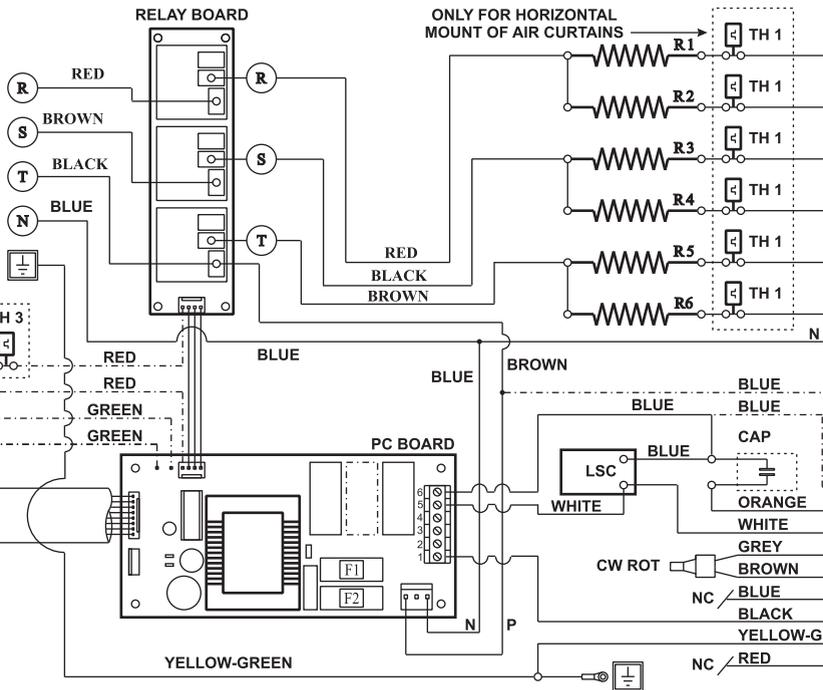


COLD CONTACT  
5 mA



**ATTENTION:**

----- THE GIVEN ELEMENTS  
ARE OPTIONAL ONLY.  
FOR CCW ROTATION  
CHANGE BROWN WITH ORANGE



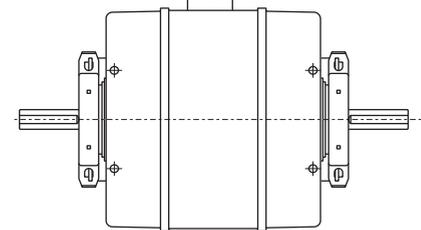
ONLY FOR HORIZONTAL  
MOUNT OF AIR CURTAINS

THERMOSTAT-TH 1	
	CLOSE < 65 °C
	OPEN > 65 °C
THERMOSTAT-TH 2	
	CLOSE > 50 °C
	OPEN < 50 °C
THERMOSTAT-TH 3	
	CLOSE < 80 °C
	OPEN > 80 °C

THERMOSTAT TH2  
IS ONLY FOR  
TYPE WITH  
SWITCH DOOR

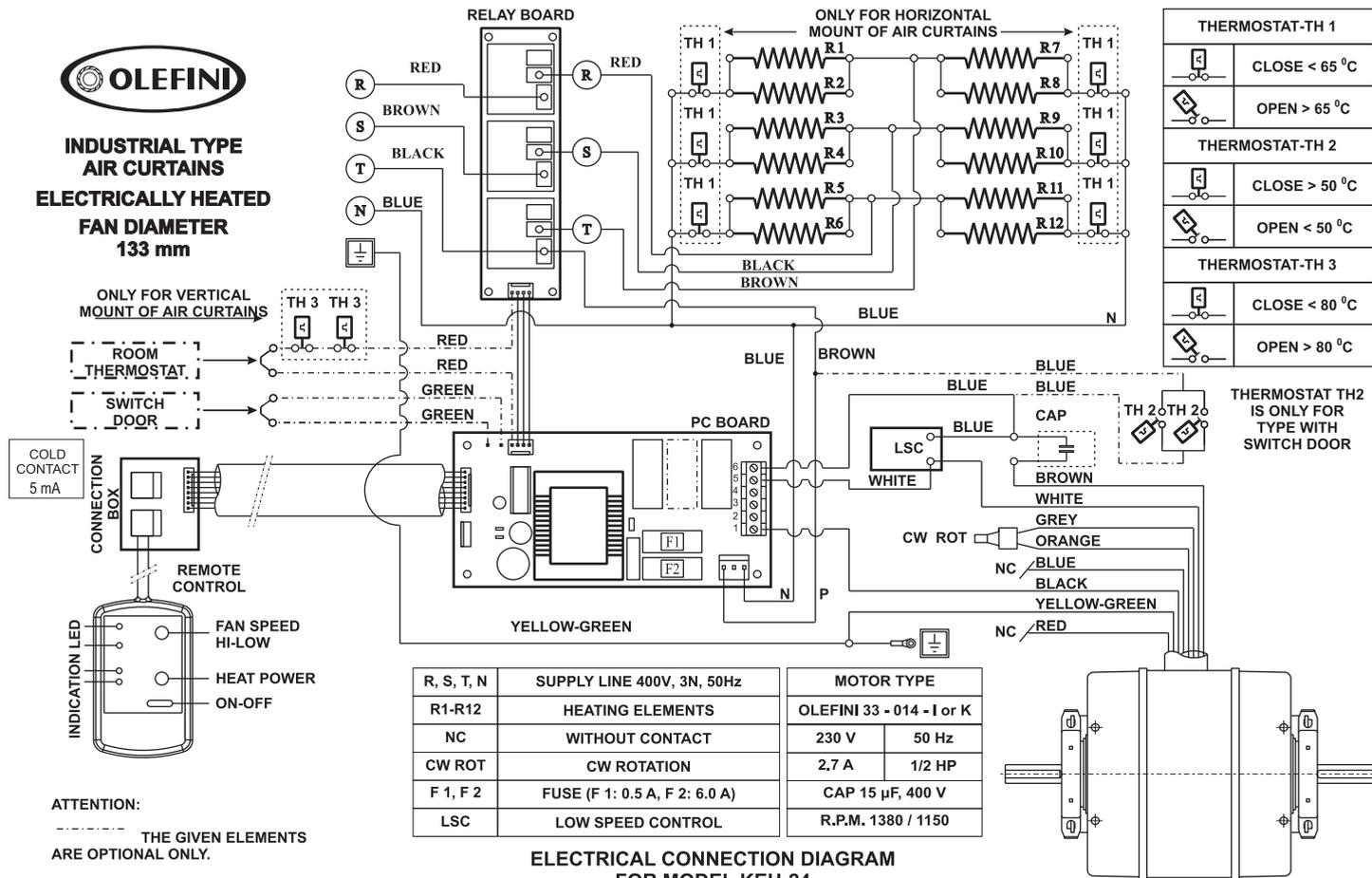
R, S, T, N	SUPPLY LINE 400V, 3N, 50Hz	MOTOR TYPE	
R1-R6	HEATING ELEMENTS	OLEFINI 33-015	
NC	WITHOUT CONTACT	230 V	50 Hz
CW ROT	CW ROTATION	2.7 A	1 / 2 HP
F 1, F 2	FUSE (F 1: 0.5 A, F 2: 6.0 A)	CAP 12 µF, 400 V	
LSC	LOW SPEED CONTROL	R.P.M. 1380 / 1150	

