



MP3energy SHR

Counterflow Heat Recovery Units
Air flow from 500 to 15000 m³/h

MP3energy

Heat recovery units



SHR heat recovery units

High Efficiency double deck Heat Recovery unit for applications where high airflows are needed. Available with counterflow or enthalpic wheel heat exchanger.

Construction – Frame made from extruded Anticorodal63 aluminium bars, sandwich panels 48mm thick, galvanized steel inner skin, prepainted steel sheet external. 60mm panels available as option.

Heat recovery – Eurovent certified.

SHRC - High efficiency counterflow heat exchanger

SHRR - High efficiency enthalpic thermal wheel.

Filters - Fresh air intake: standard compact filter, ePM10 50% (G4 EN 779) efficiency and post filtration ePM1 55% (F7 EN 779). Return air intake: ePM10 55% (M5 EN 779) efficiency.

Fans – EC motors plug fans

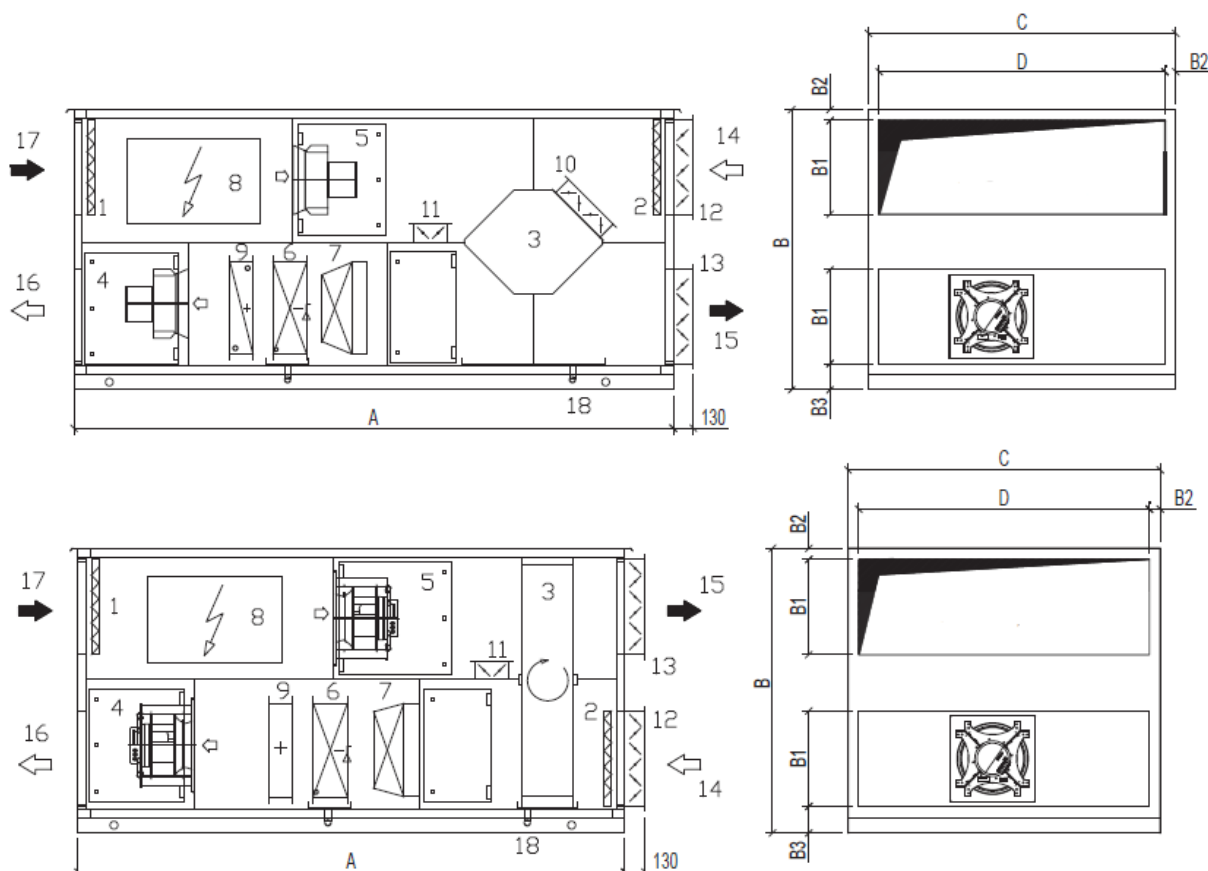
Control – the units are plug and play, factory equipped with: motorized bypass section with internal temperature sensors, automatic free cooling, automatic defrost, management of 0-10V actuator for water heaters and coolers, management of electric heaters. Pressure sensors for filter monitoring. humidifiers control available, Electric cabinet with control panel onboard included. Remote control panel available as optional.

Sanitization - All the models can be equipped as option with air ionization system MP3 oXy, tested in Padua University and approved by TUV Hessen.

SHRC- a- b- c- d
SHRR-

a	Size
15	400 m ³ /h
08	750 m ³ /h
10	1000 m ³ /h
15	1500 m ³ /h
20	2000 m ³ /h
32	3200 m ³ /h
40	3800 m ³ /h
50	4700 m ³ /h
b	Control
E	Evolution
c	Flow configuration
1	Configuration 1
2	Configuration 2
d	Heat recovery efficiency
8	high efficiency heat recovery





KEY

1	Return air filter	10	By-pass damper
2	Fresh air pre-filter	11	Recirculation damper (optional)
3	Heat recovery	12	Fresh air damper (optional)
4	Supply fan	13	Exhaust air damper (optional)
5	Exhaust fan	14	Fresh air
6	4-rows coil (optional)	15	Exhaust air
7	Supply air filter	16	Supply air
8	Built-in electric cabinet	17	Return air
9	2-rows coil (optional)	18	Drain 1" M

SHRC – 48mm panels – SIZES:

SHRC – 60mm panels – SIZES:

		15	35	55	70	90	100	130	150	15	35	55	70	90	100	130	150
A	mm	3350	3650	3900	3900	4350	4350	4500	4800	3370	3670	3920	3920	4370	4370	4520	4820
B	mm	1470	1820	1820	1820	2100	2100	2100	2200	1490	1840	1840	1840	2120	2120	2120	2220
B1	mm	410	510	610	610	610	610	610	610	410	510	610	610	610	610	610	610
B2	mm	70	70	70	70	70	70	70	60	60	60	60	60	60	60	60	60
B3	mm	170	170	170	170	170	170	170	160	160	160	160	160	160	160	160	160
C	mm	1210	1510	2000	2000	2190	2190	2320	2320	1230	1530	2020	2020	2210	2210	2340	2340
D	mm	1070	1370	1860	1860	2050	2050	2180	2180	1070	1370	1860	1860	2050	2050	2180	2280
Weight	kg	750	1020	1500	1580	1900	2000	2240	2500	760	1030	1510	1590	1920	2020	2260	2520

