



MP3energy BSNH

Counterflow Heat Recovery Units
Air flow from 400 to 4700 m³/h

MP3energy

Heat recovery units



BSNH heat recovery units

Horizontal High Efficiency Heat Recovery unit for residential and commercial application. Suitable for ceiling installation, indoor

Construction – Self-supporting Aluzinc frame with panels in galvanized steel with polyurethane thermal and acoustic insulation; thickness of 23mm. Integrated motorized bypass for free cooling in spring/summer with fresh air.

Heat recovery – Eurovent certified. High efficiency counterflow heat exchanger in aluminum (80% to 89% efficiency). Optional Super High Efficiency Heat recovery (over 90%).

Filters – Fresh air intake: standard compact filter, ePM1 55% (F7 EN 779) efficiency. Return air intake: ePM10 55% (M5 EN 779) efficiency, ePM1 55% (F7 EN 779) filter available as optional.

Fans – EC motors centrifugal fans (AC motors available on request)

Control – 3 different control configurations are available:

BASIC – unit supplied with electrical cabinet and cabled fans, without control, sensors and bypass motor. The bypass motor and other tools are available as ancillary.

EVOLUTION – motorized bypass section with internal temperature sensors, automatic free cooling, management of 0-10V actuator for water heaters and coolers, management of electric heaters. Pressure sensors for filter monitoring. Modbus communication included.

TOP – motorized bypass section with internal temperature sensors, automatic free cooling, automatic defrost of the heat recovery exchanger, automatic variable airflow, management of on/off and 0-10V actuator for water heaters and coolers and electric heaters, remote on/off, service relays, week clock program, status alarms, pressure sensors for filter monitoring. Modbus communication included. Panel and cabinet onboard.

BASIC AC – unit supplied with electrical cabinet and cabled AC fans, without control, sensors and bypass motor. The bypass motor and other tools are available as ancillary.

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

BSNH- a- b- c- d

a Size

04	400 m³/h
08	750 m³/h
10	1000 m³/h
15	1500 m³/h
20	2000 m³/h
32	3200 m³/h
40	3800 m³/h
50	4700 m³/h

