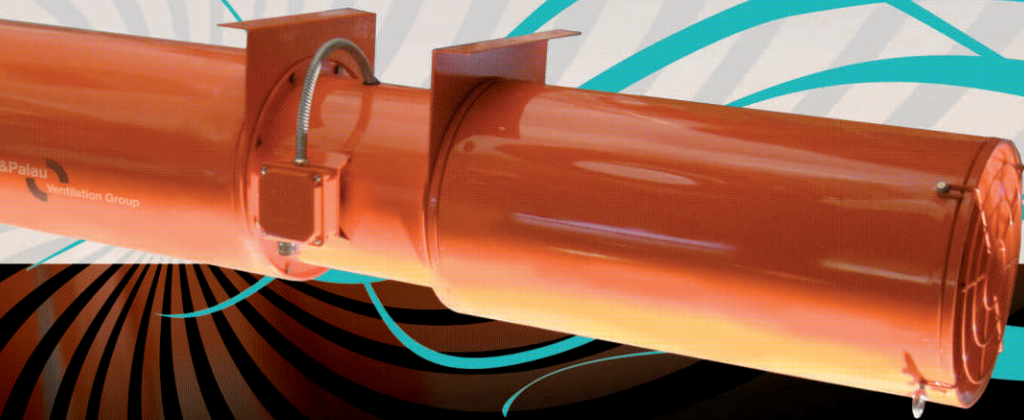


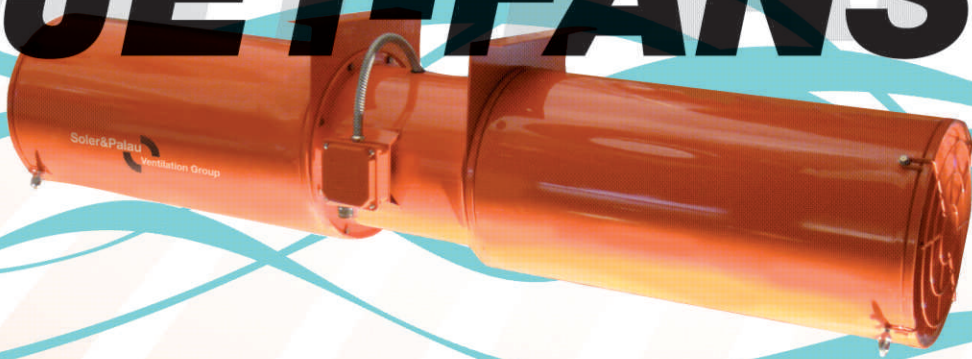


JET-FANS





JET-FANS



Introduction

S&P is a global company, providing solutions for ventilation in many diverse applications, especially for enclosed car parking applications. Many car park projects worldwide have ventilation provided by S&P.

Experience gained from many years of providing ventilation solutions means that S&P has the experience to provide impulse ventilation for enclosed car parking.

Application

Historical ventilation of enclosed car parking, in many countries has used ducted systems to extract air from the parking area. Fresh air being drawn in via access ramps, louvers, shafts or supplied by fans. Extract grilles may have been located at high level, low level, or both. Whilst required ventilation rates may vary from country to country. This system of extract has been considered suitable for pollution control, but may not provide for adequate extract in event of emergency fire smoke.

Ventilation by impulse, or Jetfans, offers an effective alternative to ducted extract systems. Extract fans are still required to provide air extract to comply with local regulations for pollution and emergency smoke extract, however, ducting within the parking space may be minimized or removed completely. Provision for fresh air inlet must be maintained as before, via access ramps, louvers, shafts or provided by supply fans.

Impulse or Jetfans distributed within the car park area induce air flow throughout the parking area. Thus air flows from air inlets, is induced throughout the parking area toward the extract points, to minimize or eliminate areas of stagnant air.

The concept being influenced from experience of longitudinal ventilation in tunnels.