SHRR – 48mm panels – SIZES:

SHRR – 60mm panels – SIZES:

		15	35	55	70	90	130	150	15	35	55	70	90	130	150
A	mm	3350	3650	3900	3900	4350	4500	4800	3370	3670	3920	3920	4370	4520	4820
B	mm	1470	1820	1820	1820	2100	2100	2200	1490	1840	1840	1840	2120	2120	2220
B1	mm	410	510	610	610	610	610	610	410	510	610	610	610	610	610
B2	mm	70	70	70	70	70	70	60	60	60	60	60	60	60	60
B3	mm	170	170	170	170	170	170	160	160	160	160	160	160	160	160
C	mm	1210	1510	2000	2000	2190	2320	2320	1230	1530	2020	2020	2210	2340	2340
D	mm	1070	1370	1860	1860	2050	2180	2180	1070	1370	1860	1860	2050	2180	2280
Weight	kg	750	1020	1500	1580	1900	2240	2500	760	1030	1510	1590	1920	2260	2520

MP3 oXy SANITIZATION

MP3 oXy performs a ionization of the air freeing negative oxygen ions. The oXy system reduces the bacteria of 80 to 85%. This percentage can be brought up to 99% further powering the sanitization system.

The technology is based on a special condenser made with a quartz cylinder and a special metallic net, supplied by a low voltage and low power alternate current. The system frees negative oxygen ions and other positive ions; it has a high oxidation power.



The constant use of MP3 oXy with Bioxygen technology guarantees a big improvement of the internal air quality, acting particularly on:

- ✓ Chemical composition
- ✓ Bacteria activity
- ✓ Electrostatic balance
- ✓ High reduction of fine dust
- ✓ High reduction of smells and odours

Improving the health of the people through:

- ✓ Reduction of infection risk caused by bacteria proliferation
- ✓ Improvement of the respiratory system and consequent reduction of diseases
- ✓ Reduction of anxiety and stress

The system brings benefits also to the room with:

- ✓ Elimination of moulds avoiding damages to the ceiling and walls
- ✓ Elimination of smells and odours without the need of using chemical products that affect the integrity of items and the health of the occupants
- ✓ High reduction of mites
- ✓ Elimination of electrostatic charge

Before Prima	Decrease in microbial contents with Bioxygen® Abbattimento del contenuto microbico con Bioxygen®		After Dopo
	Staphylococcus aureus	<div>decrease % abbattimento %</div> <div>in 3 hours' time / tempo 3 ore: - 70,90</div> <div>in 8 hours' time / tempo 8 ore: - 97,02</div> <div>in 24 hours' time / tempo 24 ore: - 98,80</div>	
	Escherichia coli	<div>decrease % abbattimento %</div> <div>in 3 hours' time / tempo 3 ore: - 84,07</div> <div>in 8 hours' time / tempo 8 ore: - 89,77</div> <div>in 24 hours' time / tempo 24 ore: - 99,53</div>	
	Saccaromices cerevisiae	<div>decrease % abbattimento %</div> <div>in 3 hours' time / tempo 3 ore: - 97,71</div> <div>in 8 hours' time / tempo 8 ore: - 98,14</div> <div>in 24 hours' time / tempo 24 ore: - 99,05</div>	
	Legionella	<div>UFC / 0,1 ml</div> <div>negative control / controllo negativo: 0</div> <div>positive control / controllo positivo: 191</div> <div>after 5 / dopo 5': 180</div> <div>after 15 / dopo 15': 3</div> <div>after 30 / dopo 30': 0</div> <div>after 60 / dopo 60': 0</div>	

SHRC - HEAT RECOVERY PERFORMANCE

SIZE 15

RISCALDAMENTO / HEATING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
18	50	-10	80	15,1 / 12,0	89.8
		-7		14,8 / 16,0	87.1
		-5		14,6 / 19,0	85.3
		0		14,6 / 30,0	80.9
20	50	-10	80	17,3 / 11,0	90.9
		-7		16,9 / 14,0	88.7
		-5		16,6 / 17,0	86.5
		0		16,5 / 26,0	82.5
22	50	-10	80	19,1 / 9,0	90.9
		-7		19,2 / 12,0	90.3
		-5		18,9 / 15,0	88.5
		0		18,5 / 23,0	84.1

RAFFRESCAMENTO / COOLING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
24	50	29	50	25,1 / 63,0	78.2
		32		25,7 / 72,0	78.2
		35		26,4 / 82,0	78.1
26	50	29	50	26,6 / 58,0	78.2
		32		27,3 / 66,0	78.2
		35		28,0 / 75,0	78.1
28	50	29	50	28,2 / 52,0	78.2
		32		28,9 / 60,0	78.2
		35		29,5 / 68,0	78.1

(1) Efficienza di recupero in temperatura

(1) Recovery temperature efficiency

SIZE 35

RISCALDAMENTO / HEATING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
18	50	-10	80	15,1 / 12,0	89.8
		-7		14,8 / 16,0	87.1
		-5		14,6 / 19,0	85.3
		0		14,5 / 30,0	80.7
20	50	-10	80	17,3 / 11,0	91
		-7		16,9 / 14,0	88.7
		-5		16,7 / 17,0	86.9
		0		16,5 / 26,0	82.3
22	50	-10	80	19,1 / 9,0	91
		-7		19,2 / 12,0	90.4
		-5		18,9 / 15,0	88.6
		0		18,5 / 23,0	84

RAFFRESCAMENTO / COOLING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
24	50	29	50	25,1 / 63,0	77.4
		32		25,8 / 72,0	77.4
		35		26,5 / 81,0	77.3
26	50	29	50	26,7 / 57,0	77.4
		32		27,4 / 66,0	77.4
		35		28,0 / 74,0	77.3
28	50	29	50	28,2 / 52,0	77.4
		32		28,9 / 60,0	77.4
		35		29,6 / 68,0	77.3

(1) Efficienza di recupero in temperatura

(1) Recovery temperature efficiency

SIZE 55

RISCALDAMENTO / HEATING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
18	50	-10	80	14,6 / 13,0	87.9
		-7		14,3 / 17,0	85.1
		-5		14,1 / 20,0	83.2
		0		14,1 / 30,0	78.5
20	50	-10	80	16,7 / 11,0	89.1
		-7		16,4 / 15,0	86.8
		-5		16,2 / 17,0	84.9
		0		16,0 / 27,0	80.2
22	50	-10	80	18,5 / 10,0	89.1
		-7		18,7 / 13,0	88.5
		-5		18,4 / 15,0	86.6
		0		18,0 / 24,0	81.9