**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS LEH-22, REH-22, LEH-23, REH-23  
(ELECTRONIC CONTROL) CB**





**INDUSTRIAL TYPE  
AIR CURTAINS  
ELECTRICALLY HEATED  
FAN DIAMETER  
133 mm**



THERMOSTAT-TH 1	
	CLOSE < 65 °C
	OPEN > 65 °C
THERMOSTAT-TH 2	
	CLOSE > 50 °C
	OPEN < 50 °C
THERMOSTAT-TH 3	
	CLOSE < 80 °C
	OPEN > 80 °C

THERMOSTAT TH2  
IS ONLY FOR  
TYPE WITH  
SWITCH DOOR

R, S, T, N	SUPPLY LINE 400V, 3N, 50Hz	MOTOR TYPE	
R1-R12	HEATING ELEMENTS	OLEFINI 33 - 014 - I or K	
NC	WITHOUT CONTACT	230 V	50 Hz
CW ROT	CW ROTATION	2.7 A	1/2 HP
F 1, F 2	FUSE (F 1: 0.5 A, F 2: 6.0 A)	CAP 15 µF, 400 V	
LSC	LOW SPEED CONTROL	R.P.M. 1380 / 1150	

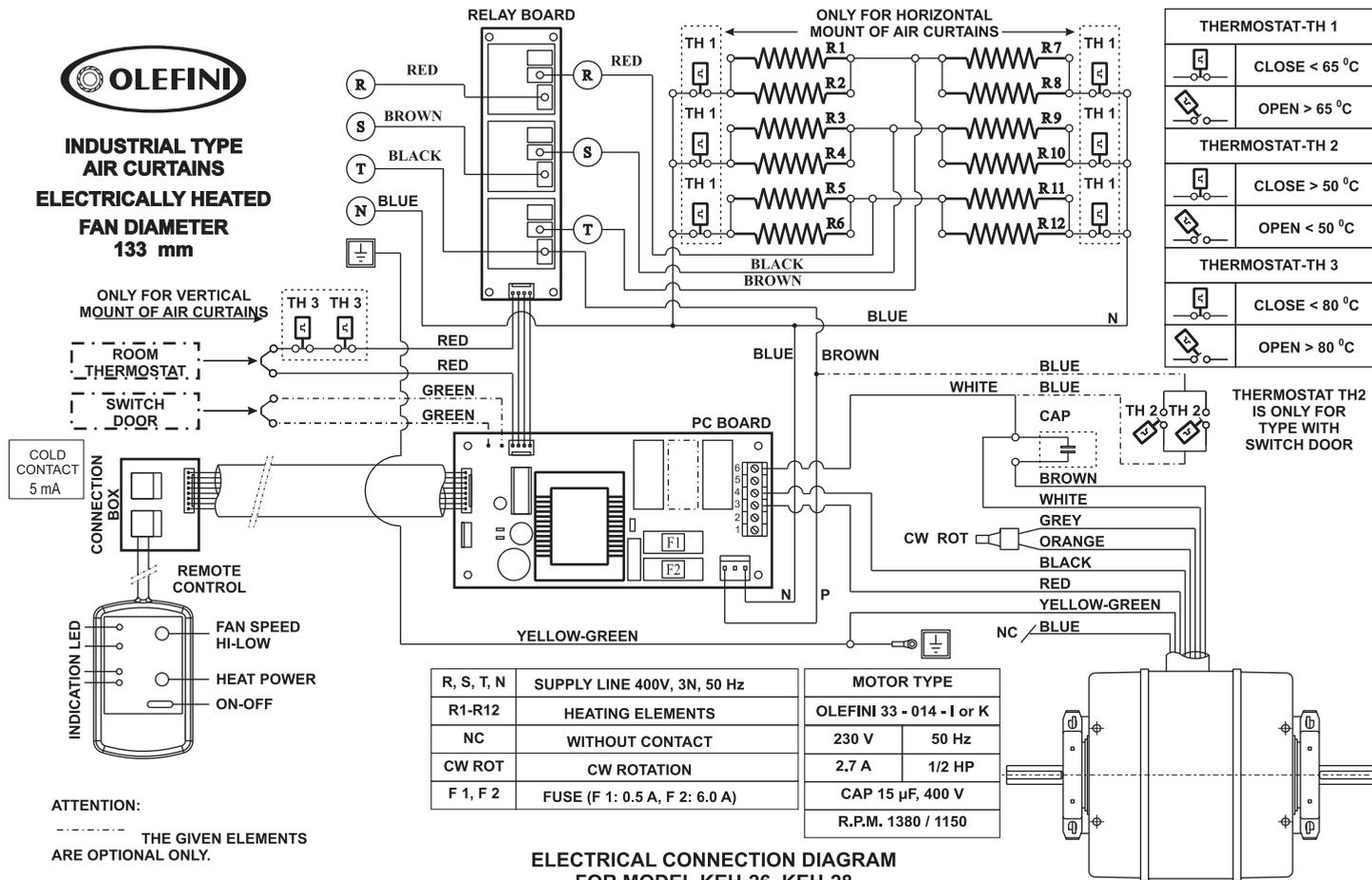
**ATTENTION:**

----- THE GIVEN ELEMENTS  
ARE OPTIONAL ONLY.

**ELECTRICAL CONNECTION DIAGRAM  
FOR MODEL KEH-24  
(ELECTRONIC CONTROL) CB**



**INDUSTRIAL TYPE  
AIR CURTAINS  
ELECTRICALLY HEATED  
FAN DIAMETER  
133 mm**



THERMOSTAT-TH 1	
	CLOSE < 65 °C
	OPEN > 65 °C
THERMOSTAT-TH 2	
	CLOSE > 50 °C
	OPEN < 50 °C
THERMOSTAT-TH 3	
	CLOSE < 80 °C
	OPEN > 80 °C

THERMOSTAT TH2 IS ONLY FOR TYPE WITH SWITCH DOOR

R, S, T, N	SUPPLY LINE 400V, 3N, 50 Hz
R1-R12	HEATING ELEMENTS
NC	WITHOUT CONTACT
CW ROT	CW ROTATION
F 1, F 2	FUSE (F 1: 0.5 A, F 2: 6.0 A)

MOTOR TYPE	
OLEFINI 33 - 014 - I or K	
230 V	50 Hz
2.7 A	1/2 HP
CAP 15 µF, 400 V	
R.P.M. 1380 / 1150	

**ATTENTION:**  
----- THE GIVEN ELEMENTS  
ARE OPTIONAL ONLY.

**ELECTRICAL CONNECTION DIAGRAM  
FOR MODEL KEH-26, KEH-28  
(ELECTRONIC CONTROL)**



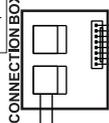
**INDUSTRIAL TYPE  
AIR CURTAINS  
ELECTRICALLY HEATED**