The removal of air ducts within the parking area may assist building design by maximizing useful parking space, and reducing potential for conflict with other services, especially during installation. However, care must be taken with the selection and location of these Jetfans to ensure effective air movement.

Fortunately CFD tools are available within S&P to assist this process.

The quantity, location, and sizing of these fans, and the associated elements require careful determination to ensure effective air movement for both pollution control, and especially for smoke clearance, in event of an emergency. These fans, and the system, are a life preservation solution, and should not compromise the safety of car park users, or indeed the firefighters who may need to enter this enclosed space, possibly in darkness, to deal with a fire emergency.

The system equipment and performance should comply with prevailing local requirements of air flow, pollution etc.

CYLINDRICAL CASED AXIAL FLOW FANS

AXIAL FAN TJFT/TJHT



Officially approved to EN12101-3 standard (certificate number 0370-CPD-0673 0672)

Jet fans to induce air movement in enclosed car parking, tunnels and large spaces.
 TJFT: "ventilation" models for air from -20°C to +40°C.
 TJHT: certified F200-120, F300-120, F400-120 (CE marked) in accordance with EN12101-3.
 Range made of 7 diameters of tubular axial fans, from 315 mm to 630 mm.
 Reversible impeller in aluminum.
 Hot galvanised steel casing supplied with two support feet.
 Two circular sound attenuators made of galvanised sheet steel.
 Supplied with inlet and outlet guard.
 External terminal box.

Motors

Available, depending upon the model:
 - with three phase motors in 2 pole.
 - with three phase two speed motors in 2/4 pole.
 TJFT motors are IP55, Class F insulation.
 TJHT motors can be F400 120, IP55 Class H
 F300 120, IP55 Class H
 F200 120, IP55 Class F

Electrical supplies:
 Three phase 400V-50Hz.

On request

Version with isolator.
 Version with inlet guard and discharge deflector for uni-direction airflow.
 Version with inlet and discharge deflector for reversible airflow.
 External painting.

External terminal box



External terminal box for ease of connection

Two protection guards fitted as standard



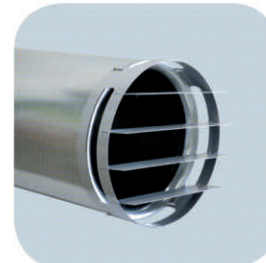
Air protection guard to mount at the inlet or outlet side

Optional isolator



Electrical Isolator fitted to fan for security

Optional deflector

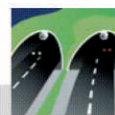


Deflector to direct air. Can be mounted at the inlet or outlet side

A P P L I C A T I O N S



Parkings



Tunnels



Technical characteristics

Before installation check that the product electrical characteristics listed on the data plate label (Voltage, power, frequency etc) match those of the intended electrical supply.

Model	Speed (rpm)	Thrust (N)	Airflow (m ³ /h)	Air velocity (m/s)	motor* (kW)	FLC* (A)	Sound level ** (dBA)		Weight* (kg)
							Form A	Form B	
REVERSIBLE -1 speed 2 POLE -VENTILATION ONLY									
TJFT/2-315-6/41	2810	24	4.500	16	0,75	1,8	71	64	56
TJFT/2-355-6/41	2810	40	6.500	18	1,1	2,32	74	67	76
TJFT/2-400-6/41	2870	60	9.000	20	1,5	3,07	79	71	87
TJFT/2-450-6/41	2840	85	12.075	21	2,2	4,56	82	74	128
TJFT/2-500-6/41	2890	150	17.850	25	4	7,55	85	78	146
TJFT/2-560-6/41	2935	239	25.200	28	7,5	13,6	88	81	198
TJFT/2-630-6/41	2930	390	36.225	33	15	25,5	92	85	260