RAFFRESCAMENTO / COOLING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
24	50	29	50	25,2 / 63,0	75.4
		32		26,0 / 71,0	75.4
		35		26,7 / 80,0	75.3
26	50	29	50	26,7 / 57,0	75.4
		32		27,5 / 65,0	75.4
		35		28,2 / 74,0	75.3
28	50	29	50	28,3 / 52,0	75.4
		32		29,0 / 60,0	75.4
		35		29,7 / 68,0	75.3

(1) Efficienza di recupero in temperatura

(1) Recovery temperature efficiency

SIZE 70

RISCALDAMENTO / HEATING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
18	50	-10	80	14,7 / 12,0	88.3
		-7		14,4 / 17,0	85.5
		-5		14,2 / 20,0	83.5
		0		14,2 / 30,0	78.8
20	50	-10	80	16,8 / 11,0	89.4
		-7		16,5 / 14,0	87.2
		-5		16,3 / 17,0	85.2
		0		16,1 / 27,0	80.6
22	50	-10	80	18,6 / 10,0	89.4
		-7		18,8 / 13,0	88.9
		-5		18,5 / 15,0	86.9
		0		18,1 / 24,0	82.3

RAFFRESCAMENTO / COOLING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
24	50	29	50	25,2 / 63,0	75.6
		32		25,9 / 71,0	75.6
		35		26,7 / 81,0	75.5
26	50	29	50	26,7 / 57,0	75.6
		32		27,5 / 65,0	75.6
		35		28,2 / 74,0	75.5
28	50	29	50	28,2 / 52,0	75.6
		32		29,0 / 60,0	75.6
		35		29,7 / 68,0	75.5

(1) Efficienza di recupero in temperatura

(1) Recovery temperature efficiency

SIZE 90

RISCALDAMENTO / HEATING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
18	50	-10	80	14,9 / 12,0	88.9
		-7		14,5 / 16,0	86
		-5		14,3 / 20,0	84.1
		0		14,3 / 30,0	79.4
20	50	-10	80	17,0 / 11,0	90
		-7		16,7 / 14,0	87.7
		-5		16,4 / 17,0	85.8
		0		16,2 / 27,0	81.1
22	50	-10	80	18,8 / 10,0	90
		-7		18,9 / 12,0	89.4
		-5		18,6 / 15,0	87.5
		0		18,2 / 23,0	82.8

RAFFRESCAMENTO / COOLING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
24	50	29	50	25,2 / 63,0	76
		32		25,9 / 71,0	75.9
		35		26,6 / 81,0	75.9
26	50	29	50	26,7 / 57,0	76
		32		27,4 / 65,0	75.9
		35		28,2 / 74,0	75.9
28	50	29	50	28,2 / 52,0	76
		32		29,0 / 60,0	75.9
		35		29,7 / 68,0	75.9

(1) Efficienza di recupero in temperatura

(1) Recovery temperature efficiency

SIZE 100

RISCALDAMENTO / HEATING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
18	50	-10	80	15,1 / 12,0	89.7
		-7		14,8 / 16,0	87
		-5		14,6 / 19,0	85.2
		0		14,5 / 30,0	80.6
20	50	-10	80	17,3 / 11,0	90.9
		-7		16,9 / 14,0	88.6
		-5		16,7 / 17,0	86.8
		0		16,5 / 26,0	82.3
22	50	-10	80	19,1 / 9,0	90.9
		-7		19,2 / 12,0	90.3
		-5		18,9 / 15,0	88.5
		0		18,5 / 23,0	83.9

RAFFRESCAMENTO / COOLING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
24	50	29	50	25,1 / 63,0	77.7
		32		25,8 / 72,0	77.6
		35		26,5 / 82,0	77.5
26	50	29	50	26,7 / 57,0	77.7
		32		27,3 / 66,0	77.6
		35		28,0 / 74,0	77.5
28	50	29	50	28,2 / 52,0	77.7
		32		28,9 / 60,0	77.6
		35		29,6 / 68,0	77.5

(1) Efficienza di recupero in temperatura

(1) Recovery temperature efficiency

SIZE 130

RISCALDAMENTO / HEATING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
18	50	-10	80	15,0 / 12,0	89.2
		-7		14,6 / 16,0	86.4
		-5		14,4 / 20,0	84.4
		0		14,3 / 30,0	79.6
20	50	-10	80	17,1 / 11,0	90.4
		-7		16,8 / 14,0	88.1
		-5		16,5 / 17,0	86.1
		0		16,3 / 27,0	81.4
22	50	-10	80	18,9 / 10,0	90.4
		-7		19,0 / 12,0	89.8
		-5		18,7 / 15,0	87.9
		0		18,3 / 23,0	83.1

RAFFRESCAMENTO / COOLING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
24	50	29	50	25,2 / 63,0	75.8
		32		25,9 / 71,0	75.8
		35		26,7 / 81,0	75.7
26	50	29	50	26,7 / 57,0	75.8
		32		27,4 / 65,0	75.8
		35		28,2 / 74,0	75.7
28	50	29	50	28,2 / 52,0	75.8
		32		29,0 / 60,0	75.8
		35		29,7 / 68,0	75.7

(1) Efficienza di recupero in temperatura

(1) Recovery temperature efficiency

SIZE 150

RISCALDAMENTO / HEATING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
18	50	-10	80	15,2 / 12,0	89.9
		-7		14,8 / 16,0	87
		-5		14,6 / 19,0	85.2
		0		14,5 / 30,0	80.4
20	50	-10	80	17,3 / 11,0	91
		-7		16,9 / 14,0	88.7
		-5		16,7 / 17,0	86.9
		0		16,4 / 26,0	82.1
22	50	-10	80	19,1 / 9,0	91
		-7		19,2 / 12,0	90.4
		-5		18,9 / 15,0	88.6
		0		18,4 / 23,0	83.8

RAFFRESCAMENTO / COOLING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
24	50	29	50	25,2 / 63,0	76.4
		32		25,9 / 71,0	76.3
		35		26,6 / 81,0	76.3
26	50	29	50	26,7 / 57,0	76.4
		32		27,4 / 65,0	76.3
		35		28,1 / 74,0	76.3
28	50	29	50	28,2 / 52,0	76.4
		32		28,9 / 60,0	76.3
		35		29,7 / 68,0	76.3