**FAN DIAMETER  
133 mm**

ONLY FOR VERTICAL  
MOUNT OF AIR CURTAINS

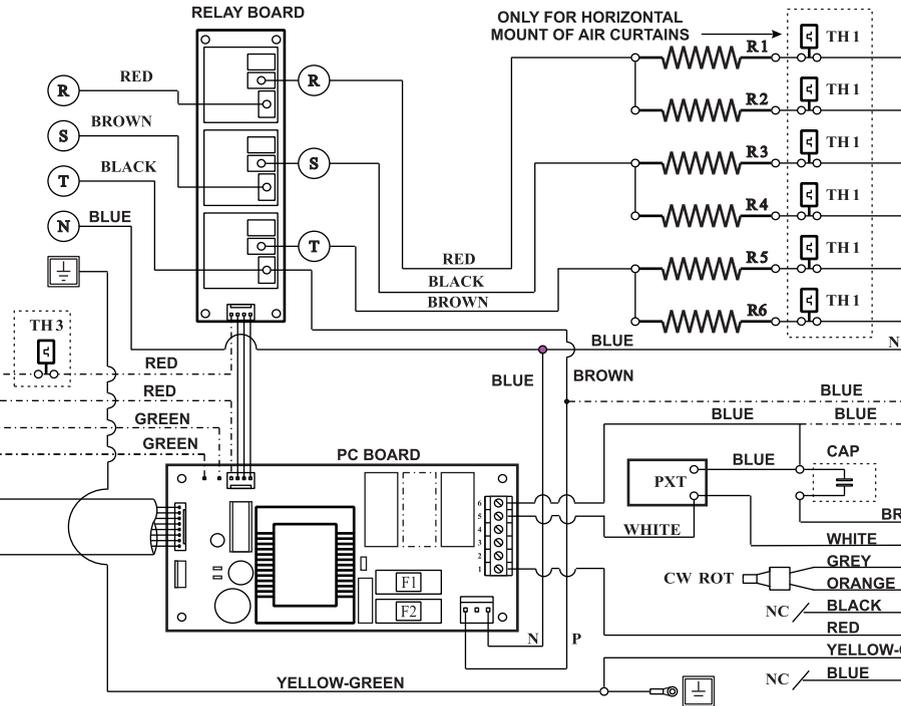
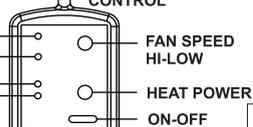


COLD CONTACT  
5 mA



REMOTE CONTROL

INDICATION LED



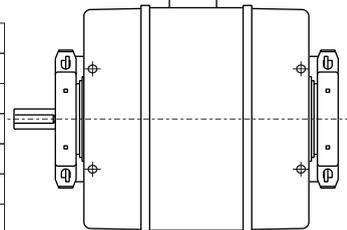
THERMOSTAT-TH 1	
	CLOSE < 65 °C
	OPEN > 65 °C
THERMOSTAT-TH 2	
	CLOSE > 50 °C
	OPEN < 50 °C
THERMOSTAT-TH 3	
	CLOSE < 80 °C
	OPEN > 80 °C

THERMOSTAT TH2  
IS ONLY FOR  
TYPE WITH  
SWITCH DOOR

R, S, T, N	SUPPLY LINE 400V, 3N, 50 Hz	MOTOR		MOTOR	
R1 - R6	HEATING ELEMENTS	MOTOR 33-015		OLEFINI 36-928A	
PXT	SPEED CONTROLLERS	230 V	50 Hz	L, REH-27CB	
NC	NOT CONNECTED	2,7 A	1/2 HP	230 V	50 Hz
CW ROT	CW ROTATION	CAP 12 µF, 400 V		2,8 A	1 HP
F1, F2	FUSES (F1 : 0,5A; F2 : 6,0A)	R.P.M. 1380/1150		CAP 15 µF, 400 V	
				R.P.M. 1380/1150	

**ELECTRICAL DIAGRAMM  
FOR MODELS LEH - 36 CB, REH - 36 CB,  
LEH - 37 CB, REH - 37 CB, LEH - 27 CB, REH - 27 CB**

ATTENTION:  
----- THE GIVEN ELEMENTS  
ARE OPTIONAL ONLY.