REVERSIBLE -2 speed 2/4 POLE -VENTILATION ONLY									
TJFT/2/4-315-6/41	2850/1440	24	4.500	16	0,85/0,2	1,9/0,7	71/56	64/49	56
TJFT/2/4-355-6/41	2855/1450	40	6.500	18	1,1/0,25	2,4/0,85	74/59	67/52	76
TJFT/2/4-400-6/41	2900/1435	60	9.000	20	1,5/0,33	3,3/1,1	79/64	71/56	87
TJFT/2/4-450-6/41	2845/1420	85	12.075	21	2,2/0,45	4,6/1,4	82/67	74/59	128
TJFT/2/4-500-6/41	2890/1440	150	17.850	25	4,5/1	8,4/2,4	85/70	78/63	153
TJFT/2/4-560-6/41	2930/1470	239	25.200	28	8,3/1,7	15,4/4,2	88/73	81/66	212
TJFT/2/4-630-6/41	2950/1470	390	36.225	33	16/3,2	28,5/7	92/77	85/70	268

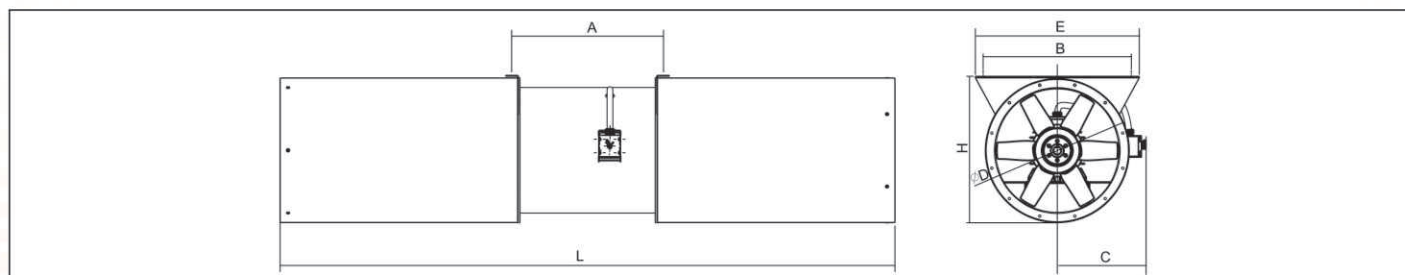
REVERSIBLE -1 speed 2 POLE -F200, F300, F400									
TJHT/2-315-6/41	2790	24	4.500	16	0,75	1,57	71	64	61
TJHT/2-355-6/41	2810	40	6.500	18	1,1	2,32	74	67	80
TJHT/2-400-6/41	2875	60	9.000	20	1,5	3,01	79	71	93
TJHT/2-450-6/41	2875	85	12.075	21	2,2	4,48	82	74	133
TJHT/2-500-6/41	2930	150	17.850	25	4	7,5	85	78	165
TJHT/2-560-6/41	2940	239	25.200	28	7,5	13,6	88	81	220
TJHT/2-630-6/41	2935	390	36.225	33	15	27	92	85	290

REVERSIBLE -2 speed 2/4 POLE - F200, F300, F400									
TJHT/2/4-315-6/41	2820/1400	24	4.500	16	0,8/0,2	1,91/0,6	71/56	64/49	61
TJHT/2/4-355-6/41	2810/1390	40	6.500	18	1,1/0,25	2,41/0,75	74/59	67/52	80
TJHT/2/4-400-6/41	2850/1460	60	9.000	20	1,5/0,37	3,54/1,25	79/64	71/56	94
TJHT/2/4-450-6/41	2870/1470	85	12.075	21	2,2/0,5	4,63/1,54	82/67	74/59	134
TJHT/2/4-500-6/41	2900/1470	150	17.850	25	4,4/1,1	8,59/2,79	85/70	78/63	166
TJHT/2/4-560-6/41	2930/14750	239	25.200	28	8/2	15,3/4,83	88/73	81/66	223
TJHT/2/4-630-6/41	2950/1470	390	36.225	33	16/4	30,5/9,57	92/77	85/70	311

* May vary depending on motor used

** Sound pressure at 1,5 m free field.

Dimensions (mm)



Model	A	B	C/I*	C/C**	D	E	H	L
315	410	205	284	235	386	480	397,5	1946
355	410	225	305	258	426	520	437,5	1946
400	450	250	330	282	487	580	498	1986
450	550	280	354	305	537	610	548	2488
500	550	313	383	330	595	675	612	2488
560	670	343	415	360	655	735	672	3010
630	770	378	452	422	725	835	743	3010

* Optional C/I with isolator.