(1) Efficienza di recupero in temperatura

(1) Recovery temperature efficiency

SHRC - HEAT RECOVERY PERFORMANCE

SIZE 15

RISCALDAMENTO / HEATING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
18	50	-10	80	11,6 / 66,0	77.2
		-7		12,3 / 64,0	77.2
		-5		12,8 / 62,0	77.3
		0		13,9 / 59,0	77.3
20	50	-10	80	13,2 / 68,0	77.2
		-7		13,9 / 65,0	77.3
		-5		14,1 / 64,0	76.4
		0		15,5 / 60,0	77.4
22	50	-10	80	14,7 / 69,0	77.3
		-7		15,4 / 67,0	77.4
		-5		15,9 / 65,0	77.4
		0		17,0 / 61,0	77.5

RAFFRESCAMENTO / COOLING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
24	50	29	50	25,1 / 51,0	77.8
		32		25,8 / 52,0	77.8
		35		26,6 / 52,0	76
26	50	29	50	26,7 / 51,0	77.9
		32		28,2 / 52,0	76.6
		35		28,2 / 52,0	75.5
28	50	29	50	28,2 / 50,0	78
		32		28,9 / 51,0	78
		35		29,5 / 52,0	77.9

(1) Efficienza di recupero in temperatura

(1) Recovery temperature efficiency

SIZE 35

RISCALDAMENTO / HEATING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
18	50	-10	80	11,4 / 67,0	76.3
		-7		12,1 / 64,0	76.4
		-5		12,6 / 63,0	76.4
		0		13,8 / 59,0	76.5
20	50	-10	80	12,9 / 68,0	76.4
		-7		13,6 / 65,0	76.4
		-5		13,9 / 64,0	75.5
		0		15,3 / 60,0	76.5
22	50	-10	80	14,5 / 69,0	76.4
		-7		15,2 / 67,0	76.5
		-5		15,7 / 65,0	76.5
		0		16,9 / 61,0	76.6

RAFFRESCAMENTO / COOLING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
24	50	29	50	25,1 / 52,0	77
		32		25,8 / 52,0	77
		35		26,7 / 53,0	75.2
26	50	29	50	26,7 / 51,0	77.1
		32		28,3 / 52,0	75.6
		35		28,3 / 52,0	74.7
28	50	29	50	28,2 / 50,0	77.2
		32		28,9 / 51,0	77.1
		35		29,6 / 52,0	77.1

(1) Efficienza di recupero in temperatura

(1) Recovery temperature efficiency

SIZE 55

RISCALDAMENTO / HEATING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
18	50	-10	80	11,2 / 67,0	75.8
		-7		12,0 / 65,0	75.9
		-5		12,5 / 63,0	75.9
		0		13,7 / 60,0	76
20	50	-10	80	12,8 / 69,0	75.9
		-7		13,5 / 66,0	76.0
		-5		13,8 / 64,0	75.0
		0		15,2 / 61,0	76.1
22	50	-10	80	14,3 / 70,0	76
		-7		15,1 / 67,0	76
		-5		15,5 / 66,0	76.1
		0		16,8 / 62,0	76.2

RAFFRESCAMENTO / COOLING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
24	50	29	50	25,2 / 51,0	76.6
		32		25,9 / 52,0	76.6
		35		26,8 / 52,0	74.8
26	50	29	50	26,7 / 51,0	76.7
		32		28,4 / 52,0	75.2
		35		28,3 / 52,0	74.4
28	50	29	50	28,2 / 50,0	76.8
		32		28,9 / 51,0	76.8
		35		29,6 / 52,0	76.7

(1) Efficienza di recupero in temperatura

(1) Recovery temperature efficiency

SIZE 70

RISCALDAMENTO / HEATING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
18	50	-10	80	11,1 / 67,0	75.3
		-7		11,8 / 64,0	75.3
		-5		12,3 / 63,0	75.4
		0		13,6 / 59,0	75.5
20	50	-10	80	12,6 / 68,0	75.3
		-7		13,4 / 66,0	75.4
		-5		13,6 / 64,0	74.4
		0		15,1 / 60,0	75.5
22	50	-10	80	14,1 / 70,0	75.4
		-7		14,9 / 67,0	75.5
		-5		15,4 / 65,0	75.5
		0		16,6 / 62,0	75.6

RAFFRESCAMENTO / COOLING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
24	50	29	50	25,2 / 52,0	76
		32		25,9 / 52,0	76
		35		26,8 / 53,0	74.3
26	50	29	50	26,7 / 51,0	76.1
		32		28,5 / 52,0	74.6
		35		28,4 / 53,0	73.8
28	50	29	50	28,2 / 50,0	76.2
		32		29,0 / 52,0	76.2
		35		29,7 / 52,0	76.1

(1) Efficienza di recupero in temperatura

(1) Recovery temperature efficiency

SIZE 90

RISCALDAMENTO / HEATING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
18	50	-10	80	11,2 / 67,0	75.7
		-7		11,9 / 64,0	75.7
		-5		12,4 / 63,0	75.8
		0		13,7 / 59,0	75.8
20	50	-10	80	12,7 / 69,0	75.7
		-7		13,5 / 66,0	75.8
		-5		13,7 / 64,0	74.9
		0		15,2 / 61,0	75.9
22	50	-10	80	14,3 / 70,0	75.8
		-7		15,0 / 67,0	75.9
		-5		15,5 / 65,0	75.9
		0		16,7 / 62,0	76

RAFFRESCAMENTO / COOLING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
24	50	29	50	25,2 / 52,0	76.4
		32		25,9 / 52,0	76.4
		35		26,8 / 53,0	74.6
26	50	29	50	26,7 / 51,0	76.5
		32		28,4 / 52,0	75.1
		35		28,3 / 52,0	74.1
28	50	29	50	28,2 / 50,0	76.6
		32		28,9 / 51,0	76.5
		35		29,6 / 52,0	76.5

(1) Efficienza di recupero in temperatura

(1) Recovery temperature efficiency

SIZE 130

RISCALDAMENTO / HEATING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
18	50	-10	80	10,9 / 66,0	74.7
		-7		11,7 / 64,0	74.8
		-5		12,2 / 62,0	74.8
		0		13,5 / 59,0	74.9
20	50	-10	80	12,4 / 68,0	74.8
		-7		13,2 / 65,0	74.8
		-5		13,5 / 63,0	74.0
		0		15,0 / 60,0	75.0
22	50	-10	80	13,9 / 69,0	74.8
		-7		14,7 / 66,0	74.9
		-5		15,2 / 65,0	74.9
		0		16,5 / 61,0	75.0