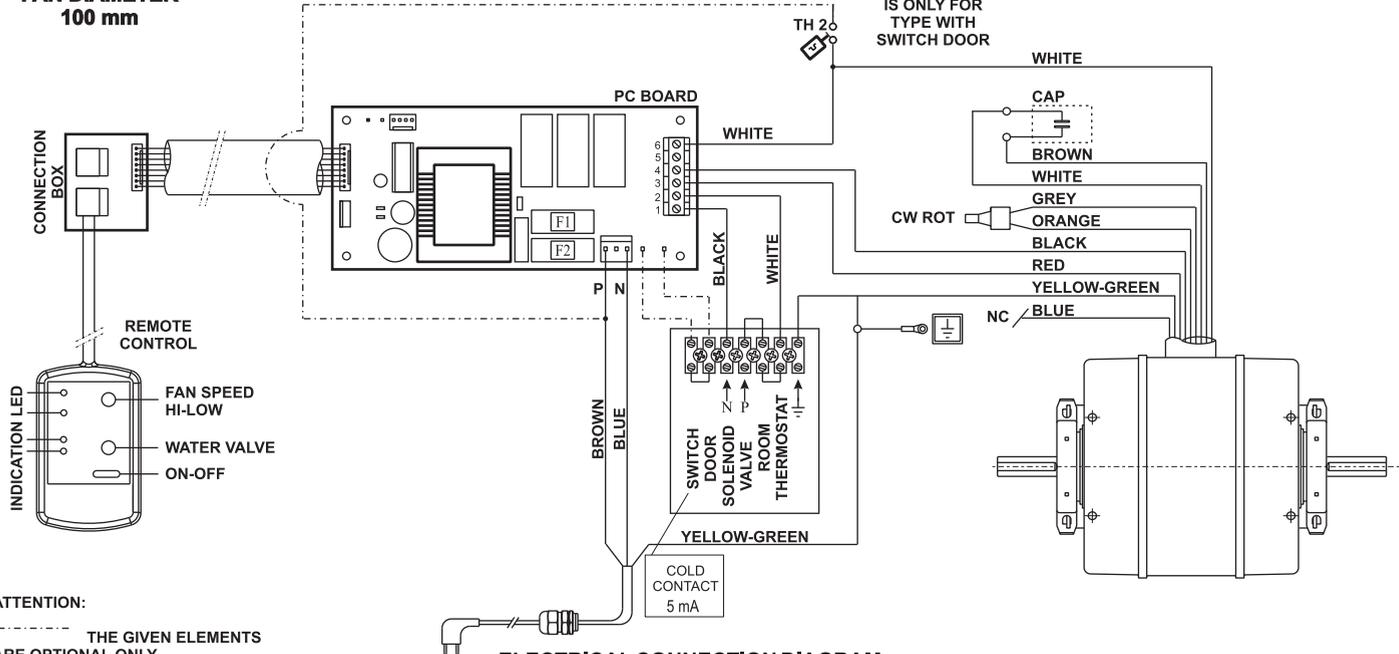


**COMMERCIAL TYPE  
AIR CURTAINS  
HOT WATER HEATED  
FAN DIAMETER  
100 mm**

P, N	SUPPLY LINE 230V, 1N, 50Hz
F 1, F 2	FUSE (F 1: 0.5 A, F 2: 6.0 A)
NC	WITHOUT CONTACT
CW ROT	CW ROTATION

MOTOR TYPE	
OLEFINI 31-873	
230 V	50 Hz
0.5 A	1 / 12 HP
CAP 4 µF, 400 V	
R.P.M. 1380 / 1150	

THERMOSTAT-TH 2	
	CLOSE > 50 °C
	OPEN < 50 °C



THERMOSTAT TH2  
IS ONLY FOR  
TYPE WITH  
SWITCH DOOR

**ATTENTION:**

----- THE GIVEN ELEMENTS  
ARE OPTIONAL ONLY.  
FOR CCW ROTATION  
CHANGE BROWN WITH ORANGE

**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS: LWH-13 W, RWH-13 W  
(ELECTRONIC CONTROL) CB**

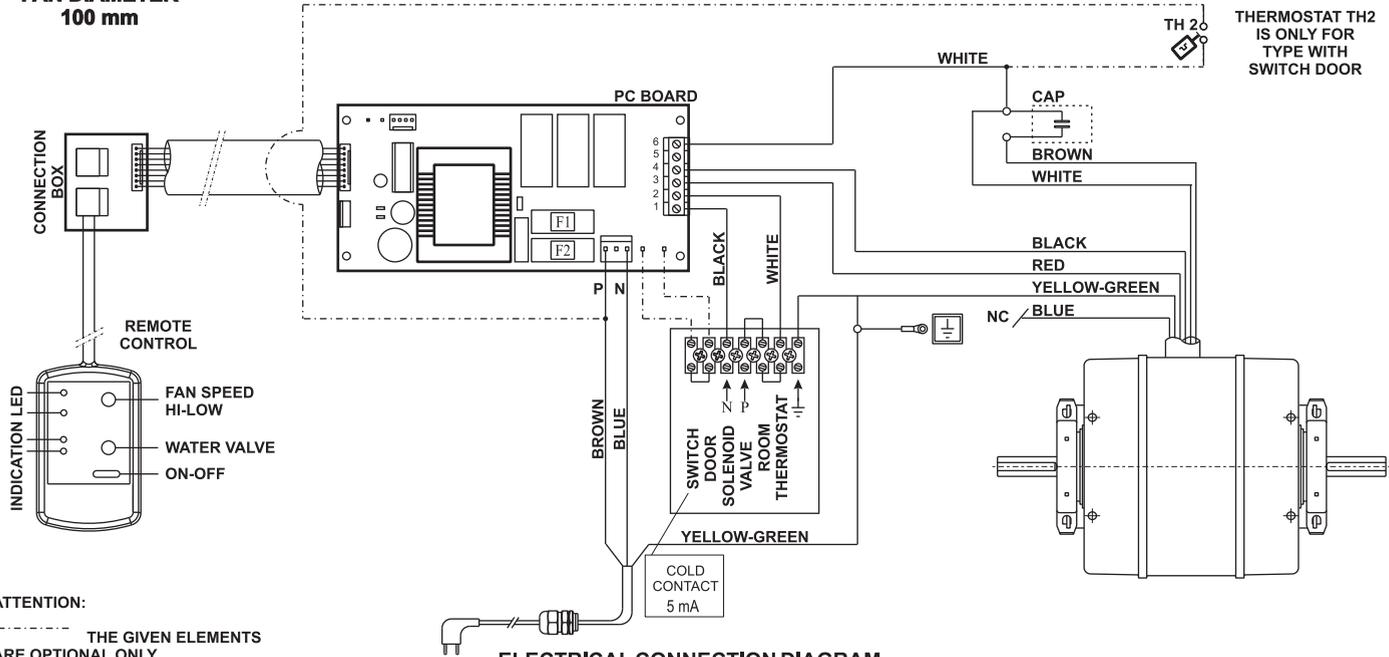


**COMMERCIAL TYPE  
AIR CURTAINS  
HOT WATER HEATED  
FAN DIAMETER  
100 mm**

P, N	SUPPLY LINE 230V, 1N, 50Hz
F 1, F 2	FUSE (F 1: 0.5 A , F 2: 6.0 A)
NC	WITHOUT CONTACT
CW ROT	CW ROTATION

MOTOR TYPE	
OLEFINI 31-961	
230 V	50 Hz
1.1 A	1 / 5 HP
CAP 4 µF, 400 V	
R.P.M. 1380 / 1150	

THERMOSTAT-TH 2	
	CLOSE > 50 °C
	OPEN < 50 °C



**ATTENTION:**

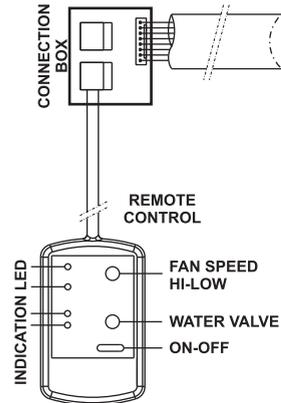
----- THE GIVEN ELEMENTS  
ARE OPTIONAL ONLY.

**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS : KWH-14 W, KWH-15 W, KWH-16 W, KWH-17 W, KWH-18 W  
(ELECTRONIC CONTROL) CB**



**AIR CURTAINS  
GENERAL TYPE AND  
INDUSTRIAL TYPE**

**HOT WATER HEATED  
FAN DIAMETER  
120 mm  
133 mm**



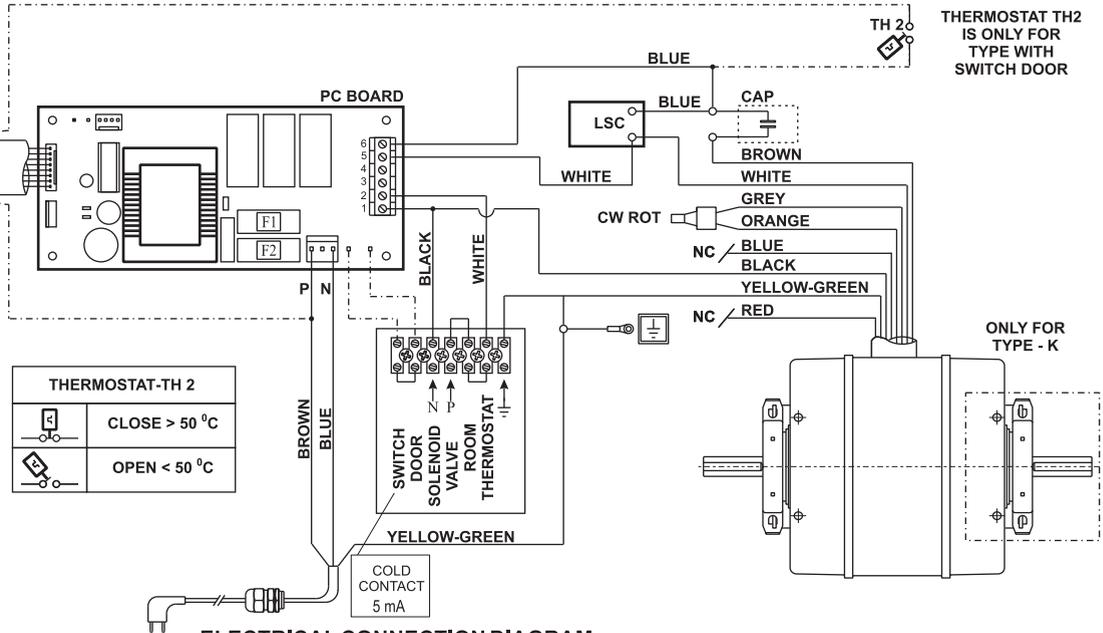
**ATTENTION:**

----- THE GIVEN ELEMENTS  
ARE OPTIONAL ONLY.  
FOR CCW ROTATION  
CHANGE BROWN WITH ORANGE

P, N	SUPPLY LINE 230V, 1N, 50Hz
F 1, F 2	FUSE (F 1: 0.5 A, F 2: 6.0 A)
NC	WITHOUT CONTACT
CW ROT	CW ROTATION
LSC	LOW SPEED CONTROL

