



50/60 Hz

# HOTELES

CONTRACT FANS > HOTELS

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

































## > SELECTION CHART <

### < HEAT RECOVERY UNITS

	ErP 2018	Eurovent	Exchanger	Impeller	Motor	Airflow (m³/h)	Configura-tion	Coil	Control	Bypass	Filters	Efficiency
<b>&gt; CEPHIRUS - 2 &gt; Heat recovery with crossed flow filter</b>												
	-			Forward		600-7000		-	CTRL-MAX	-	F7/F7 F9/F9	64
<b>&gt; ARUMAK LP &gt; Low profile counter flow heat exchanger for false ceiling</b>												
				Forward		500-4200		-	CTRL-F CTRL-DPH	Partial	F7/F7 F7+F9/F7	78
<b>&gt; ARUMAK &gt; Counter flow heat recovery unit</b>												
				Forward		430-3700			CTRL-DPH CTRL MAX²	Total	F7/F7 F7+F9/F7	79
<b>&gt; KOXA &gt; Large air flow cross-flow heat exchanger</b>												
	-			Backward		8000-14000		-	CTRL-MAX	-	F7/F7	70
<b>&gt; CEPHIRUS - 2 EEC &gt; Counter flow heat recovery with EC motor</b>												
				Forward		1200-6000		-	CTRL-MAX + MODBUS	Total	F7/F7 F9/F9	74
<b>&gt; ARUMAK LP EEC &gt; Low profile counter flow heat exchanger with EC motor</b>												
				Backward		400-4000		-	CTRL-F CTRL-DPH VAV,CAV,COP	Partial	F7/F7 F7+F9/F7	79
<b>&gt; ARUMAK EEC &gt; Counter flow heat recovery with EC motor</b>												
				Forward		430-2600			CTRL-DPH VAV,CAV,COP	Total	F7/F7 F7+F9/F7	80
<b>&gt; DOMEX EEC &gt; High efficiency counter flow heat exchanger with EC motor</b>												
				Backward		1000-5400			CTRL-MAX VAV,CAV,COP (+ MODBUS)	Total	F7/F7 F7+F9/F7	92
<b>&gt; MAKNA EEC &gt; Large air flow heat exchanger with modbus control and EC motor</b>												
				Backward		8000-13000			CTRL DPH, CTRL MAX² VAV,CAV,COP (+ MODBUS)	Total	F7/F7	85
<b>&gt; CIRKEDO EEC &gt; Rotary heat recovery with high efficiency and EC motor</b>												
				Backward		1200-8000			CTRL DPH, CTRL MAX² VAV,CAV,COP (+ MODBUS)	Total	F7/F7	84

# > RESIDENTIAL RANGE <

## > SELECTION CHART < ENERGY SAVING AND WELFARE

	Size	Airflow (m <sup>3</sup> /h)	Sound dB(A)	Applications
<b>&gt; L A R U S &gt; Axial fan for exhaust ventilation with backdraft damper</b>				
	LARUS 100/ 125/ 150	100/ 180/ 290	28/ 29/ 35	  
<b>&gt; L I B E L L A &gt; Axial fan with automatic louver shutter for exhaust ventilation</b>				
	LIBELLA 100/ 125/ 150	100/ 190/ 300	28/ 29/ 35	  
<b>&gt; F E N E S O &gt; Axial window fan for exhaust ventilation</b>				
	FENESO 125/ 150	190/ 300	29/ 35	  
<b>&gt; C H R Y S A M R E V &gt; Axial window fan with automatic louver shutters and reversing motor</b>				
	CHRYSAM REV 180/ 230	212/ 176 - 455/ 290	25/ 26	  
<b>&gt; C Y C N U S &amp; C I C O N U S &gt; Axial deluxe with timer</b>				
	CYCNUM 100/ CICONUST 100	100/ 90	28/ 27	  
<b>&gt; L I B E L L U M &gt; Low level noise axial fan</b>				
	LIBELLUM 100	95	27	
<b>&gt; E S T E L A &gt; Silent ceiling fan</b>				
	ESTELA 100/ 150/ 150 TURBO	250/ 380/ 450	39/ 37/ 42	  
<b>&gt; S I G I L A &gt; Low noise efficient extractor with timer and humidity sensor</b>				
	SIGILA 100/ 125/ 100T/ 125T/ 100TH/ 125TH	80/ 150/ 80/ 150/ 80/ 150	20/ 25/ 20/ 25/20/ 25	  
<b>&gt; S I G I L A M O T I O N &gt; Low noise efficient extractor with timer and motion sensor</b>				
	SIGILA MOTION 100T/ 125T	80/ 150	20/ 25	  
<b>&gt; C H E L Y S &gt; Mixflow, casing and impeller made of plastic</b>				
	CHELYS 100/ 125/ 125S/ 150/ 160/ 200/ 250/ 315	190/ 280/ 320/ 520/520/ 1.040/ 1.400/ 2.050	27/ 31/ 34/ 43/ 43/ 49/ 47/ 48	     
<b>&gt; C H E L Y S S I G I L A &gt; Inline silent fan</b>				
	CHELYS SIGILA 100/ 125/ 150/ 160/ 200/ 250/ 315	240/ 340/ 555/ 555/ 1.020/ 1.330/ 1.950	24/ 23/ 26/ 26/ 31/ 34/ 36	     