RAFFRESCAMENTO / COOLING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
24	50	29	50	25,1 / 51,0	77.8
		32		25,8 / 52,0	77.8
		35		26,6 / 52,0	76
26	50	29	50	26,7 / 51,0	77.9
		32		28,2 / 52,0	76.6
		35		28,2 / 52,0	75.5
28	50	29	50	28,2 / 50,0	78
		32		28,9 / 51,0	78
		35		29,5 / 52,0	77.9

(1) Efficienza di recupero in temperatura

(1) Recovery temperature efficiency

SIZE 150

RISCALDAMENTO / HEATING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
18	50	-10	80	11,2 / 65,0	75.6
		-7		11,9 / 63,0	75.7
		-5		12,4 / 61,0	75.7
		0		13,6 / 58,0	75.8
20	50	-10	80	12,7 / 66,0	75.7
		-7		13,5 / 64,0	75.8
		-5		14,1 / 62,0	76.5
		0		15,2 / 59,0	75.9
22	50	-10	80	14,2 / 68,0	75.8
		-7		15,0 / 65,0	75.8
		-5		15,5 / 64,0	75.9
		0		16,7 / 60,0	76

RAFFRESCAMENTO / COOLING					
Aria ambiente / Room air		Aria rinnovo / Fresh air		Aria trattata / Supply air	Efficienza / Efficiency ⁽¹⁾
°C	%	°C	%	°C / %	%
24	50	29	50	25,2 / 53,0	76.4
		32		25,9 / 54,0	76.3
		35		26,8 / 55,0	74.6
26	50	29	50	26,7 / 52,0	76.4
		32		28,2 / 53,0	75.3
		35		28,3 / 54,0	74.1
28	50	29	50	28,2 / 51,0	76.5
		32		28,9 / 52,0	76.5
		35		29,6 / 54,0	76.5

(1) Efficienza di recupero in temperatura

(1) Recovery temperature efficiency

SOUND POWER LEVELS L_w(A) AT NOMINAL AIRFLOW

SIZE 04

	Potenza sonora L _w per frequenza di centro banda Sound power levels L _w at center band frequencies									Lw globale Total L _w
	Hz	63	125	250	500	1000	2000	4000	8000	
Canale di mandata / Supply duct	dB(A)	47.7	56.9	63.7	66.6	64.8	60.2	58.0	53.9	70.9
Canale di espulsione / Exhaust duct	dB(A)	48.0	57.1	63.8	67.0	65.1	60.4	58.4	54.9	71.2
Esterno involucro / Outside the casing	dB(A)	42.9	45.7	52.0	52.5	50.4	45.5	26.9	17.6	57.3

SIZE 08

	Potenza sonora L _w per frequenza di centro banda Sound power levels L _w at center band frequencies									Lw globale Total L _w
	Hz	63	125	250	500	1000	2000	4000	8000	
Canale di mandata / Supply duct	dB(A)	50.2	59.4	66.2	69.1	67.3	62.7	60.5	56.4	73.4
Canale di espulsione / Exhaust duct	dB(A)	50.5	59.6	66.3	69.5	67.6	62.9	60.9	57.4	73.7
Esterno involucro / Outside the casing	dB(A)	45.4	48.2	54.5	55.0	52.9	48.0	29.4	20.1	59.8

SIZE 10

	Potenza sonora L _w per frequenza di centro banda Sound power levels L _w at center band frequencies									Lw globale Total L _w
	Hz	63	125	250	500	1000	2000	4000	8000	
Canale di mandata / Supply duct	dB(A)	41.8	57.9	67.4	64.8	67.0	65.2	60.0	50.9	72.7
Canale di espulsione / Exhaust duct	dB(A)	41.8	57.9	67.4	64.8	67.0	65.2	60.0	50.9	72.7
Esterno involucro / Outside the casing	dB(A)	36.8	46.6	55.6	50.5	52.4	50.4	28.7	14.1	59.1

SIZE 15

	Potenza sonora L _w per frequenza di centro banda Sound power levels L _w at center band frequencies									Lw globale Total L _w
	Hz	63	125	250	500	1000	2000	4000	8000	
Canale di mandata / Supply duct	dB(A)	33.8	59.9	68.4	65.8	69.0	67.2	62.0	53.9	74.3
Canale di espulsione / Exhaust duct	dB(A)	33.8	59.9	68.4	65.8	69.0	67.2	62.0	53.9	74.3
Esterno involucro / Outside the casing	dB(A)	28.8	48.6	56.6	51.5	54.4	52.4	30.7	17.1	60.5

SIZE 20

	Potenza sonora L _w per frequenza di centro banda Sound power levels L _w at center band frequencies									Lw globale Total L _w
	Hz	63	125	250	500	1000	2000	4000	8000	
Canale di mandata / Supply duct	dB(A)	35.8	58.9	67.4	62.8	66.0	67.2	59.0	49.9	72.6
Canale di espulsione / Exhaust duct	dB(A)	36.0	60.7	67.4	63.1	66.1	67.1	60.0	50.9	72.8
Esterno involucro / Outside the casing	dB(A)	30.9	48.6	55.6	48.7	51.5	52.4	28.2	13.6	59.2

SIZE 32

	Potenza sonora L _w per frequenza di centro banda Sound power levels L _w at center band frequencies									Lw globale Total L _w
	Hz	63	125	250	500	1000	2000	4000	8000	
Canale di mandata / Supply duct	dB(A)	36.8	62.9	74.4	65.8	68.0	68.2	63.0	54.9	76.9
Canale di espulsione / Exhaust duct	dB(A)	37.3	63.4	74.7	66.2	68.4	68.4	63.6	55.7	77.2
Esterno involucro / Outside the casing	dB(A)	32.1	51.9	62.8	51.7	53.6	53.5	32.0	18.5	64.2

SIZE 40

	Potenza sonora Lw per frequenza di centro banda Sound power levels Lw at center band frequencies									Lw globale Total Lw
	Hz	63	125	250	500	1000	2000	4000	8000	
Canale di mandata / Supply duct	dB(A)	40.8	66.4	73.4	69.8	72.0	72.2	69.0	60.9	78.9
Canale di espulsione / Exhaust duct	dB(A)	40.8	67.0	74.4	70.3	72.6	72.5	69.0	59.9	79.5
Esterno involucro / Outside the casing	dB(A)	35.8	55.4	62.1	55.8	57.7	57.6	37.7	23.6	65.5