MOTOR TYPE	
OLEFINI 33-015	
230 V	50 Hz
2.7 A	1 / 2 HP
CAP 12 µF, 400 V	
R.P.M. 1380 / 1150	

MOTOR TYPE	
OLEFINI 33 - 014 - I or K	
230 V	50 Hz
2.7 A	1/2 HP
CAP 15 µF, 400 V	
R.P.M. 1380 / 1150	

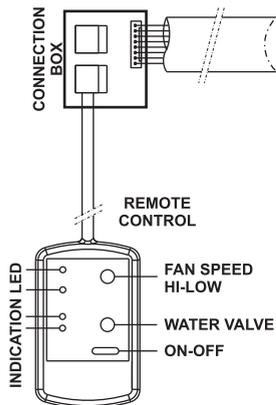


**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS LWH-33W, RWH-33W, LWH - 22, RWH - 22, LWH - 23, RWH - 23  
KWH-34W, KWH-35W, KWH-36W, KWH-37W, KWH-24  
(ELECTRONIC CONTROL) CB**



**AIR CURTAINS  
GENERAL TYPE AND  
INDUSTRIAL TYPE**

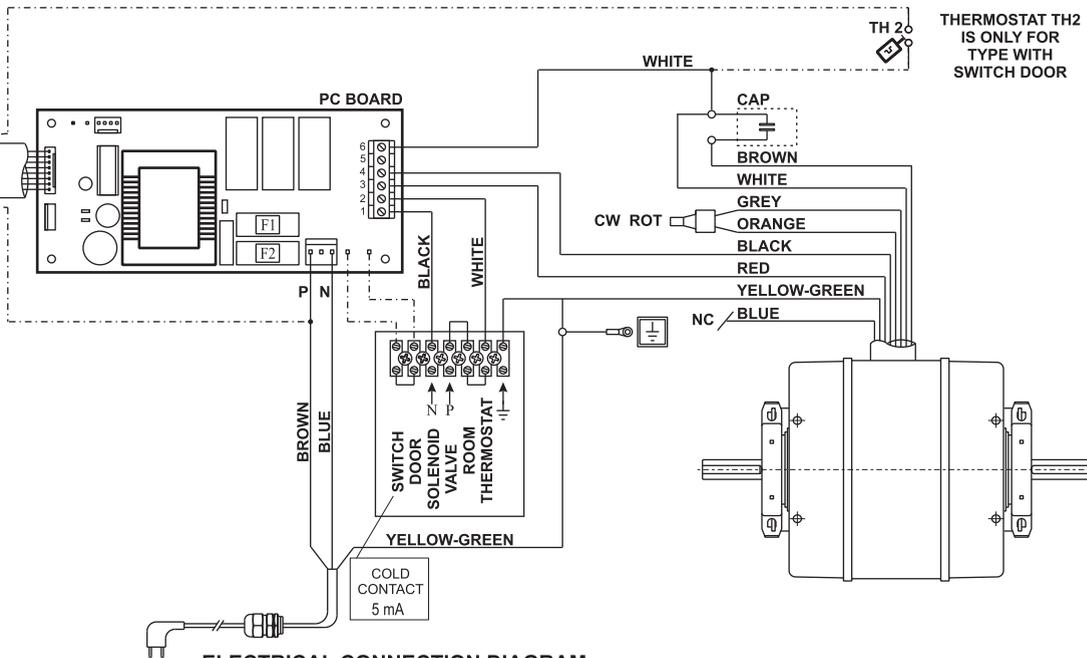
**HOT WATER HEATED  
FAN DIAMETER**  
120 mm  
133 mm



P, N	SUPPLY LINE 230V, 1N, 50Hz
F 1, F 2	FUSE (F 1: 0.5 A, F 2: 6.0 A)
NC	WITHOUT CONTACT
CW ROT	CW ROTATION

MOTOR TYPE	
OLEFINI 33 - 014 - I or K	
230 V	50 Hz
2.7 A	1/2 HP
CAP 15 µF, 400 V	
R.P.M. 1380 / 1150	

THERMOSTAT-TH 2	
	CLOSE > 50 °C
	OPEN < 50 °C



**ATTENTION:**

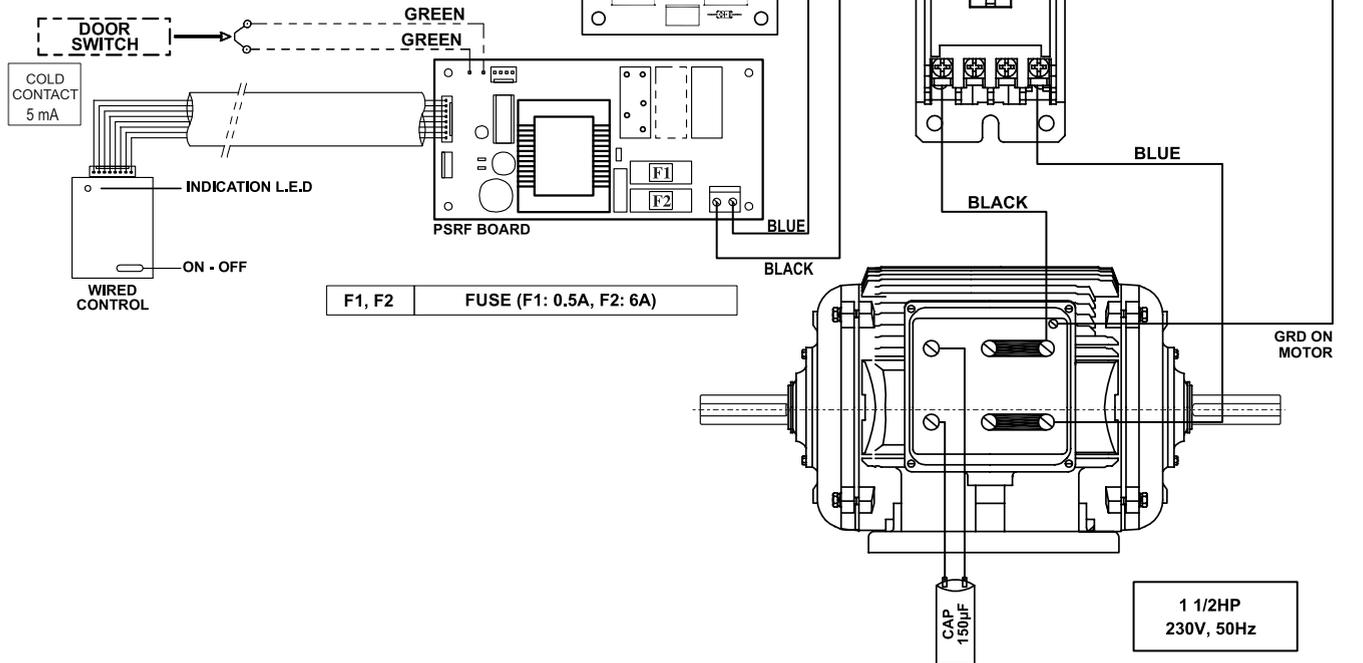
----- THE GIVEN ELEMENTS  
ARE OPTIONAL ONLY.