** Standard C/C with terminal box.

Acoustic characteristics ///

Sound power levels, ref 10⁻¹² watts, are shown in Acoustic characteristics below.

2 pole

Form A	63	125	250	500	1000	2000	4000	8000	LwA
315	59	68	84	73	75	76	72	66	86
355	62	71	87	76	78	79	75	69	89
400	68	76	92	80	82	81	76	69	93
450	70	78	95	84	86	86	83	76	97
500	73	82	98	87	89	90	86	80	100
560	74	83	100	90	92	94	92	86	102
630	80	89	105	94	96	97	93	87	107

Form B	63	125	250	500	1000	2000	4000	8000	LwA
315	59	65	75	67	70	71	68	63	79
355	62	68	78	70	73	74	71	66	82
400	67	73	83	74	76	76	72	66	85
450	70	76	85	77	81	82	78	73	89
500	73	79	89	81	84	85	82	77	93
560	75	81	90	83	88	90	87	83	96
630	80	86	96	88	91	92	89	84	100

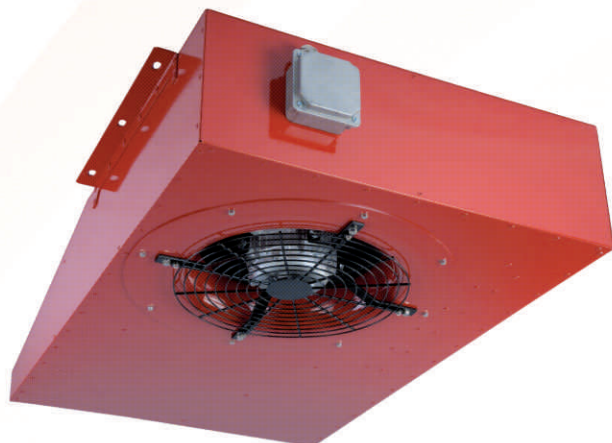
4 pole

Form A	63	125	250	500	1000	2000	4000	8000	LwA
315	44	53	69	58	60	61	57	51	71
355	47	56	72	61	63	64	60	54	74
400	53	61	77	65	67	66	61	54	78
450	55	63	80	69	71	71	68	61	82
500	58	67	83	72	74	75	71	65	85
560	59	68	85	75	77	79	77	71	87
630	65	74	90	79	81	82	78	72	92

Form B	63	125	250	500	1000	2000	4000	8000	LwA
315	44	50	60	52	55	56	53	48	64
355	47	53	63	55	58	59	56	51	67
400	52	58	68	59	61	61	57	51	70
450	55	61	70	62	66	67	63	58	74
500	58	64	74	66	69	70	67	62	78
560	60	66	75	68	73	75	72	68	81
630	65	71	81	73	76	77	74	69	85

CASED CENTRIFUGAL FANS

CENTRIFUGAL FAN IFHT



Officially approved
to EN12101-3
standard
(certificate number
0370-CPD-0673
0672)

Induction fans to induce air movement
in enclosed car parkings.

IFHT: certified F300-120 (CE marked)
in accordance with EN12101-3.

Galvanised sheet steel casing supplied
with two mountings.

Supplied with inlet guard.

External terminal box.

Motors

Available, depending upon the model:
- with three phase motors.

IFHT motors can be F300 120. IP55 Class H.

On request

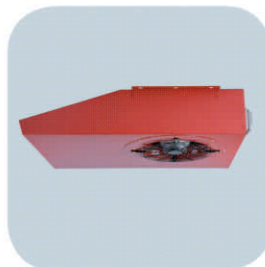
External painting.
Version with isolator.