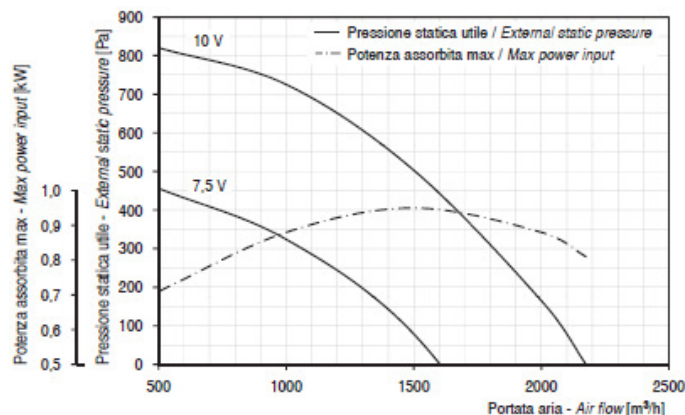
SIZE 50

	Potenza sonora Lw per frequenza di centro banda Sound power levels Lw at center band frequencies									Lw globale Total Lw
	Hz	63	125	250	500	1000	2000	4000	8000	
Canale di mandata / Supply duct	dB(A)	44.6	70.7	75.6	71.8	74.5	76.1	73.0	64.9	81.9
Canale di espulsione / Exhaust duct	dB(A)	44.8	71.5	76.4	71.8	75.0	76.2	73.2	65.0	82.3
Esterno involucro / Outside the casing	dB(A)	39.7	59.8	64.2	57.5	60.2	61.4	41.8	28.2	68.2