**ELECTRICAL CONNECTION DIAGRAM  
FOR MODELS KWH-38W, KWH-26, KWH-28  
(ELECTRONIC CONTROL) CB**



**GENERAL TYPE  
AIR CURTAINS**

**SIMPLE  
FAN DIAMETER  
180 mm**



F1, F2	FUSE (F1: 0.5A, F2: 6A)
--------	-------------------------

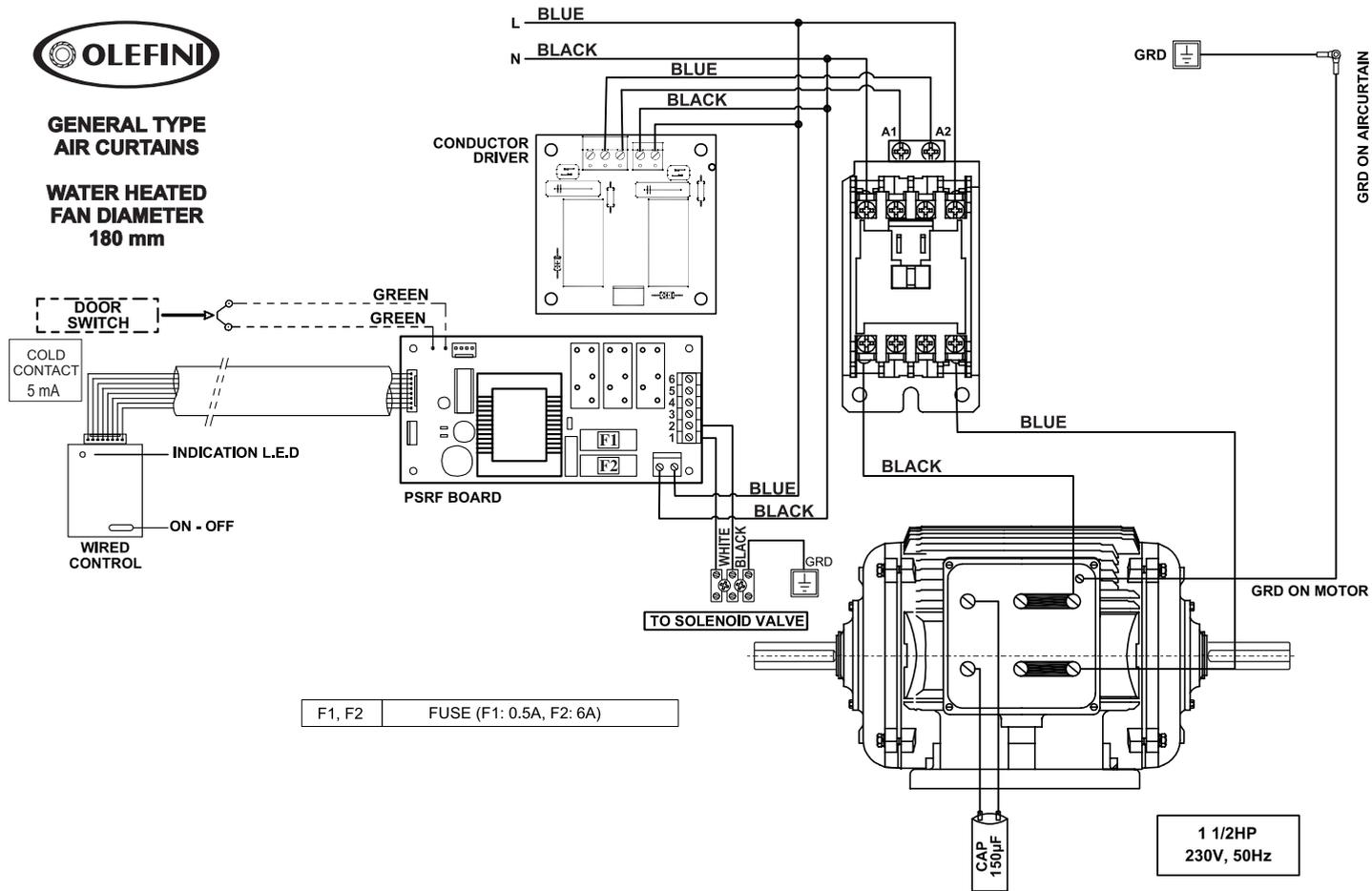
1 1/2HP 230V, 50Hz
-----------------------

CAP 150µF
--------------



**GENERAL TYPE  
AIR CURTAINS**

**WATER HEATED  
FAN DIAMETER  
180 mm**



F1, F2	FUSE (F1: 0.5A, F2: 6A)
--------	-------------------------

1 1/2HP 230V, 50Hz
-----------------------

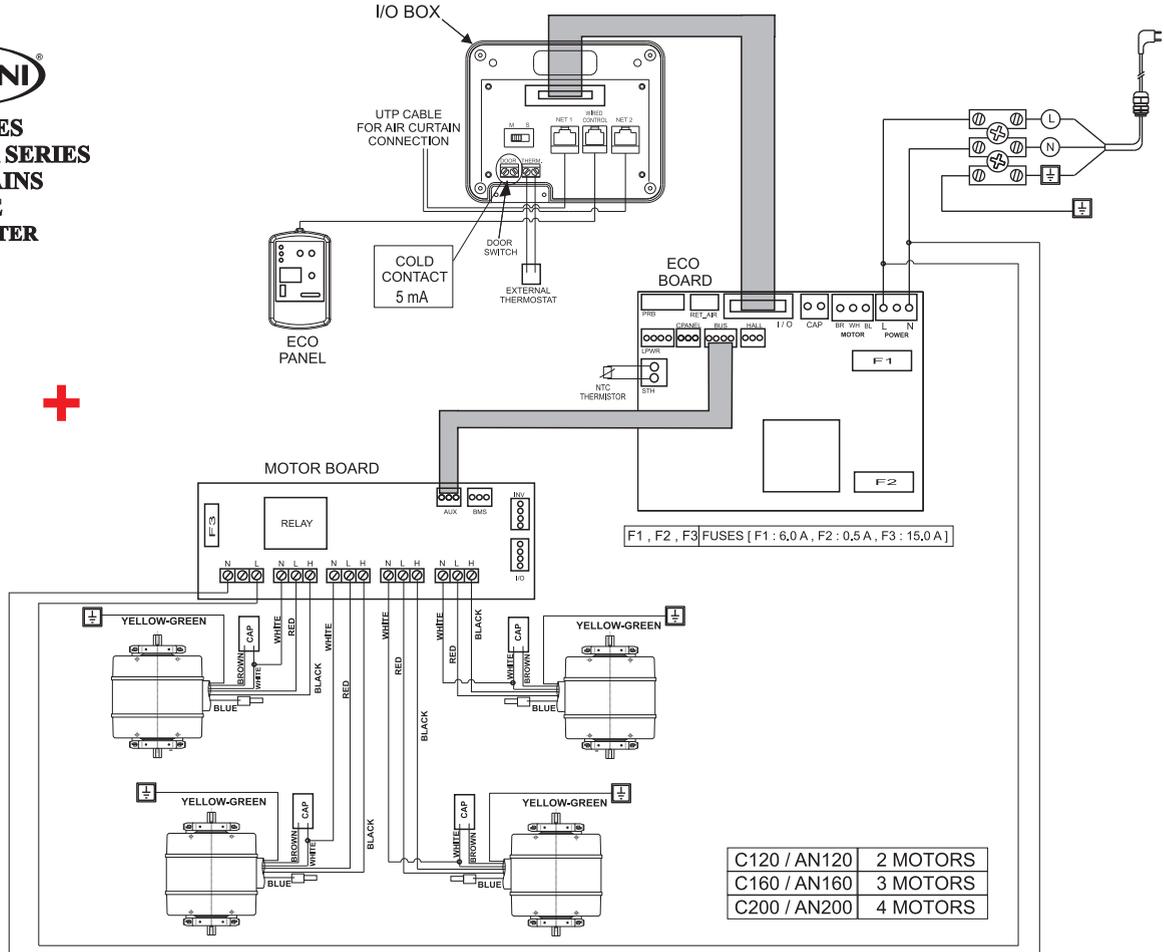


**"C" SERIES  
& ANEMOESSA SERIES  
AIR CURTAINS  
SIMPLE  
FAN DIAMETER  
115 mm**

MOTOR (optional) 36-769 A	
230 V	50 Hz
1.78 A	170 W
CAP 3µF, 450 VA 2700 R.P.M.	