# > KITCHENS <

## > MAIN GOALS TO ACCOMPLISH IN VENTILATION < KITCHENS

**Complying with the requirements of safety, energy saving, maintenance, hygiene, comfort and international regulations mentioned above, we conclude that a good extraction and ventilation system in kitchens must meet the following 4 goals:**

> 1. Extract the dirty and stale air from the inside of the kitchens to the outside of the building, so that the kitchen and the adjacent areas are not contaminated. This way the smells, grease particles and harmful gases are reduced for professionals and assistants inside. It is also important to extract the heat and humidity that occurs due to the different reactions that take place inside the kitchen.

> 2. The clean air must be induced from the outside avoiding that the extracted air reenters the kitchen due to a bad calibration of the system of impulsion and/or extraction. Achieving a comfortable and energy-efficient climatization thanks to the induction of air in the kitchen normally at a lower temperature than the extracted air.

> 3. The necessary requirements for healthy, hygienic, comfortable and safety environments for the professionals and assistants must be maintained therefore the standards are defined by the different international regulations and legislations. It is very important to install good systems to eliminate smells and retain all the grease particles, to avoid the exit of contaminating particles or the inhalation of them inside the installations.

> 4. The air renewal inside the kitchen and adjacent rooms must be maintained at appropriate and specific temperatures according to the specified requirements of each room. It is important that when the air is extracted or inducted, they do not mix, producing an inefficient and harmful air renewal in the different rooms and kitchen.

**Other technical data to achieve the goals and requirements of a good ventilation in kitchens.**

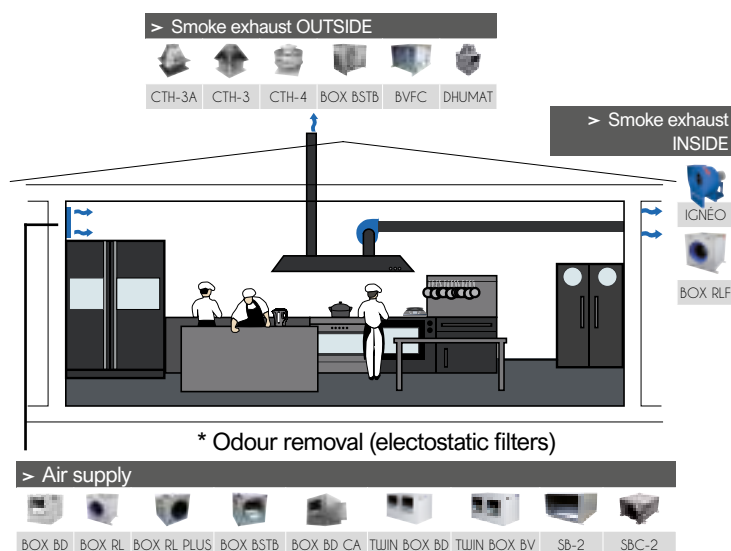
Always that the installed power of the elements destined to the preparation of food in the professional kitchens is superior to 20kW, they will be classified as special risk areas. The ducts must be independent of any other extraction or ventilation. The mechanical smoke



and heat extractors will have a fire classification F400/2 hour. In the case where the total cooking power is higher than 25 kW the extraction will be mandatory and therefore the mechanical supply of air as well, but in the case where the total cooking power is lower than 25kW only mechanical extraction will be required.