b Control

B	Basic
E	Evolution
T	Top
A	

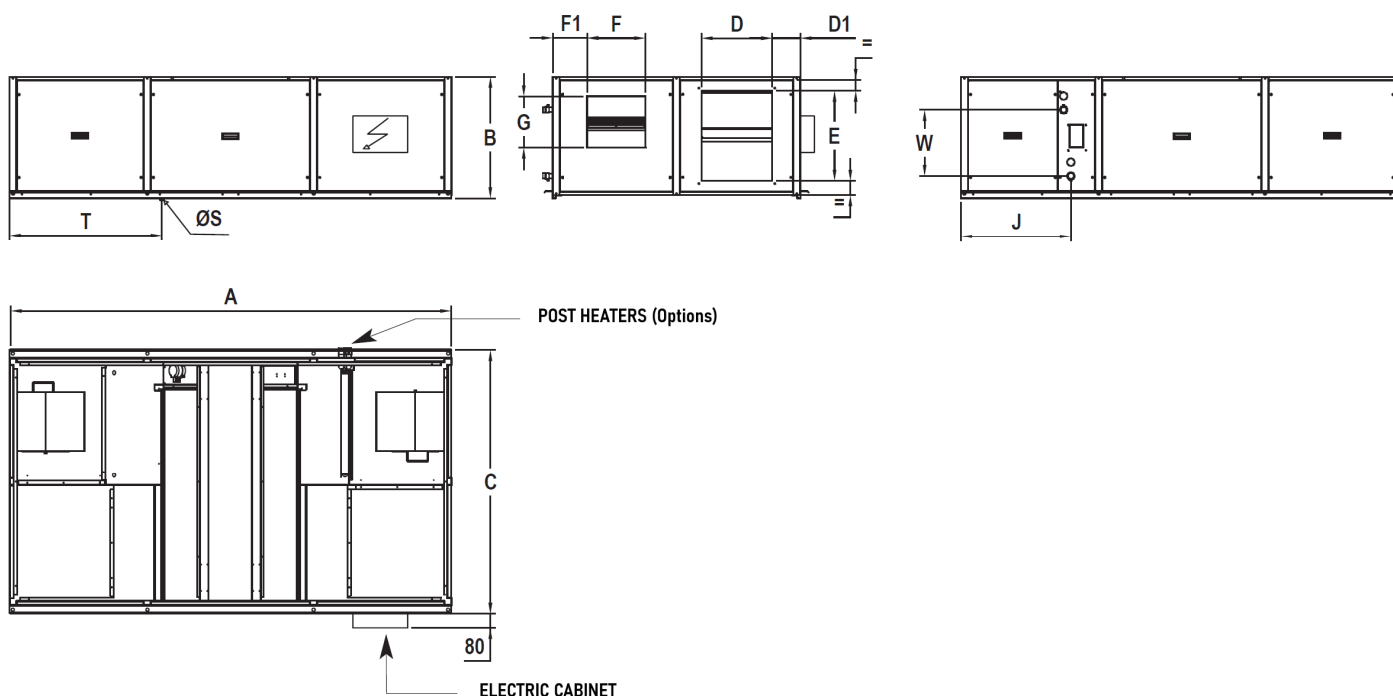
c Flow configuration

1	Configuration 1
2	Configuration 2

d Heat recovery efficiency

8	high efficiency heat recovery
9	90% efficiency heat recovery





	DIMENSIONS															Weight
SIZE	A [mm]	B [mm]	C [mm]	D [mm]	D1 [mm]	E [mm]	F [mm]	F1 [mm]	G [mm]	G1(1) Ø Inch	S(3) Ø Incl	T [mm]	K(2) [mm]	J(1) [mm]	W(1) [mm]	[kg]
04	1480	380	800	200	110	210	230	90	70	¾"	½"	355	500	412	177	90
08	1940	480	990	300	100	310	230	140	210	¾"	½"	697	500	550	190	140
10	1940	480	990	300	100	310	230	140	260	¾"	½"	697	500	550	190	150
15	2200	550	1000	300	100	410	230	145	260	¾"	½"	778	600	550	265	170
20	2200	550	1400	500	100	410	300	215	260	¾"	½"	779	620	550	350	200
32	2500	680	1400	400	150	510	330	195	290	¾"	½"	863	700	620	375	230
40	2500	680	1400	500	100	510	405	157.5	405	1"	½"	863	700	620	375	260
50	2500	680	1700	500	185	510	405	232.5	405	1"	½"	863	800	620	375	300

Air Flow Range – optimal airflow range to meet Ecodesign parameters

SIZE	Min. Airflow [m3/h]	Max. Airflow [m3/h]
04	80	400
08	340	750
10	640	1000
15	950	1500
20	1350	2050
32	1950	3200
40	2880	3800
50	3610	4700

HEAT RECOVERY PERFORMANCE – High Heat Recovery Efficiency [8]

SIZE 04

Portata Air flow	Aria ambiente Room air	Aria di rinnovo Fresh air		Aria trattata Supply air	Efficienza Efficiency	Potenza recuperata Capacity
m³/h	Ta (°C)	°C	U.R.%	°C	%	kW
400	20	-10	80	16.3	87.7	3.5
400	20	-5	80	15.9	83.6	2.8
400	20	0	70	15.8	78.9	2
400	20	5	60	16.5	76.7	1.5
400	20	10	50	17.6	75.8	1
400	26	28	50	26.5	75.5	0.2
400	26	30	50	27	75.5	0.4
400	26	32	50	27.5	74.9	0.7
400	26	34	50	28	75.4	0.8