MOTOR 40-768-H2	
230 V	50 Hz
1.78 A	210 W
CAP 12 µF , 450 VA 2700 R.P.M.	



F1 , F2 , F3 FUSES [ F1 : 6.0 A , F2 : 0.5 A , F3 : 15.0 A ]

C120 / AN120	2 MOTORS
C160 / AN160	3 MOTORS
C200 / AN200	4 MOTORS

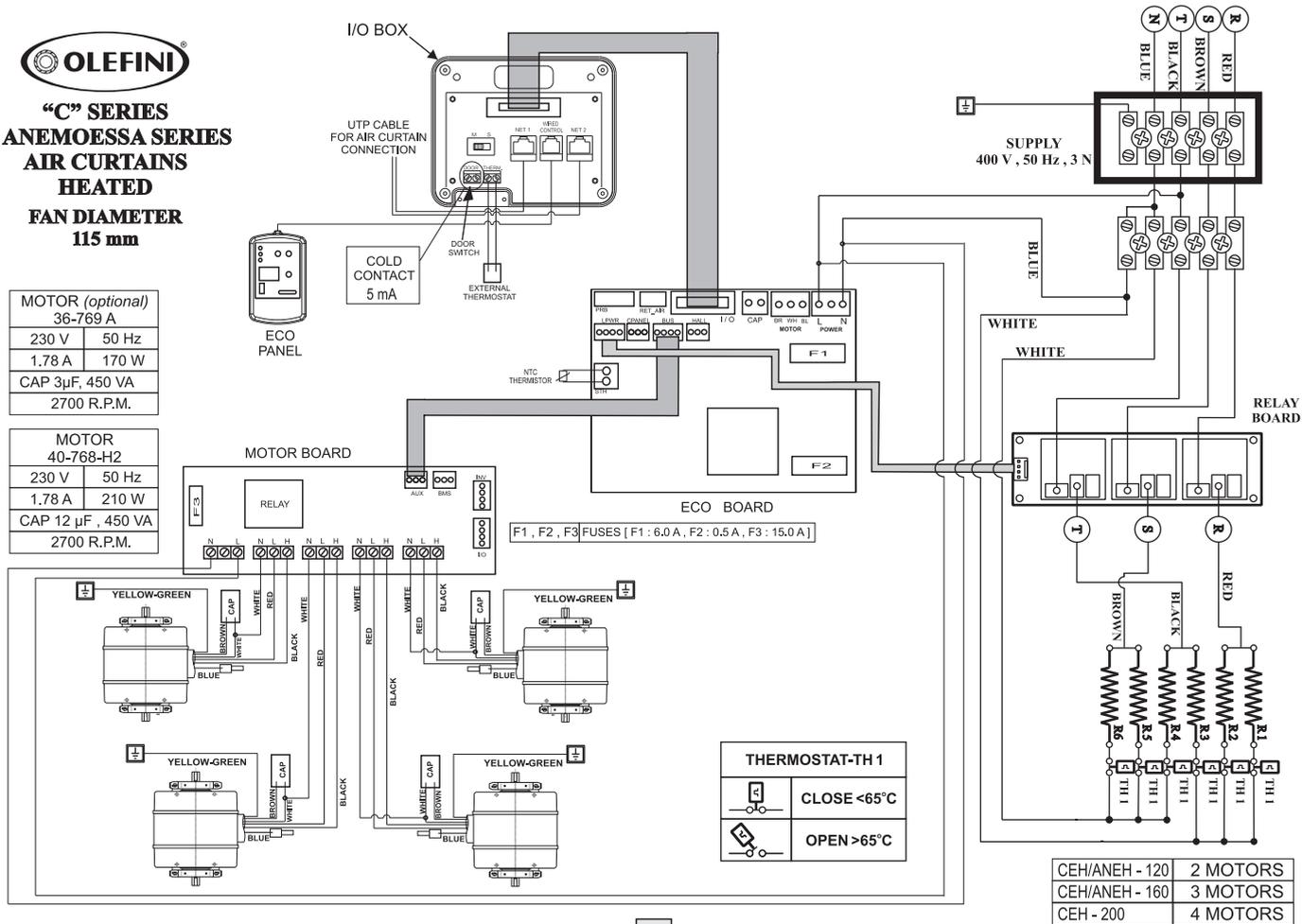


**"C" SERIES  
& ANEMOESSA SERIES  
AIR CURTAINS  
HEATED**

**FAN DIAMETER  
115 mm**

MOTOR (optional) 36-769 A	
230 V	50 Hz
1.78 A	170 W
CAP 3µF, 450 VA	
2700 R.P.M.	

MOTOR 40-768-H2	
230 V	50 Hz
1.78 A	210 W
CAP 12 µF, 450 VA	
2700 R.P.M.	