The air flow of an extraction will be calculated from a suction speed from the free perimeter respect to the height of the hood. The suction speed of the base of the hood will depend on the open sides. A suction speed of 0.6 m/s is recommended in island-type hoods (four open sides), 0.45 m/s for hoods with 3 open sides, for hoods with 2 open sides 0.35 m/s for the hoods with only one open side 0.25 m/s.

To achieve an adequate thermal comfort Casals Ventilation recommends that the ambient air inside the kitchen oscillates between 18°C and 26°C with humidity levels around 30% to 65% RH. Casals also recommends a maximum acoustic level of 60 dBA within the work area (unit value of the sound level produced by ventilation only) to achieve an adequate acoustic comfort. Hygiene should have a maximum depression of 10% established in the kitchen. As we have mentioned before, the induction of fresh air must be from the outside, it cannot be air recycled from other rooms. Regarding filtration, standard levels recommended according to IDA2 (EN13779) = the average indoor air quality with F8-F9.

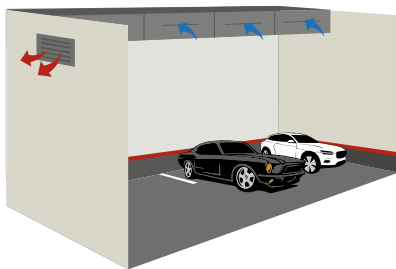


# > PARKINGS <



## > JET FANS

### < INSIDE



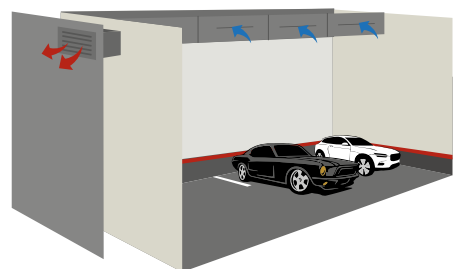
#### > INSIDE FANS

HBF F 400	HBFX F 400	HBF F 300	HBFX F 300
HCF F 400	HCFX F 400	HCF F 300	HCFX F 300
HMF F 400	HMFx F 400	HMF F 300	HMFx F 300
BOX HBF F 400	BOX HBFX F 400	BOX HBF F 300	BOX HBFX F 300
IGNEO F 400	JF F 400	JF F 300	JFC F 400
JFC F 300	SYBILO F 400	SYBILO F 300	BOX RLF
BOX RLFx			

#### > JET FANS

JF CONFORT	JF F 400	JF F 300	JFC CONFORT	JFC F 400
JFC F 300	SYBILO CONFORT	SYBILO F 400	SYBILO F 300	

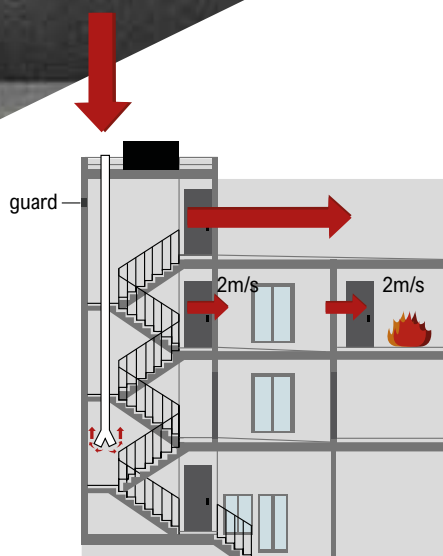
### < OUTSIDE



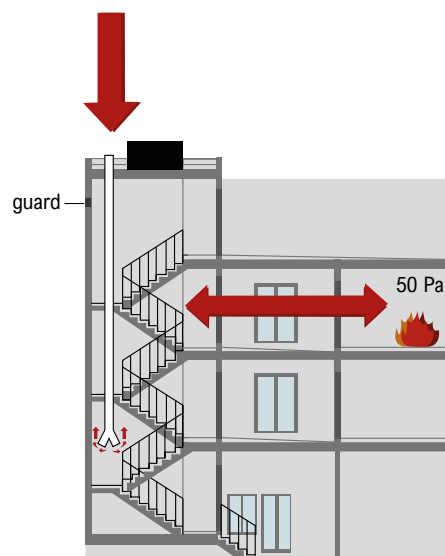
#### > OUTSIDE FANS

CTH-3 F 400	BVFC F 400	DHUMAT F 400	BOX BSTB F 400

# > STAIR PRESSURIZATION <



Air speed criterium.