SIZE 08

Portata Air flow	Aria ambiente Room air	Aria di rinnovo Fresh air		Aria trattata Supply air	Efficienza Efficiency	Potenza recuperata Capacity
m³/h	Ta (°C)	°C	U.R.%	°C	%	kW
750	20	-10	80	16.1	86.9	6.5
750	20	-5	80	15.7	82.8	5.1
750	20	0	70	15.6	78.2	3.8
750	20	5	60	16.4	76.1	2.7
750	20	10	50	17.6	82	1.9
750	26	28	50	26.5	75.9	0.4
750	26	30	50	27	75.9	0.8
750	26	32	50	27.4	75.8	1.1
750	26	34	50	27.9	75.8	1.5

SIZE 10

Portata Air flow	Aria ambiente Room air	Aria di rinnovo Fresh air		Aria trattata Supply air	Efficienza Efficiency	Potenza recuperata Capacity
m³/h	Ta (°C)	°C	U.R.%	°C	%	kW
1000	20	-10	80	15.7	85.7	8.53
1000	20	-5	80	15.4	81.6	6.7
1000	20	0	70	15.4	76.9	5
1000	20	5	60	16.2	74.7	3.5
1000	20	10	50	17.5	81	2.5
1000	26	28	50	26.5	74.5	0.5
1000	26	30	50	27	74.5	1
1000	26	32	50	27.5	74.5	1.5
1000	26	34	50	28.1	74.4	2

SIZE 15

Portata Air flow	Aria ambiente Room air	Aria di rinnovo Fresh air		Aria trattata Supply air	Efficienza Efficiency	Potenza recuperata Capacity
m³/h	Ta (°C)	°C	U.R.%	°C	%	kW
1500	20	-10	80	16.2	87.4	13.1
1500	20	-5	80	15.8	83.2	10.3
1500	20	0	70	15.7	78.6	7.6
1500	20	5	60	16.5	76.4	5.4
1500	20	10	50	17.6	81	3.8
1500	26	28	50	26.5	75.2	0.8
1500	26	30	50	27	75.1	1.5
1500	26	32	50	27.5	75.1	2.3
1500	26	34	50	28	75.1	3

SIZE 20

Portata Air flow	Aria ambiente Room air	Aria di rinnovo Fresh air		Aria trattata Supply air	Efficienza Efficiency	Potenza recuperata Capacity
m ³ /h	Ta (°C)	°C	U.R.%	°C	%	kW
2050	20	-10	80	16.3	87.8	17.9
2050	20	-5	80	15.9	83.6	14.1
2050	20	0	70	15.8	79	10.5
2050	20	5	60	16.5	76.8	7.4
2050	20	10	50	17.6	81	5.2
2050	26	28	50	27.5	75.6	1
2050	26	30	50	27	75.6	2.1
2050	26	32	50	27.5	75.5	3.1
2050	26	34	50	28	75.5	4

SIZE 32

Portata Air flow	Aria ambiente Room air	Aria di rinnovo Fresh air		Aria trattata Supply air	Efficienza Efficiency	Potenza recuperata Capacity
m ³ /h	Ta (°C)	°C	U.R.%	°C	%	kW
3200	20	-10	80	16.7	89	28.4
3200	20	-5	80	16.2	84.8	22.3
3200	20	0	70	16	80.1	16.6
3200	20	5	60	16.7	77.9	12
3200	20	10	50	17.6	76.2	8.2
3200	26	28	50	26.5	75.9	1.6
3200	26	30	50	27	75.9	3.3
3200	26	32	50	27.4	75.8	4.9
3200	26	34	50	27.9	75.8	6.5

SIZE 40

Portata Air flow	Aria ambiente Room air	Aria di rinnovo Fresh air		Aria trattata Supply air	Efficienza Efficiency	Potenza recuperata Capacity
m ³ /h	Ta (°C)	°C	U.R.%	°C	%	kW
3800	20	-10	80	16.5	88.3	33.4
3800	20	-5	80	16	84.1	26.3
3800	20	0	70	15.9	79.3	19.5
3800	20	5	60	16.6	77.1	13.8
3800	20	10	50	17.5	75.4	9.6
3800	26	28	50	26.5	75.1	1.9
3800	26	30	50	27	75.1	3.8
3800	26	32	50	27.5	75	5.7
3800	26	34	50	28	75	7.6

