

ELECTRICALLY HEATED COMMERCIAL

(door height up to 2,5 m)



- Energy Saving
- Barrier to Insects, Dust Odours, Pollutants & Humidity
- Controlled Microclimate
- Easy Installation
- Low Noise Level
- Modern Design

OPTIONAL

- Vertical mount
- Inox body (430 stainless steel)
- Able to connect with a BMS system

motor side
MIDDLE

1,0m

1,2m

1,4m

1,6m

1,8m

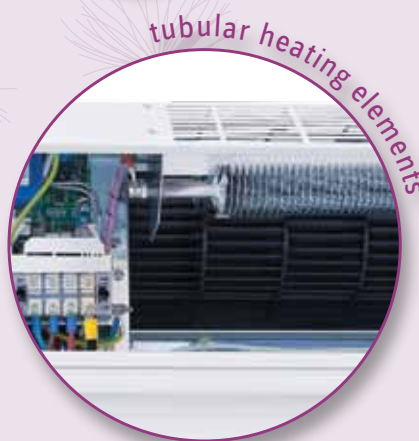
2,0m

MAXIMUM DOOR WIDTH

Infrared
Remote
Control



Remote
Control



tubular heating elements



adjustable airflaps

FOR USE IN:

SMALL SHOPS, JEWELRIES, HAIRDRESSER SALONS,
HEALTH SPAS, BARS, CAFETERIAS, PASTRY SHOP, BREWERIES,
SMALL HOTELS, BANKS, SCHOOLS, SUPER MARKETS, FOOD FACTORIES,
MEAT FACTORIES, FISH MONGER SHOPS, SMALL COLD STORAGE PLANTS

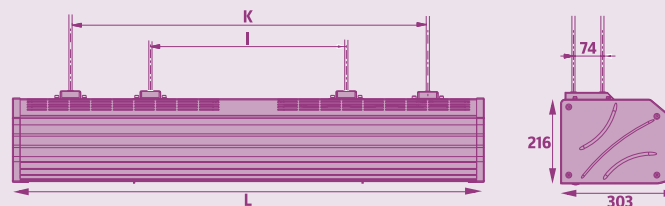


OPERATION WAYS

- New eco control system (ECO)



opening
cover



TECHNICAL DETAILS

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)	9/6	9/6	9/6	9/6	9/6	9/6
Max Air volume (m ³ /h)	1780 / 1190	1850 / 1230	2180 / 1450	2500 / 1670	2820 / 1880	3150 / 2100
Motor power input (W)	240	240	240	240	240	240
Capacitor (μF)	4	4	4	8	8	8
Noise level in 1 m [dB(A)]	54 / 43	54 / 43	54 / 43	54 / 43	54 / 43	54 / 43
DIMENSIONS L: Unit length (mm)	1145	1185	1385	1585	1785	1985
K: Mounting distance (mm)	400	500	600	700	600	600
I: Mounting distance (mm)	-	-	-	-	1200	1300
Weight (kgr)	21	24	27	30	33	37
Power supply (V/Hz/N-)	400/50/3	400/50/3	400/50/3	400/50/3	400/50/3	400/50/3
Motor speed (rpm)	1310/1000	1310/1000	1310/1000	1310/1000	1310/1000	1310/1000
Thermal power (kW)	6	9	9	12	15	15
Max current cons. (A) (per phase)	9	13,5	13,5	18	22,5	22,5



cross flow fan
Ø 100 diameter

*Company OLEFINI reserves the right to alter given product specifications without further notice.

CONVENTIONAL OPERATION WAY



"OLEFINI S.A." Air Curtains can be controlled either by switches on the control panel located on the device, or by the wired-infrared remote control provided (if ordered).

* 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 Curtain Models:

KEH43/44/46, MINI-700, MINI-800 S, R, LEH-13 S have a HI-LOW switch for regulating Motor speeds and a rotary switch for ON-OFF (motor operation) and Heaters regulation.

These Air Curtains work in the following way:

When switch is in ON position we 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 $65^{\circ} \pm 5^{\circ} \text{C}$.

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.

* 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.

PSRF OPERATION.

"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 level (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 the solenoid water valve depending on the way of heating.

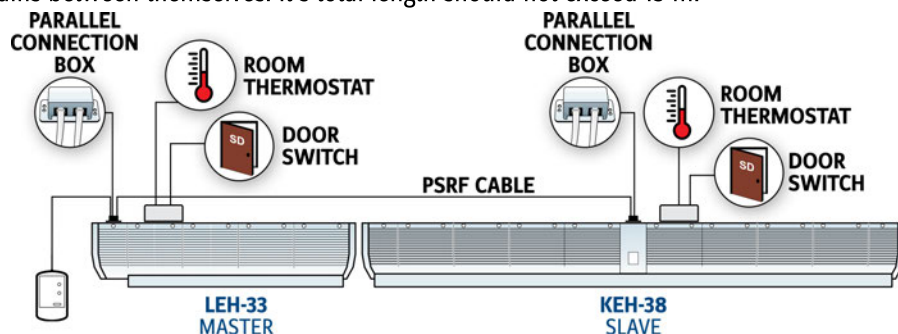
3. FAN SPEED: Control of the fan rotation speed. Though an Air Curtain has a three-stage motor, there are only two speeds (high and low) used in the existing models. The Middle speed (Blue wire) can be provided by a qualified electrician by switching terminals of the control unit.