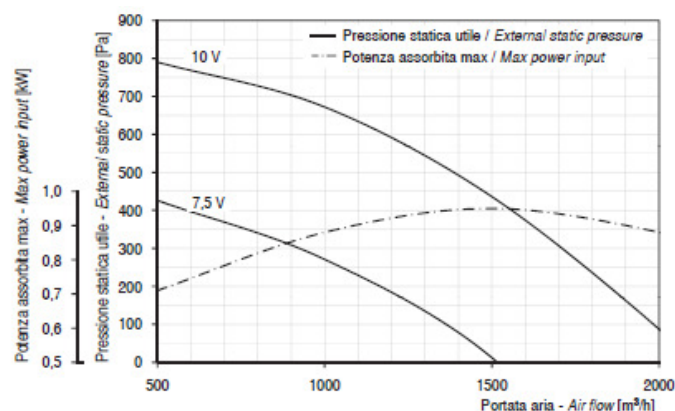
FAN CURVES

SIZE 15

SHRC

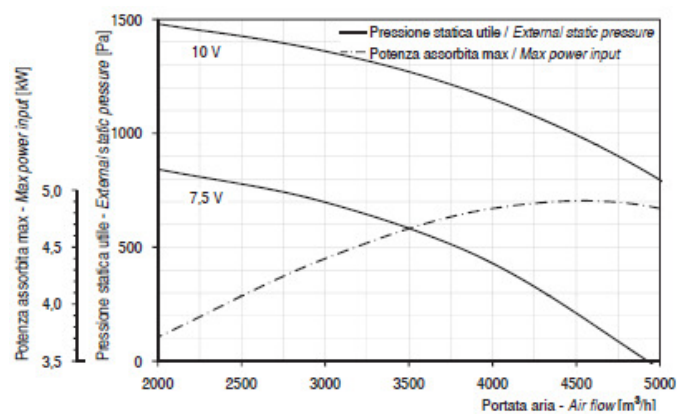


SHRR

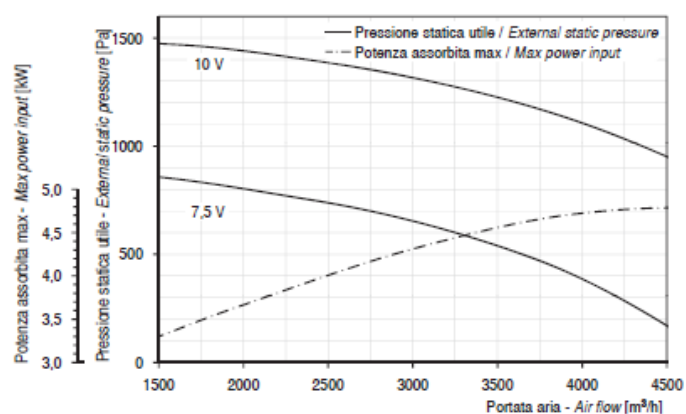


SIZE 35

SHRC

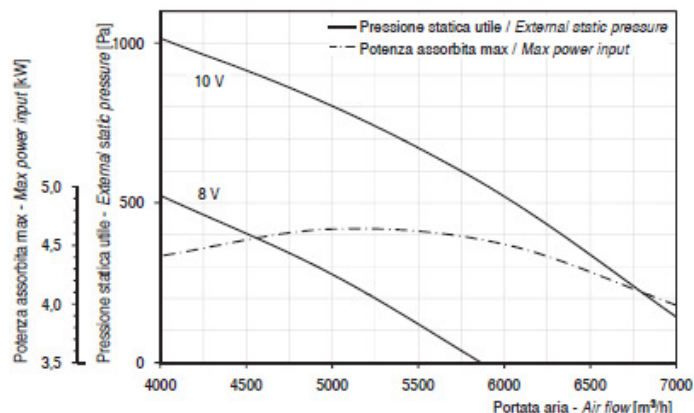


SHRR

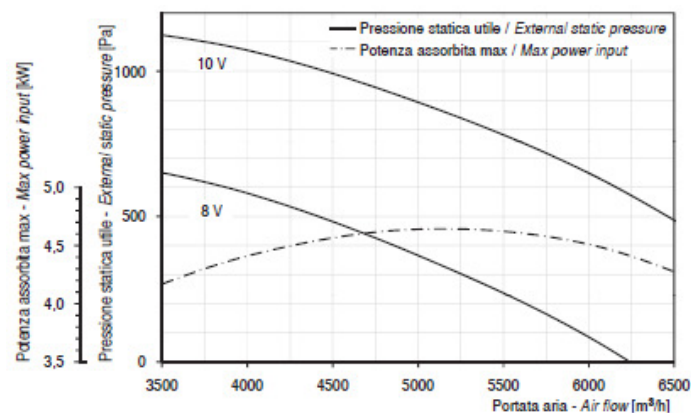


SIZE 55

SHRC

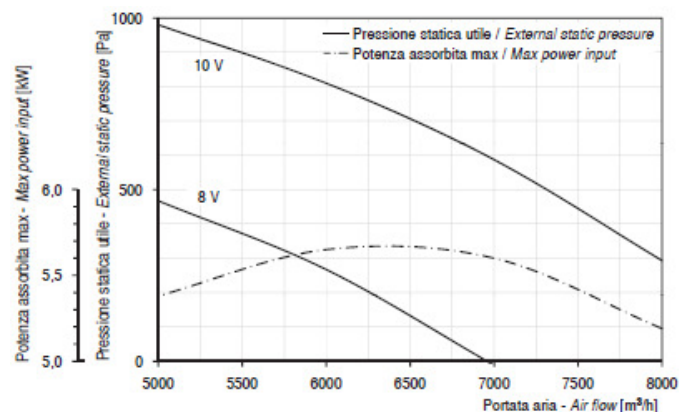


SHRR

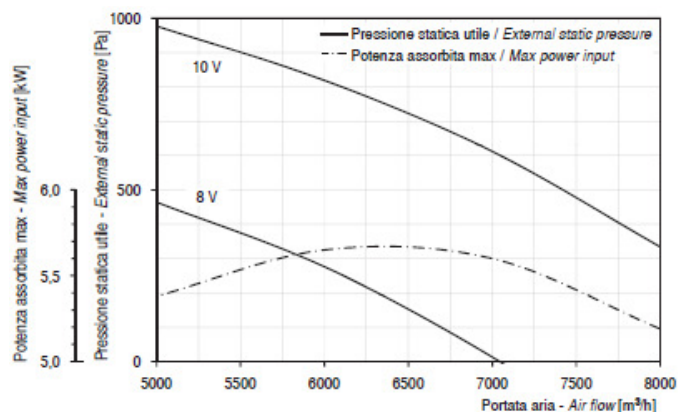


SIZE 70

SHRC

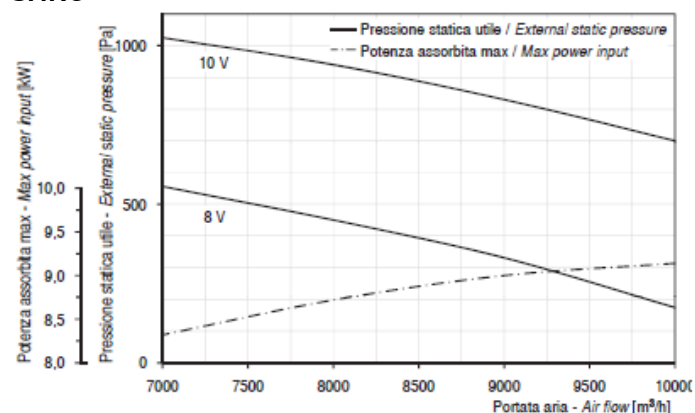


SHRR

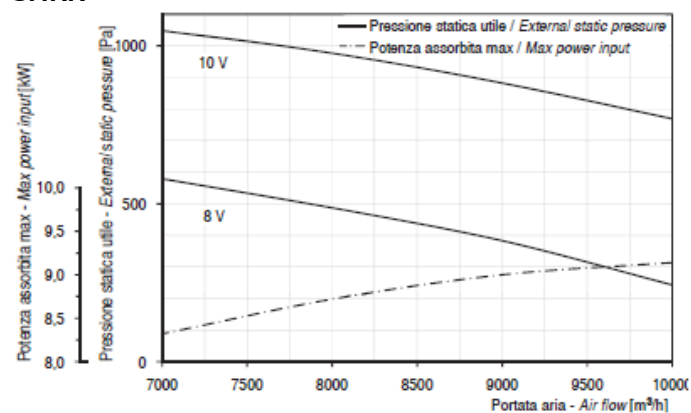


SIZE 90

SHRC

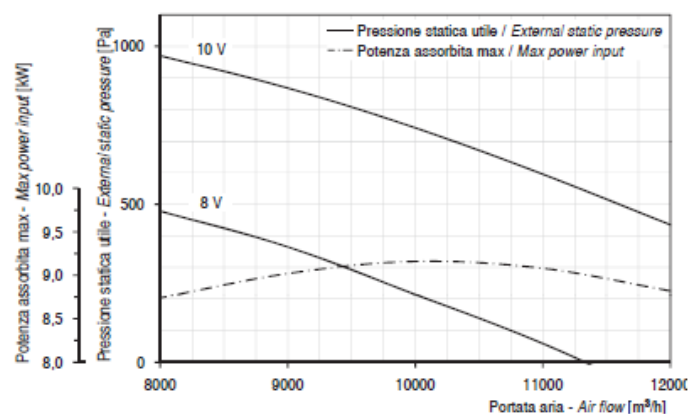


SHRR



SIZE 100

SHRC

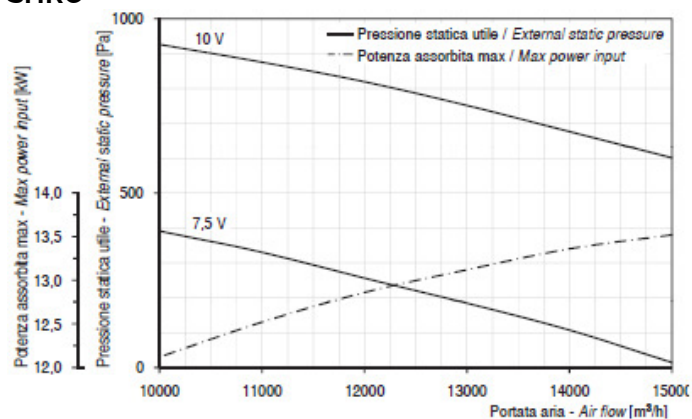


SHRR

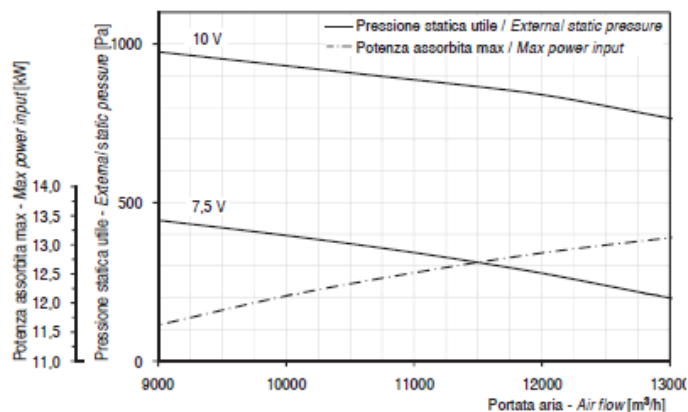
Size not available

SIZE 130

SHRC

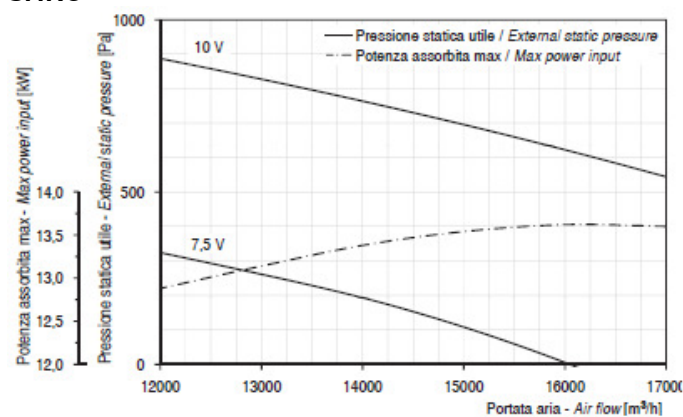


SHRR

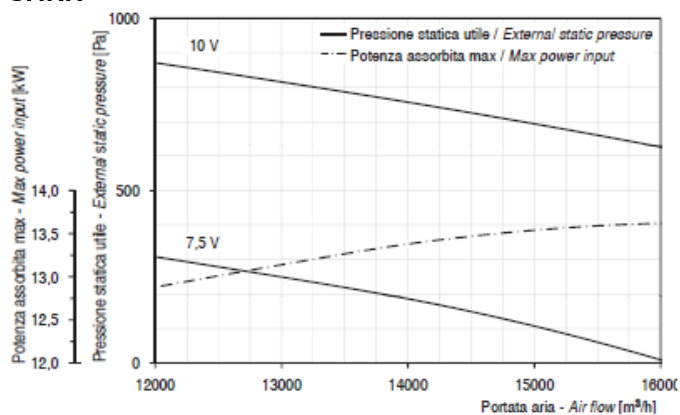


SIZE 150

SHRC



SHRR



ANCILLARIES – For additional information and combination, please call the Sales Department

ANCILLARIES		
	Code	Size
Electric pre-heating	BAER_SH1515	size 15
	BAER_SH3535	size 35
	BAER_SH5570	size from 55 to 70
	BAER_SH90100	size from 90 to 100
	BAER_SH130150	size from 130 to 150
Electric post-heating	BZER_SH1515	size 15
	BZER_SH3535	size 35
	BZER_SH5570	size from 55 to 70
	BZER_SH90100	size from 90 to 100
	BZER_SH130150	size from 130 to 150
2R water coil	BZ2W1515	size 15
	BZ2W3535	size 35
	BZ2W5570	size from 55 to 70
	BZ2W90100	size from 90 to 100
	BZ2W130150	size from 130 to 150
4R water coil	BZ4W1515	size 15
	BZ4W3535	size 35
	BZ4W5570	size from 55 to 70
	BZ4W90100	size from 90 to 100
	BZ4W130150	size from 130 to 150
Kit 3-Way valve with modulating actuator	BVMW_SH1515	size 15
	BVMW_SH3535	size 35
	BVMW_SH55100	size from 55 to 100
	BVMW_SH130150	size from 130 to 150
Electric steam humidifier kit	BHU11515	size 15
	BHU13535	size 35
	BHU155100	size from 55 to 100
	BHU1130150	size from 130 to 150
Electric steam humidifier kit	BHU21515	size 15
	BHU23535	size 35
	BHU255100	size from 55 to 100
	BHU2130150	size from 130 to 150
Filter Pressure switch	BKPF_SH15150	size from 15 to 150
Intake-outlet grid	BGRD1515	size 15
	BGRD3535	size 35
	BGRD5570	size from 55 to 70
	BGRD90100	size from 90 to 100
	BGRD130150	size from 130 to 150

	Code	Size
Recirculation damper with ON-OFF actuator	BRDO_SH1515	size 15