Differential pressure criterium (with all doors closed).



The UNE-EN 12101-6 standard describes the differential pressure systems applied to escape ways, specially in protected stairs. These systems are based on the mechanical injection of outdoor air to the stair box, generating in this way a positive pressure that prevents the products of combustion from getting in the escape ways. In case of fire, the system helps in the evacuation process of the occupants by avoiding or reducing the vertical spread of the fire.

The needed flow will depend on the design conditions of the building. In general terms, an air speed through open sections of 0.75m/s will be used when the stair is used as an escape way for occupants, and of 2m/s when the stair is used by the fire extinguishing personnel.

The pressurization system must keep a differential pressure of 50Pa and overcome the pressure drop of the installation.

An automatic system consisting of a differential pressure probe (DPS), a frequency regulator (RFS) and the right fan according to the needs is recommended.

# > TERTIARY AIR CURTAINS <



## Coursalis

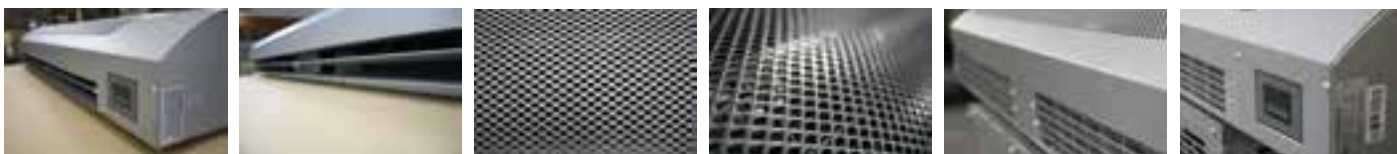
> HIGH PERFORMANCE AIR CURTAIN FOR  
TERTIARY. REACH UP TO 3M <



60Hz



50Hz



## COURSALIS

*only air*

- Exclusive arch design, light and superfine.
- High performance and low sound level.
- Metallic housing with metallic paint finish in grey colour.
- 110V and 230 V 60Hz motor.
- Sizes: 900, 1200 and 1500mm wide.
- Includes external control by remote control.
- Designed for horizontal mural installation.
- Easy adjustable air direction.
- With operating indicator LED (ambient mode, air speed and start-stop).
- Mounting brackets on wall.
- Reach up to 3m.
- The indicated weight does not include the packaging ( $\pm$  2Kg.).

## COURSALIS & COURSALIS E

*only air or with heating*

- Exclusive arch design, light and superfine.
- High performance and low sound level.
- Metallic housing with metallic paint finish in grey colour.
- 380V 50Hz motor.
- Sizes: 1000, 1500 and 2000mm wide.
- COURSALIS E: with heating, equipped with electrical coil.
- Includes external control by remote control.
- Designed for horizontal mural installation.
- Easy adjustable air direction.
- With operating indicator LED (ambient or heating, air speed and start-stop).
- Mounting brackets on wall.
- Reach up to 3m.
- The indicated weight does not include the packaging ( $\pm$  2Kg.).