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 distance of up to 10m and with an angle of deviation up to 15 degrees. CR 2032 type 3-V batteries are used for the remote control unit.

All "OLEFINI S.A." Heated Air Curtains, except models MINI 700, Mini 800S, INTELLECT 0.8, R, LEH-13 S, INTELLECT 1.0 and KEH-43/44/46 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 6x0.25 mm², is used to connect the Air Curtains between themselves. It's total length should not exceed 15 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.

The new ECO System.

Maximum energy saving, ultimate comfort.

Olefini offers a new electronic control system for the entire line of Air Curtain products. The new system called 'ECO' is capable of further reducing the electricity bill by applying intelligent control on the unit's fan and heater elements. The operation of the unit is now smoother and more efficient.

The key features of the new line of products are:

Intelligent energy efficient "Auto" mode for electric heaters.

The air curtain will monitor the temperature outside the building and will constantly adjust its air flow speed and the power level of the electric heaters to ensure that power is not wasted when no needed.

Fine-tuned control for maximum environment comfort.

The intelligent control system try to maintain a good level of separation between the inside and outside of the building and at the same time, and whenever it is possible, the air flow is reduced to lower the noise level and offer more comfort.

Door switch with configurable time delays.

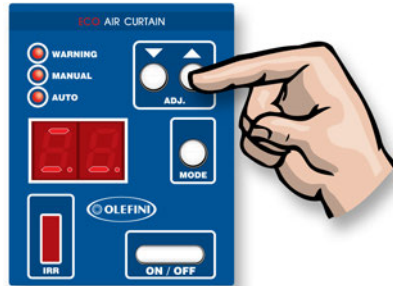
Olefini's air curtains are capable of altering their operation when the door is opened or closed. It is possible to set the air curtain to completely stop when the door is closed, or even have the air curtain work in a mode similar to space heater in the winter. All that with a touch of a button.

With Electric heaters or Hot water or Cold water.

Most of Olefini's air curtain models can be configured with electric heaters or with Hot/Cold water elements. Depending on the given project, an air curtain can operate with the building's chiller, boiler, heat pump, or just electricity when needed.

Wireless (IR) user panel and Wired panel with bright display.

The new ECO system comes with an improved and very easy to use wired panel. The user can adjust just the air curtain with a touch of a button or even leave the air curtain work completely automatically if necessary.



It is very intuitive and easy to use.

Two modes of operation are given.

An automatic mode where air flow and heater power level changes happens automatically, and a manual mode, where the user can adjust specific levels according to his/her preference.

Overheat alarm sensor, fan issue alarm sensor, and error codes to help periodic maintenance and cleaning.

Since our units are designed to offer their services at 24/7 for years, you can be assured that when the time comes to have the unit maintained, a fault indicator will guide the technician to the source of issue.

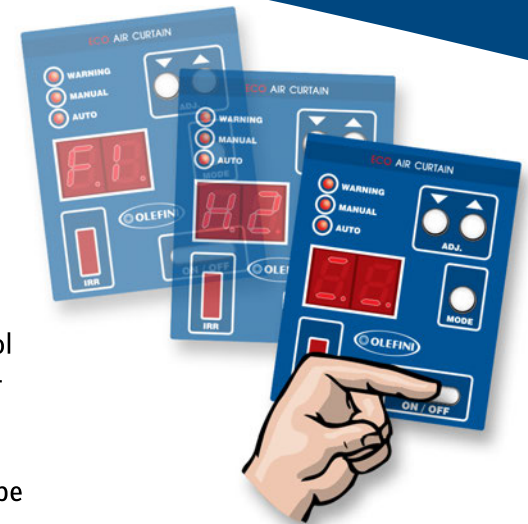
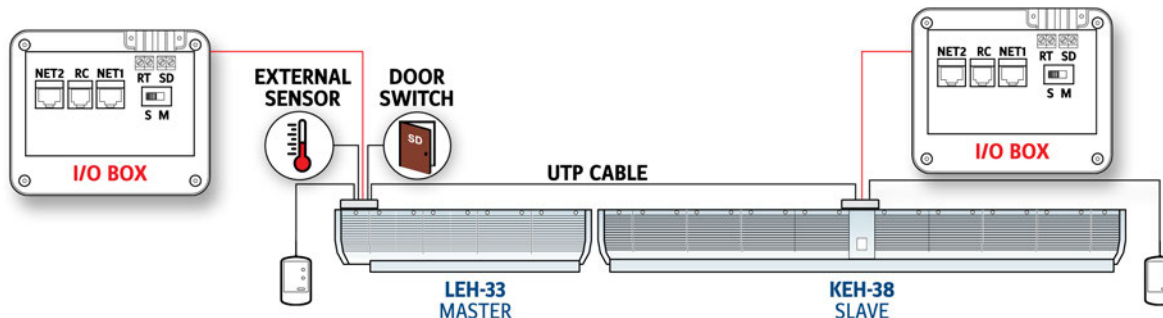
BMS networking supported, based on MODBUS (optional)