SIZE 50

Portata Air flow	Aria ambiente Room air	Aria di rinnovo Fresh air		Aria trattata Supply air	Efficienza Efficiency	Potenza recuperata Capacity
m ³ /h	Ta (°C)	°C	U.R.%	°C	%	kW
4700	20	-10	80	16.5	88.3	41.3
4700	20	-5	80	16	84.1	32.5
4700	20	0	70	15.9	79.3	24.1
4700	20	5	60	16.6	77.2	17.1
4700	20	10	50	17.6	75.5	11.9
4700	26	28	50	26.5	75.1	2.4
4700	26	30	50	27	75.1	4.7
4700	26	32	50	27.5	75.1	7.1
4700	26	34	50	28	75	9.4

SOUND POWER LEVELS Lw(A)

SIZE 04

	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)	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 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)	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 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)	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 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)	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 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)	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 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)	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

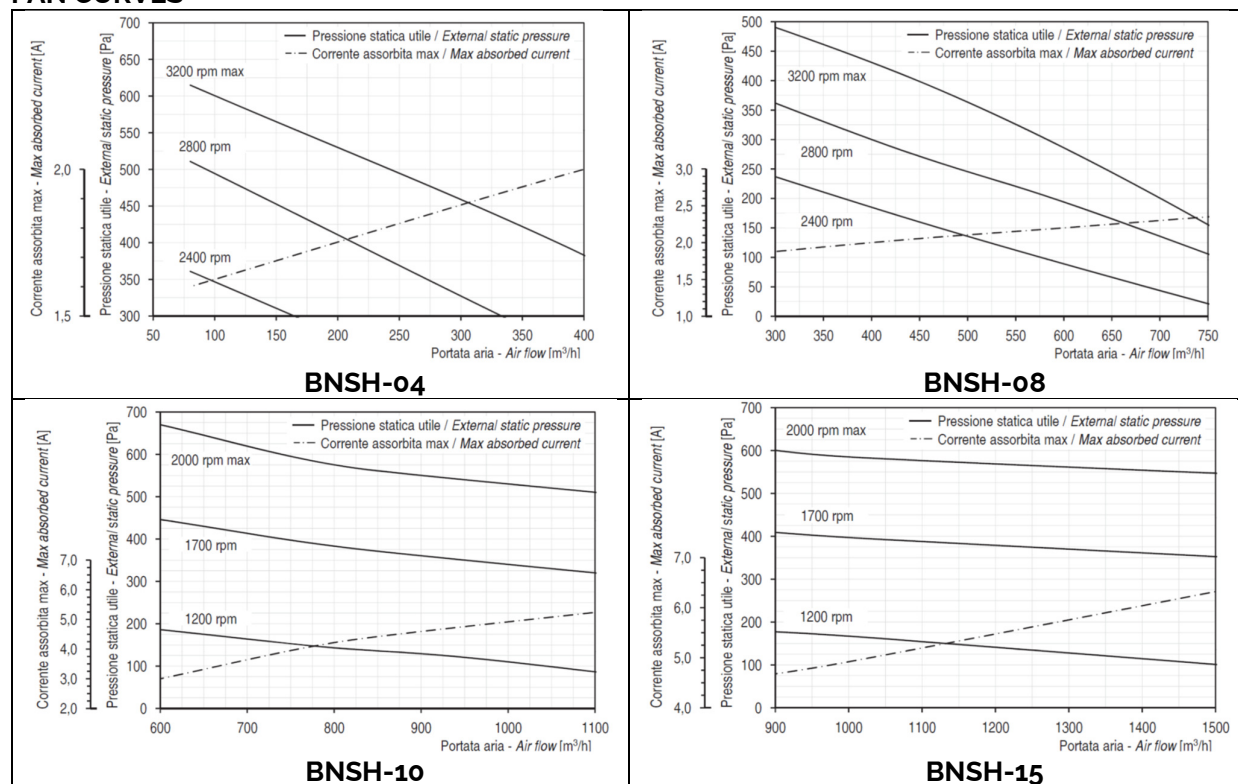
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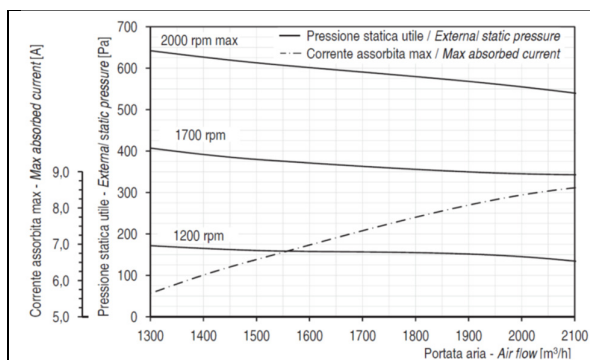
	Potenza sonora Lw per frequenza di centro banda Sound power levels Lw at center band frequencies									Lw globale Total Lw
	Hz	63	125	250	500	1000	2000	4000	8000	
Canale di mandata / Supply duct	dB(A)	40.8	66.4	73.4	69.8	72.0	72.2	69.0	60.9	78.9
Canale di espulsione / Exhaust duct	dB(A)	40.8	67.0	74.4	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