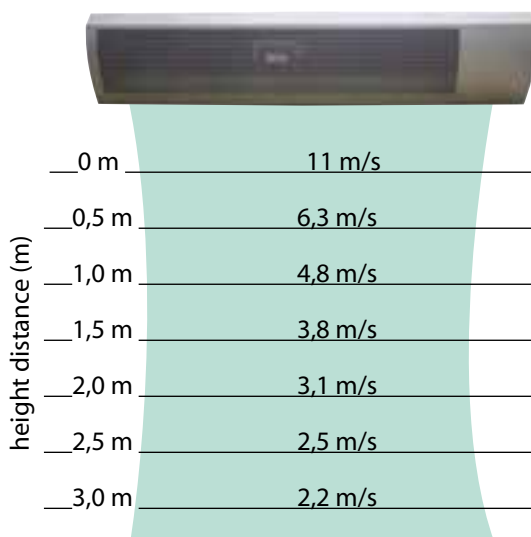


	60Hz			50Hz		
	COURSALIS			COURSALIS & COURSALIS E		
Only air	900	1200	1500	1000	1500	2000
With heating	-	-	-	1000 E	1500 E	2000 E
Air flow (m³/h)	1600	1700	2100	1100	1800	2400
Heating power (kW)	-	-	-	4,4	5,5	10
Tension (V-Hz-Ph)	110/220V - 60Hz - Single phase			380V - 50Hz - Single phase		
Speeds	2			2		
Height application (m)	3			3		
Fan consumption (W)	150	200	230	180	220	320
Control	Remote and manual			Remote and manual		
Sound level (Lp dB(A)6m) *	45	46	47	42	43	44
Height (mm)	220	220	220	220	220	220
Wide (mm)	1050	1350	1650	1150	1650	2150
Depth (mm)	195	195	195	195	195	195
Net weight (kg)	14,9	18	21,3	17,6	24,7	29,6

\* Total sound pressure level at the point of maximum flow measured in dB(A) in the suction measured in free field at a distance of 6m from the source.

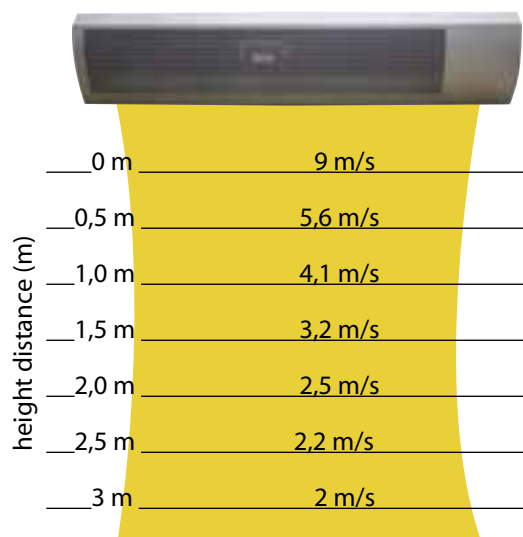
## COURSALIS 60Hz

only air

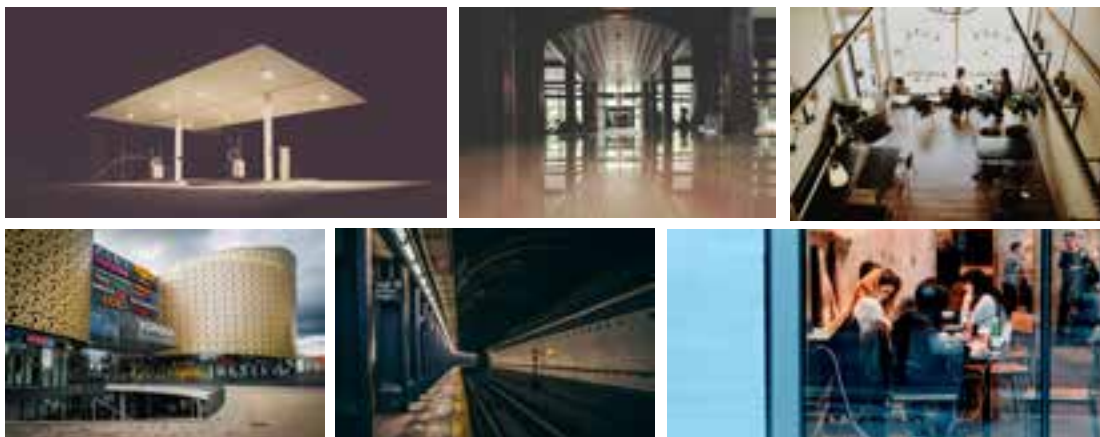


## COURSALIS & COURSALIS E 50Hz

only air or with heating



## Applications



Tertiary sector:

- Airports • Schools • Malls • Stores • Supermarkets • Train stations • Hotels • Restaurants • Pubs • Offices • Banks • Gas stations • Logistics centers • Industries, food industries • Hospitals, clinics, health centers • Veterinary clinics • Refrigerated warehouses.

