

TECHNICAL SHEET

Built-in tangential air curtains with heating elements

REV 00 - 28/06/2021
 COD: 12450014R2 - 12450014R3 - 12450024R2 -
 12450024R3 - 12450034R2 - 12450034R3

ARIA² ELEGANCE TR

MADE IN ITALY



DESCRIPTION

Tecosystemi's air curtains are designed and built to optimise the performance of air-conditioning systems in the rooms in which they are installed, compatibly with the users need to enter and leave the premises, often continuously, thus avoiding to open and close entrance doors continuously. This guarantees considerable economic savings, by significantly reducing heat loss.

The air curtain positioned internally above the entrance door, generates an air flow that is rapidly forced downwards, creating a clear separation between the volumes of internal and external air, thus enabling the rooms to be properly air-conditioned, with no heat loss in winter and no over-heating in summer. Other benefits derive from the significant reduction in POWER consumption, and from the fact that the system prevents the passage of exhaust fumes, dust and insects which may come into the premises when the doors are open.

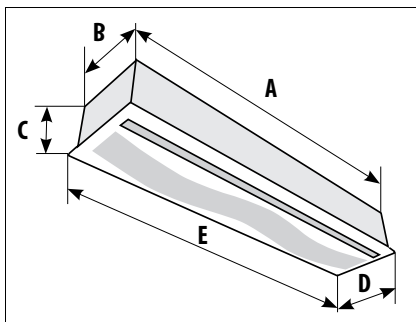
The optimal utilisation of the air curtain is guaranteed by the three different motor speeds, selectable by using the remote control device.



The air curtain must be installed by qualified operators and in accordance with standard IEC 64.8 (electrical connection).

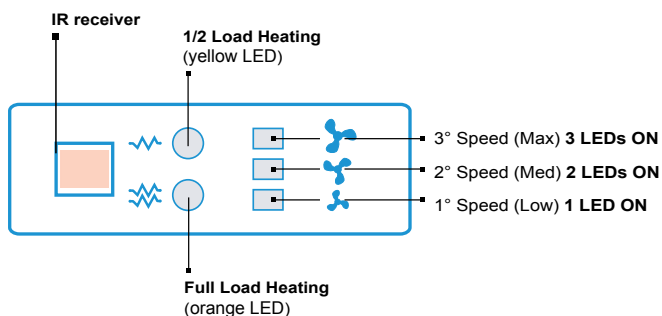
TECHNICAL FEATURES

CODE	MODEL	SUPPLY VOLTAGE	ABSORBED POWER	POWER CONSUMPTION WITH HALF LOAD HEATING	POWER CONSUMPTION WITH FULL LOAD HEATING	AIR SPEED AT THE INTAKE	AIR FLOW	SOUND LEVEL	AIR Δt WITH HEATING ELEMENT	WEIGHT	SUITABLE FOR DOORS
			[W]	[W]	[W]	[m/s]	[m³/h]	[dB (A)]	[°C]	[kg]	[mm]
TANGENTIAL AIR CURTAINS WITH 2 HEATING ELEMENTS											
12450014R2	1100	230 Vac 50 Hz	75	1900	3800	I: 8 II: 9 III:10	I: 692 II: 753 III:948	I: 47 II: 52 III: 54	12	23	L=1000 H max=2200 H min=1800
TANGENTIAL AIR CURTAINS WITH 3 HEATING ELEMENTS											
12450014R3	1100	400 Vac 50 Hz	75	3800	5700	I: 8 II: 9 III:10	I: 678 II: 738 III:929	I: 47 II: 52 III: 54	15	24	L=1000 H max=2200 H min=1800
TANGENTIAL AIR CURTAINS WITH 4 HEATING ELEMENTS											
12450024R2	1500	400 Vac 50 Hz	190	3200	6400	I: 8 II: 9 III:10	I: 1112 II: 1213 III:1263	I: 51 II: 54 III: 55	19	35	L=1500 H max=2200 H min=1800
12450034R2	2000	400 Vac 50 Hz	190	3800	7600	I: 8 II: 9 III:10	I: 1.090 II: 1.189 III: 1.238	I: 49 II: 52 III: 53	19	49	L=2000 H max=2200 H min=1800
TANGENTIAL AIR CURTAINS WITH 6 HEATING ELEMENTS											
12450024R3	1500	400 Vac 50 Hz	190	6400	9600	I: 8 II: 9 III:10	I: 1.090 II: 1.189 III: 1.238	I: 52 II: 55 III: 56	25	36	L=1500 H max=2200 H min=1800
12450034R3	2000	400 Vac 50 Hz	190	7600	11400	I: 8 II: 9 III:10	I: 1.068 II: 1.165 III: 1.213	I: 50 II: 53 III: 54	25	50	L=2000 H max=2200 H min=1800