<b>THERMOSTAT-TH 1</b>	
	CLOSE <65°C
	OPEN >65°C

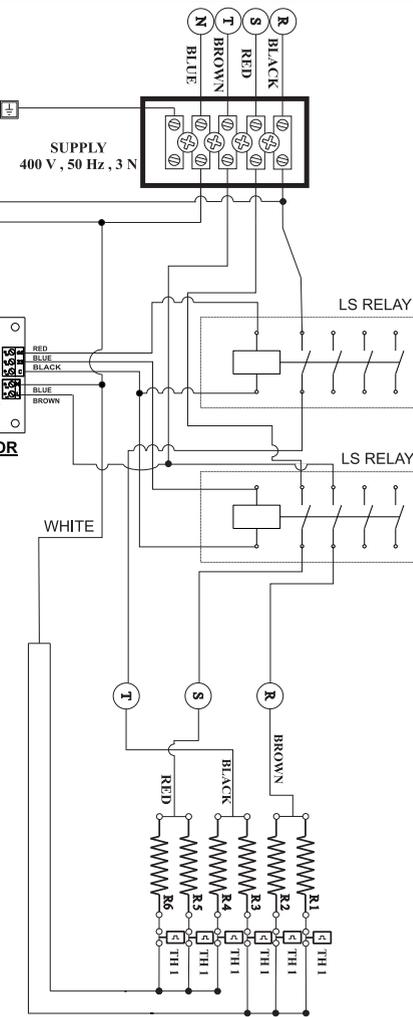
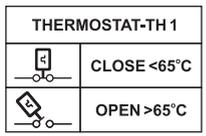
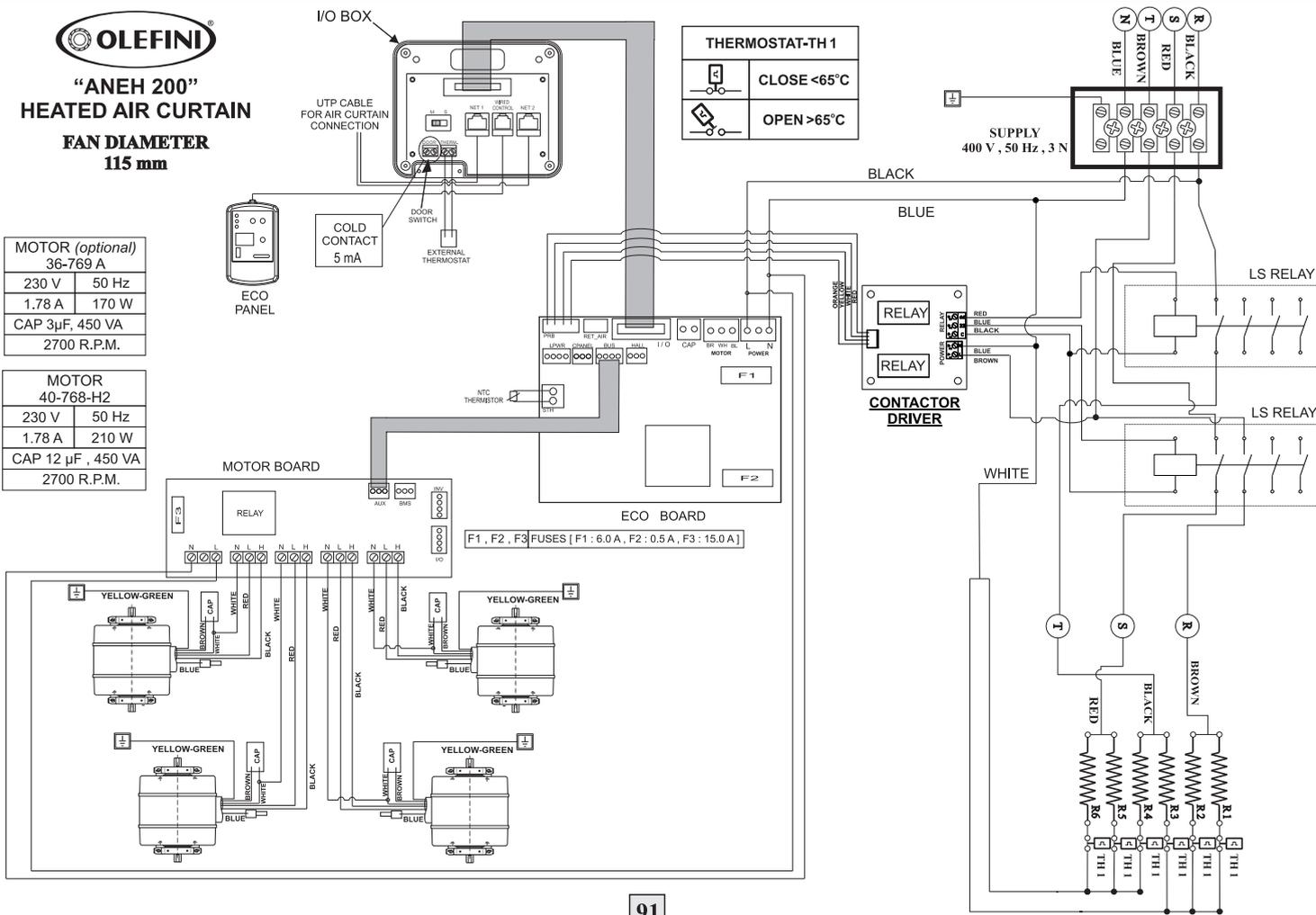
CEH/ANEH - 120	2 MOTORS
CEH/ANEH - 160	3 MOTORS
CEH - 200	4 MOTORS



**"ANEH 200"  
HEATED AIR CURTAIN**  
FAN DIAMETER  
115 mm

MOTOR (optional) 36-769 A	
230 V	50 Hz
1.78 A	170 W
CAP 3µF, 450 VA	
2700 R.P.M.	

MOTOR 40-768-H2	
230 V	50 Hz
1.78 A	210 W
CAP 12 µF, 450 VA	
2700 R.P.M.	



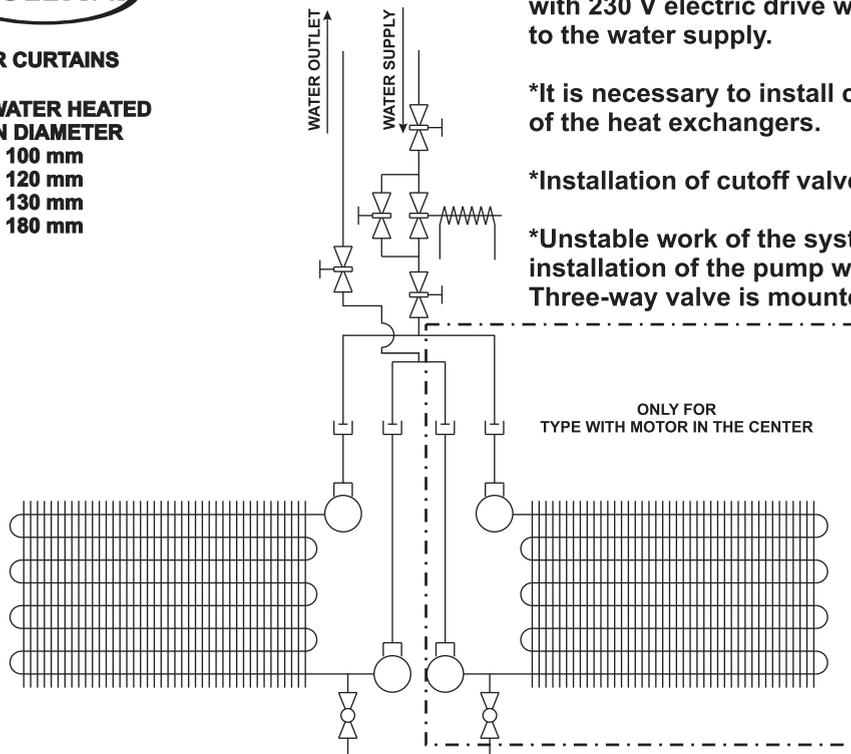
## 2.3 HYDRAULIC CONNECTION DIAGRAMS



**AIR CURTAINS**

**HOT WATER HEATED  
FAN DIAMETER**

100 mm  
120 mm  
130 mm  
180 mm



\*It is recommended to use two- or the three-way valve with 230 V electric drive when connecting the Air Curtain to the water supply.

\*It is necessary to install coarse filter to increase the life time of the heat exchangers.

\*Installation of cutoff valves is obligatory.

\*Unstable work of the system (pressure falls) requires the installation of the pump which is switched by the pressure relay. Three-way valve is mounted in such cases.

	BOLTED JOINT - 1/2 "
	COLLECTOR
	SOLENOID VALVE
	VALVE
	DRAIN

### ATTENTION

WHEN THE WATER SUPPLY IS CUT OFF IT IS NECESSARY TO PROVIDE WATER DRAIN FROM THE AIR CURTAIN IN ORDER TO AVOID DESTRUCTION OF THE HEAT EXCHANGER