Inlet guard



Air protection guard to
mount at the inlet side.

Low profile



Useful in low parkings.

External terminal box



External terminal box
for ease of connection.

A P P L I C A T I O N S



Parkings

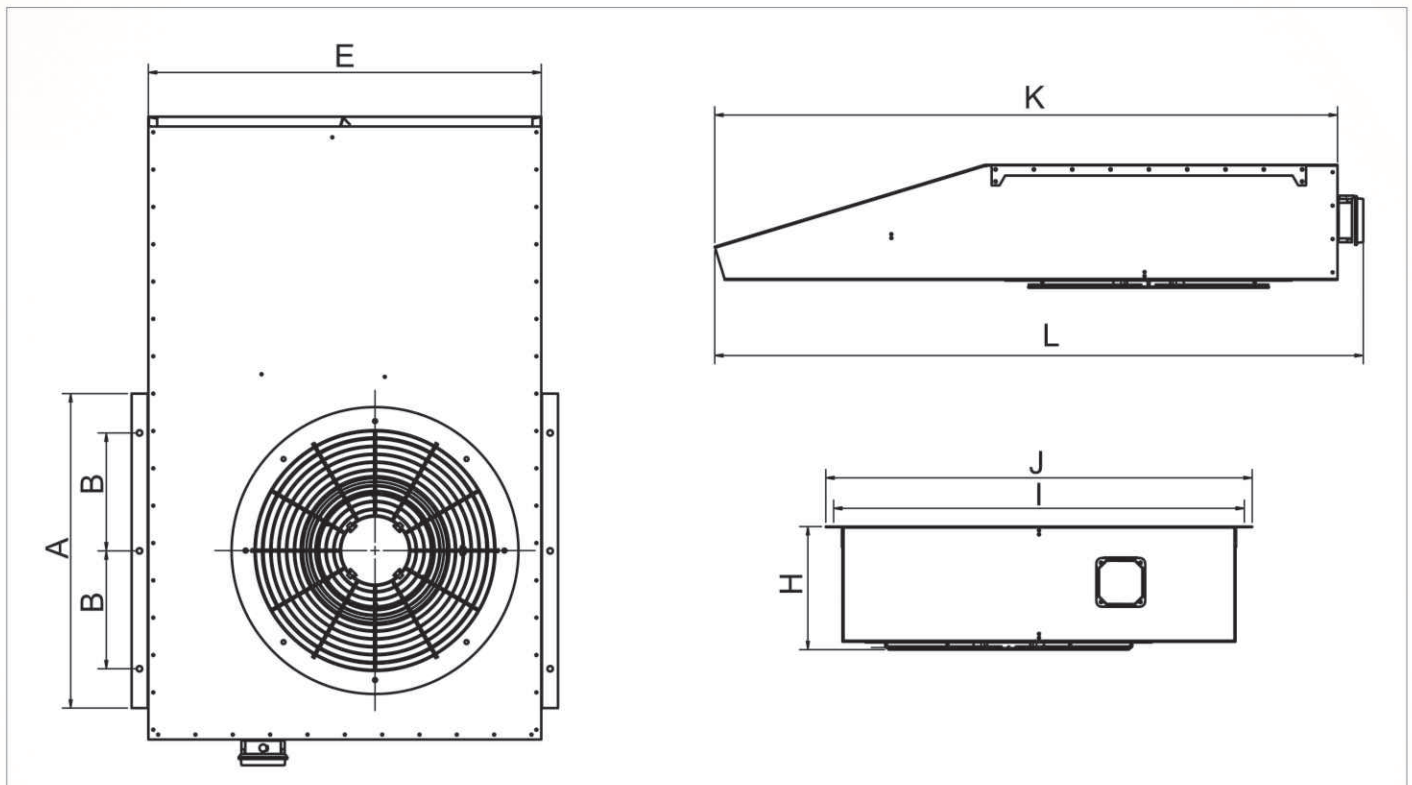


Technical characteristics

Before installation check that the product electrical characteristics listed on the data plate label (Voltage, power, frequency etc) match those of the intended electrical supply.