	BRDO_SH3535	size 35
	BRDO_SH5570	size from 55 to 70
	BRDO_SH90150	size from 90 to 150
Recirculation damper with modulating actuator	BRDM_SH1515	size 15
	BRDM_SH3535	size 35
	BRDM_SH5570	size from 55 to 70
	BRDM_SH90150	size from 90 to 150
Damper with damper actuator ON/OFF 230V	BEDO_SH1515	size 15
	BEDO_SH3535	size 35
	BEDO_SH5570	size from 55 to 70
	BEDO_SH90100	size from 90 to 100
	BEDO_SH130150	size from 130 to 150
Damper with damper actuator ON/OFF 230V SPRING RETURN	BEDS_SH1515	size 15
	BEDS_SH3535	size 35
	BEDS_SH5570	size from 55 to 70
	BEDS_SH90100	size from 90 to 100
	BEDS_SH130150	size from 130 to 150
Damper with modulating actuator	BEDM_SH1515	size 15
	BEDM_SH3535	size 35
	BEDM_SH5570	size from 55 to 70
	BEDM_SH90100	size from 90 to 100
	BEDM_SH130150	size from 130 to 150
Flexible airduct connection	BGAV1515	size 15
	BGAV3535	size 35
	BGAV5570	size from 55 to 70
	BGAV90100	size from 90 to 100
	BGAV130150	size from 130 to 150
Weather canopy	BTPC_SH1515	size 15
	BTPC_SH3535	size 35
	BTPC_SH5570	size from 55 to 70
	BTPC_SH90100	size from 90 to 100
	BTPC_SH130150	size from 130 to 150
Weather canopy	BTPR_SH1515	size 15
	BTPR_SH3535	size 35
	BTPR_SH5570	size from 55 to 70
	BTPR_SH9090	size 90
	BTPR_SH130150	size from 130 to 150

	Code	Size
Fresh and exhaust air stream rain hood kit	BCFA1515	size 15
	BCFA3535	size 35
	BCFA5570	size from 55 to 70
	BCFA90100	size from 90 to 100
	BCFA130150	size from 130 to 150
Sound attenuator section	BSSA1515	size 15
	BSSA3535	size 35
	BSSA5570	size from 55 to 70
	BSSA90100	size from 90 to 100
	BSSA130150	size from 130 to 150
Purifying system MP3oXy	BOXG_SH1515	size 15
	BOXG_SH3535	size 35
	BOXG_SH5570	size from 55 to 70
	BOXG_SH90100	size from 90 to 100
	BOXG_SH130150	size from 130 to 150
Differential pressure switch	BDPS_SH1515	size 15
	BDPS_SH35150	size from 35 to 150
Duct mount CO2 sensor	BECD15150	size from 15 to 150
Wall mount CO2 sensor	BECW15150	size from 15 to 150
Duct mount humidity sensor	BHUD15150	size from 15 to 150
Wall mount humidity sensor	BHUW15150	size from 15 to 150
Modbus serial card	BMDB15150	size from 15 to 150
Wall mount remote control panel	BWCP_SH15150	size from 15 to 150