Olefini Air Curtains can now be connected to BMS systems. We have adopted the Modbus protocol for BMS connected air curtains. Each air curtain can be equipped with its own network card (supplied as an option) and it will present itself on a Modbus BMS network.

Over the network each air curtain can be under the complete control of the building's central control unit. And of course all the sensor values, fault status, alarms, status of operation, etc will be visible or adjustable remotely.

Master/Slave connection between multiple units on the same door.

Whenever there is a need to cover a very wide opening, Olefini's ECO air curtains can be cascaded with a very easy and cost efficient method. A simple cable is all that is needed to cascade one or more units together to work in a Master - Slave configuration. In this situation, only one control panel is needed and all connected air curtains can respond identically to the user's commands.



The UP-DOWN Air Curtain Systems.

Multi speed control

Olefini offers the Up-Down system for some models of Air Curtain products. The Up-Down system, is capable of adjusting the air curtain's fan speed and heater level according to the user's preferences.

The key features of the Up-Down line of products are:

Smooth fan speed control

The air curtain's fan speed can be controlled from the user panel and adjusted in small steps in order to provide maximum confort and low noise.

Door switch operation

If a door switch is connected the Up-Down is capable of stoping it's operation when the door is closed and the air curtain's help is not needed.

Wireless (IR) user panel

The Up-Down Air Curtains feature a build in user panel (on the unit) and a wireless remote control (IR). User can issue commands either from the build in panel, or the wireless remote control with a touch of a button. The air curtain provides indication of it's operating state with bright LEDs, and audible signals.



The INTELLECT Air Curtain Systems.

Innovation and advanced features.

Olefini offers the Intellect system for some models of Air Curtain products.

The Intellect system, is capable of adjusting the air curtain's fan speed and heater level according to the user's preferences. When the building's door is closed, the same air curtain can be used as a space heater, providing hot air during the winter.

The key features of the Intellect line of products are:

Smooth fan speed control

The air curtain's fan speed can be controlled from the user panel and adjusted in small steps in order to provide maximum comfort and low noise.

Operation Mode

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

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 LED is green: ***Air curtain mode***

When LED is red : ***Room Heater mode***

Door switch & Room thermostat

The Intellect is capable of altering it's operation when the door is opened or closed. When the door is open, the unit works as an Air Curtain. When the door is closed, you can have an intelligent space heater, which starts and stops with the help of an (optional) room thermostat.

With Electric heaters

Olefini's Intellect air curtains feature an electric heater which can be controlled in four different power levels (No heat, 33% heat, 66% heat or 100% heat full power).

Wireless (IR) user panel

The Intellect Air Curtains feature a build in user panel (on the unit) and a wireless remote control (IR). User can issue commands either from the build in panel, or the wireless remote control with a touch of a button. The air curtain provides indication of it's operating state with bright LEDs, and audible signals.



IP24 CONTROL SYSTEM

The IP24 Air Curtain Systems.

For demanding working environments.

Olefini offers the IP24 control system for a few selected models of Air Curtain products. The IP24 air curtains have an ingress protection of IP24 and can be used in places where there will be exposure to water and dust. Typical applications are car washing facilities, and outdoor installations.

The key features of the IP24 line of products are:

Constant fan speed

To avoid unnecessary system complexity, the IP24 system has only one speed for the fan.

With Electric heaters

Olefini's IP24 air curtains feature an electric heater which can be controlled in four different power levels (No heat, 33% heat, 66% heat or 100% heat full power). These heaters are of course IP24 certified and can work while they are sprayed with water or dust particles.

All their electric connections are completely sealed.

Industrial user panel with easily accesible buttons

The IP24 Air Curtains feature a wired user panel. The user can issue commands by pressing the large touch buttons. The buttons are carefully designed so that it is possible to operate them while wearing a glove (typical situation for given applications). The air curtain provides indication of it's operating state with bright LEDs, and audible signals.

NOTICE:

If needed we can also operate unit with an IR (IP20) remote control.