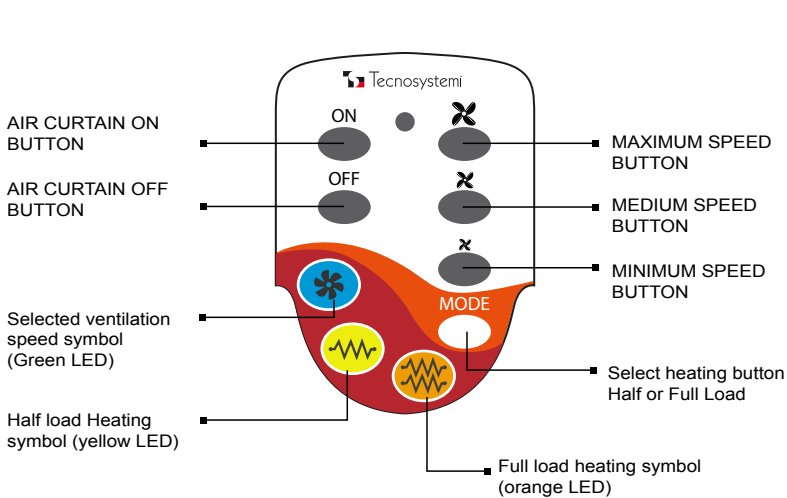


DIMENSION [mm]						
CODE	MODEL	A	B	C	D	E
12450014R2	1100	1086	362	270	396	1120
12450014R3	1100	1086	362	270	396	1120
12450024R2	1500	1440	362	270	396	1472
12450034R2	2000	2040	362	270	396	2072
12450024R3	1500	1440	362	270	396	1472
12450034R3	2000	2040	362	270	396	2072