IFHT	Thrust (N)	Volume (m ³ /s)	Sound Power (Lwa)	Sound Pressure (Lpa) 3m	Rpm	Nomimal Power (Kw)	Full Load Current (A)	Starting Current (A)
50N	50	1,72	92	72	1405/700	1,5/0,25	3,46	20
75N	75	2,45	94	77	1410/700	2,2/0,37	5,19	30
100N	100	2,45	94	77	1410/700	2,2/0,37	5,19	30

Dimensions (mm)



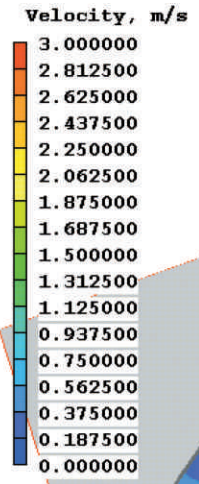
IFHT	A	B	E	H	I	J	K	L
50N	500	200	800	262	845	885	1234	1327
75N	800	300	1000	312	1045	1085	1600	1668
100N	800	300	1000	312	1045	1085	1600	1668

Installation pictures ///

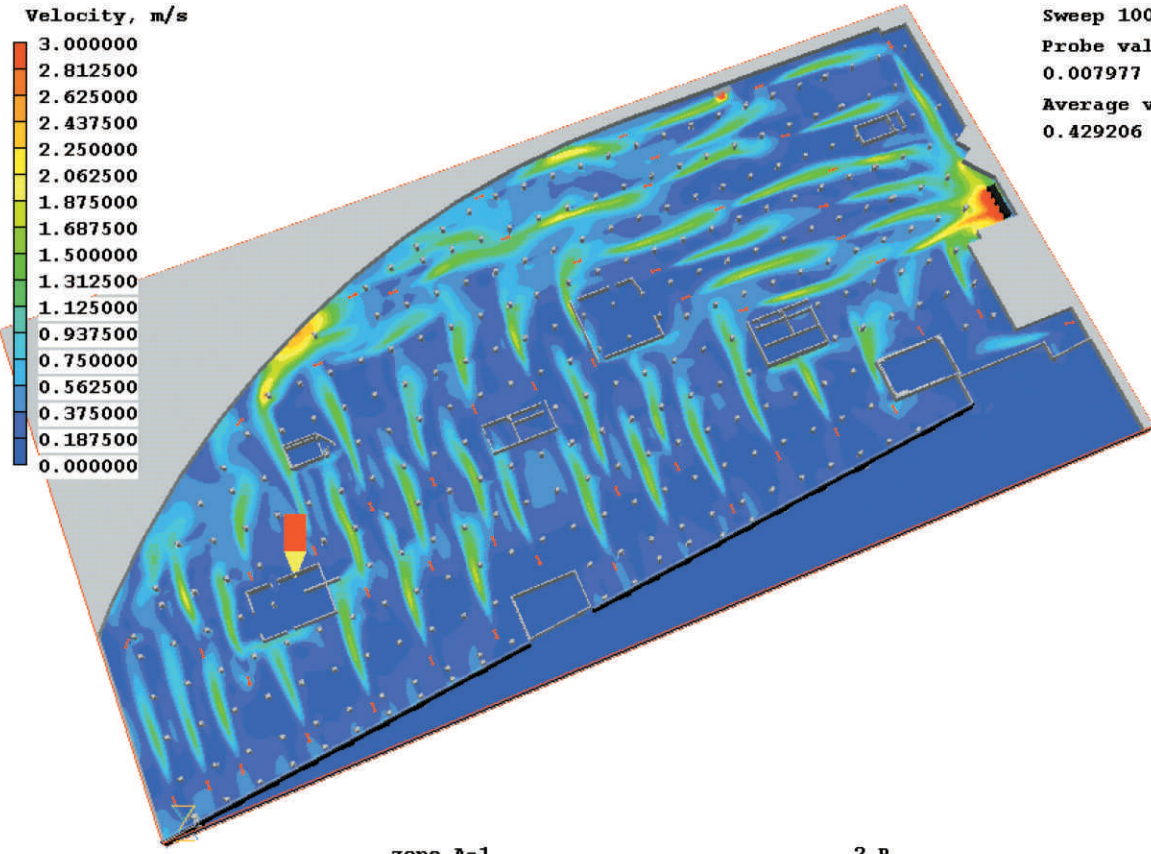


SPG Lanište - Jaruščica 9b, Zagreb





Sweep 1000
Probe value
0.007977
Average value
0.429206



zone A-1

2 P

Computational Fluid Design (CFD) tools can provide an insight into air and smoke movement within an enclosed parking area, and hence are an important aid for ventilation design. Soler & Palau engineers use a sophisticated workbench of CFD and allied software to assist with the design process. This facility is available to clients for parking projects.

extractors 400°C/2h

Summary of products suitable for smoke extract in case of a fire hazard, according to the Basic Building Regulation NBE-CP196 (Spain), and the european standard EN 12101-3.



THGT Series
Cylindrical Cased Axial Flow Fans



CHGT Series
Axial Flow Cabinet Fans



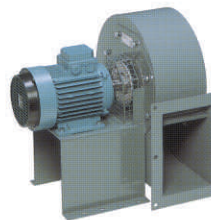
MAX-TEMP CTHB / CTHT Series
Roof Mounted Fans
Horizontal Discharge



MAX-TEMP CTVB / CTVT Series
Roof Mounted Fans
Vertical Discharge



CHMT Series
Centrifugal Direct Drive Fans



CRMT Series
Centrifugal Direct Drive Fans



BSP Series