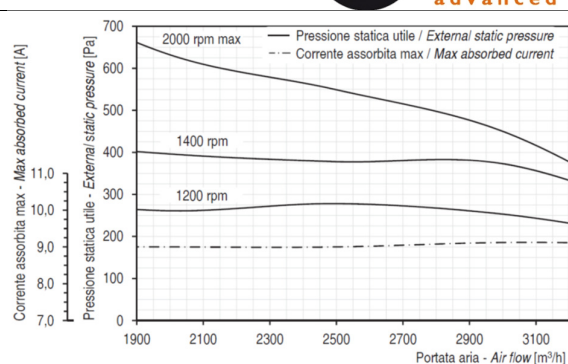
	Potenza sonora Lw per frequenza di centro banda Sound power levels Lw at center band frequencies									Lw globale Total Lw
	Hz	63	125	250	500	1000	2000	4000	8000	
Canale di mandata / Supply duct	dB(A)	44.6	70.7	75.6	71.8	74.5	76.1	73.0	64.9	81.9
Canale di espulsione / Exhaust duct	dB(A)	44.8	71.5	76.4	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

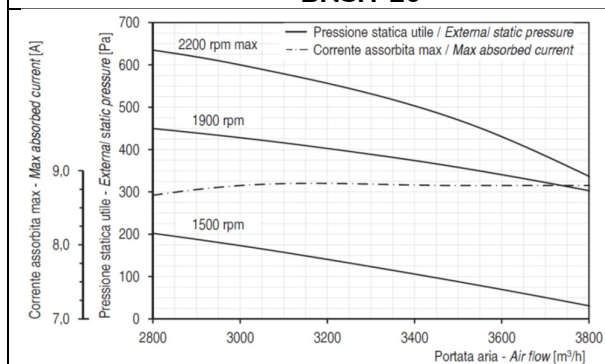




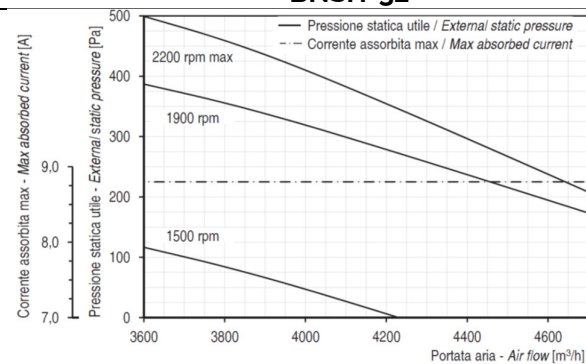
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BNSH-32



BNSH-40



BNSH-50