AIR CURTAIN LABEL



REMOTE CONTROL USE

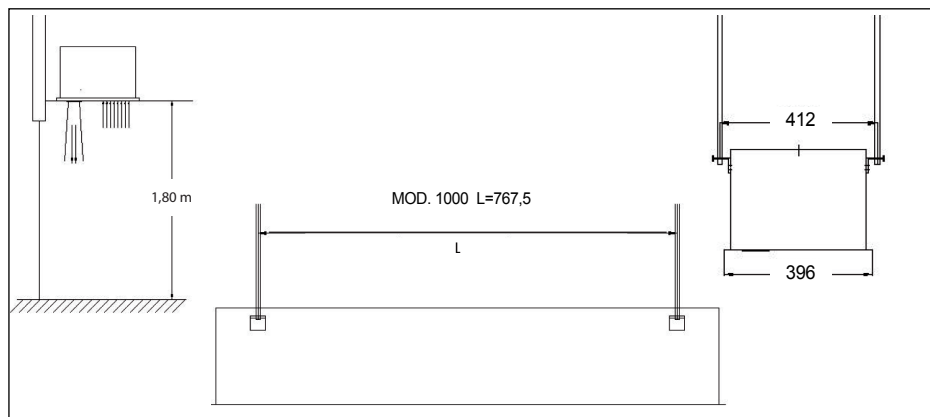


LEGEND

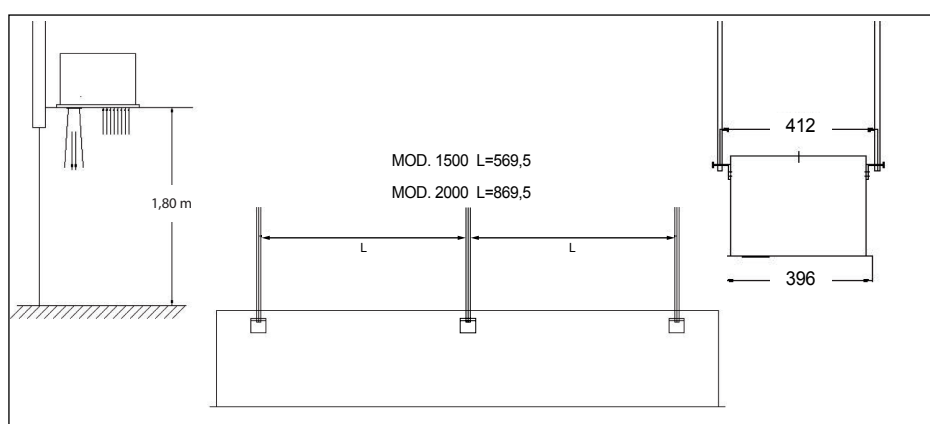
- ON
On / switch on the appliance
- OFF
Off / switch off the appliance
- Minimum speed
- Medium speed
- Maximum speed
- MODE
It allows you to select the heating mode
- Selected ventilation speed indicator (green LED)
- Electrical half load heating (yellow LED). The heating elements installed operate at half load.
- Electrical full load heating (orange LED). The heating elements installed operate at full load.

INSTALLATION AND COMMISSIONING

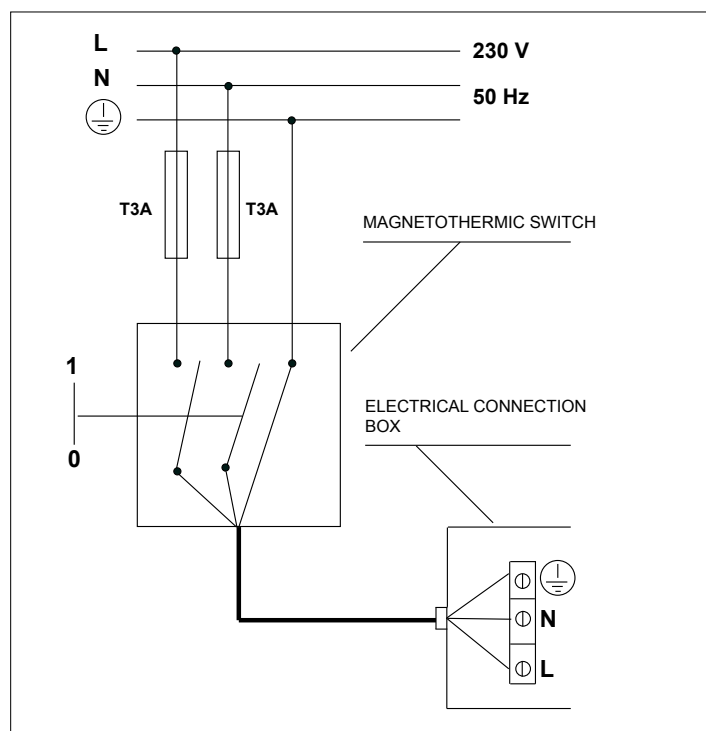
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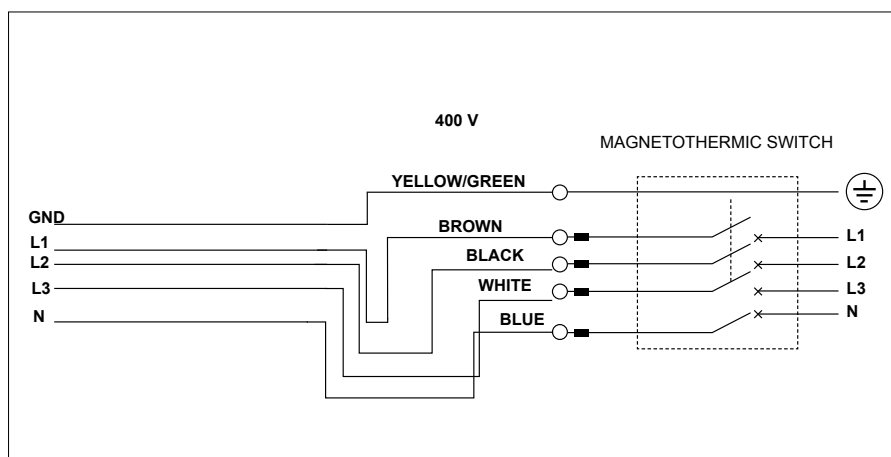
POWER SUPPLY - SINGLE PHASE AND ELECTRICAL DIAGRAM FOR INSTALLATION