Belt Driven Single Inlet Centrifugal Fans



CHAT Series
Acoustic Self-Cleaning Cabinet Fans



CVHT-H / CVHT-V Series
Belt Driven Cabinet Fans



KDTR Series
Belt Driven Cabinet Fans



NEW



DIRECT-AIR ILHT Series
In-Line Centrifugal 400°C/2h Rated Fans



CHMTC Series
Acoustic cabinets fans



Fans to carry air rated 400°C/2h - Installed outside the fire rated area



Fans to operate within areas rated 400°C/2h



Fans to operate within areas rated 300°C/2h



Fans to operate within areas rated 200°C/2h



• Ripoll - Spain



Logistic Centre - Spain



• S&P Spain



• S&P Portugal - Porto



• S&P Holland



• S&P France



• S&P VIM - Paris



• S&P VIM - Lyon



• Sits - Spain



• Madrid - Spain



• S&P Italy



• S&P Portugal - Lisbon



• S&P Belgium



• S&P England



• S&P-Kruger Singapore



Soler&Palau
Ventilation Group

- Factories
- ▲ R+D+I
- Assembly factories
- Subsidiaries
- Distributors



• France



• England



• Wisconsin - USA



• Florida - USA



• Mexico



• Brazil



• S&P Germany



• S&P Austria



• S&P Switzerland



• S&P Latvia



• S&P Canada



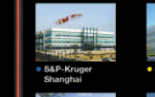
• S&P Australia



• S&P Romania



• S&P Lithuania



• S&P-Kruger Shanghai



• S&P-Kruger Beijing



• S&P-Kruger Guangzhou



• S&P-Kruger Wuhan



• S&P-Kruger Hong Kong



• S&P-Kruger Taiwan



• S&P-Kruger Thailand



• S&P-Kruger Malaysia



• S&P-Kruger Australia



• S&P-Kruger Indonesia



• S&P-Kruger India



• S&P-Kruger Vietnam



• S&P-Kruger Philippines



• S&P-Kruger Korea



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