During the electrical connection, the installer must respect the polarities indicated on the plate placed in front of the power terminal board:

- L (connect the line conductor: internally all the safety protections are inserted)
- N (connect the neutral connector)
- Earth (connect the yellow green conductor having a length 1 cm greater than L and N wires)

POWER SUPPLY - THREE-PHASE AND ELECTRICAL DIAGRAM FOR INSTALLATION



IMPORTANT!

During the electrical connection, the installer must respect the polarities indicated on the plate placed in front of the power terminal board:

- L1 - L2 - L3 (connect the line conductor: internally all the safety protections are inserted)
- N (connect the neutral connector)
- GND Earth (connect the yellow green conductor having a length 1 cm greater than L and N wires.)

AUTOMATIC START KIT FOR AIR CURTAIN

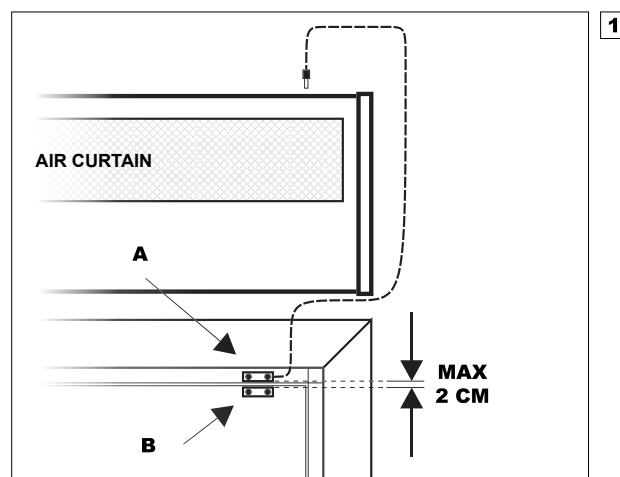
The "Automatic Start Kit" enables to connect directly the switching on/off of the unit directly to the opening/closing of the door. The kit is an optional to be ordered extra.

AUTOMATIC START KIT INSTALLATION AND COMMISSIONING

KIT FOR THE AUTOMATIC SWITCHING OFF OF THE AIR CURTAIN ONCE THE DOOR IS CLOSED (supplied separately)

Connect the sensor and the cable to the air curtain by means of the jack J, fix the magnetic sensor A to the door frame or to a solid point with the door frame; fix the second sensor B to the moveable part of the door, leaving a maximum gap between the two sensors of approx. 2 cm.

By installing the "automatic start kit", the air curtain switches on/off when the door opens/closes.



Installation of the sensor for the "automatic start kit"