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# LNH

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FAN COIL UNITS WITH  
SILENCED PLENUM  
FOR HOTELS,  
HOSPITALS,  
HOMES



S O M E T H I N G D I F F E R E N T

GB



# LNH

## FAN COIL UNITS WITH SILENCED PLENUM FOR HOTELS, HOSPITALS, HOMES

LNH has been designed to ensure maximised energy comfort and lowest-noise operation - which are difficult to achieve with traditional air units (split units, fancoils).

The solution implemented allows the natural turbulence of the convective air flow to be reduced. By necessarily integrating a silencer into the unit, suitably insulated at the delivery end, extremely low sound levels are achieved, making it suitable for installation in hotel rooms ("LOW NOISE HOTELS").

Its performance makes it the ideal product for installations that require compliance with strict noise control regulations.

### VERY LOW-NOISE

EXTREMELY LOW NOISE THANKS TO ITS TECHNICAL SOLUTIONS: THE EFFECTIVE DESIGN OF THE SILENCED PLENUM AND THE USE OF A SPECIAL HIGH SOUND-ABSORBING INSULATION MATERIAL. THE FAN AND SILENCER SECTIONS ARE INSULATED WITH TEXTURED POLYURETHANE.

### ADVANCED CONTROL

ADVANCED CONTROL ENABLES TO MANAGE MASTER/SLAVE COMBINATIONS OF UP TO 24 UNITS AND TO USE WALL MOUNTED OR REMOTE CONTROLS.

### BMS COMPATIBLE

POSSIBILITY OF CONTROLLING UP TO 240 UNITS WITH OUR TOP3 MULTIFUNCTIONAL DIGITAL THERMOSTAT AND MODBUS PROTOCOL SP3 BOARD, ALSO IN COMBINATION WITH ALL AERTESI TERMINAL UNITS.

### ECO

THE INSULATING MATERIAL OF THE SILENCER PLENUM AND OF THE STRUCTURE IS MADE OF ECO-FRIENDLY MATERIALS (RECYCLED POLYESTER FIBRE) WITH LOW ENVIRONMENTAL IMPACT.

### ACCESSIBILITY

LNH IS DESIGNED FOR MAXIMUM CONVENIENCE DURING MAINTENANCE: THE FAN, AS WELL AS THE MAIN TANK AND THE COIL, CAN BE INSPECTED AND REMOVED WITH THE SAME PROCEDURE.

**COOLING****0.8/5.8** kw**HEATING****0.8/6.5** kw**AIR FLOW****110-1140** m³/h

CONSUMPTION REDUCED UP TO

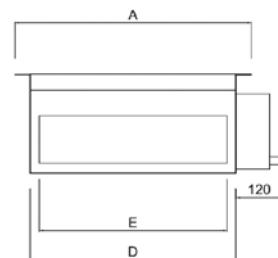
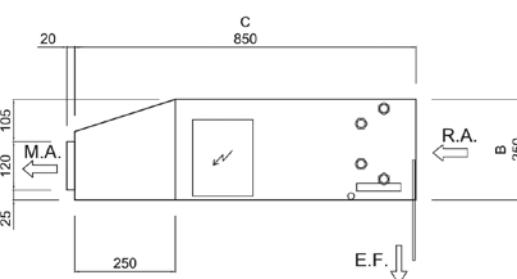
**63%****DIMENSIONAL DWGS**

SIZE	A	B	C	D	E	WEIGHT Kg
<b>3</b>	600	250	850	520	475	25
<b>6</b>	860	250	850	780	735	33
<b>8</b>	1120	250	850	1040	995	42
<b>12</b>	1120	250	850	1040	995	42

A = length mm

B = height mm

C = depth mm



# LNH AC



## AC MOTOR 2-PIPE SYSTEM

	3	6	8	12									
	4 rows			4 rows			4 rows			4 rows			
SPEED	min	med	max										
Air flow	m3/h	210	325	370	295	450	535	440	660	790	650	1000	1125
<b>COOLING - air 27°C dry bulb, 19°C wet bulb - water inlet 7°C, outlet 12°C</b>													
Total capacity	kW	1.33	1.88	2.05	1.87	2.60	2.96	2.84	3.91	4.47	3.86	5.30	5.75
Sensitive capacity	kW	1.00	1.43	1.60	1.42	2.02	2.32	2.13	2.99	3.46	2.95	4.16	4.56
Water flow rate	l/h	228	321	353	321	447	508	488	672	769	664	911	988
Δp (water)	kPa	7.5	13.6	16.0	3.1	4.8	6.9	8.2	12.6	18.3	18.5	21.4	37.1
<b>HEATING - air 20°C - water inlet 45°C, outlet 40°C</b>													
Capacity	kW	1.40	2.01	2.24	1.98	2.84	3.27	2.96	4.16	4.82	4.11	5.82	6.38
Water flow rate	l/h	242	348	387	343	491	566	512	719	834	710	1007	1104
Δp (water)	kPa	6.8	13.0	15.6	2.9	4.7	6.9	7.4	11.7	17.5	17.3	21.2	22.4
<b>MOTOR ELECTRIC POWER DRAW</b>													
Power draw	W	16	27	33	20	34	42	42	73	88	68	117	136
Max power draw	A	0.19			0.24			0.47			0.74		
<b>SOUND DATA</b>													
Return + radiated sound power	dB(A)	43	48	41	42	46	39	46	51	45	59	63	56
Delivery sound power	dB(A)	41	46	39	40	44	37	44	49	43	54	61	54
Return + radiated sound pressure (*)	dB(A)	34	39	32	33	37	30	37	42	36	50	54	47
Delivery sound pressure (*)	dB(A)	32	37	30	31	35	28	35	40	34	45	52	35

## AC MOTOR 4-PIPE SYSTEM

	3 + B1	6 + B1	8 + B1	12 + B1									
	4 rows + 1			4 rows + 1			4 rows + 1			4 rows + 1			
SPEED	min	med	max	min	med	max	min	med	max	min	med	max	
Air flow	m3/h	210	325	370	295	450	535	440	660	790	650	1000	1125
<b>COOLING - air 27°C dry bulb, 19°C wet bulb - water inlet 7°C, outlet 12°C</b>													
Total capacity	kW	1.33	1.88	2.05	1.87	2.60	2.96	2.84	3.91	4.47	3.86	5.30	5.75
Sensitive capacity	kW	1.00	1.43	1.60	1.42	2.02	2.32	2.13	2.99	3.46	2.95	4.16	4.56
Water flow rate	l/h	228	321	353	321	447	508	488	672	769	664	911	988
Δp (water)	kPa	7.5	13.6	16.0	3.1	4.8	6.9	8.2	12.6	18.3	18.5	21.4	37.1
<b>HEATING - air 20°C - water inlet 65°C, outlet 55°C</b>													
Capacity	kW	1.14	1.52	1.66	1.73	2.29	2.57	2.46	3.22	3.62	3.19	4.11	4.40
Water flow rate	l/h	99.6	133	144	151	200	224	214	281	316	278	358	384
Δp (water)	kPa	2.2	3.6	4.2	7.2	10.3	14.4	2.4	3.4	4.8	5.0	5.2	8.9
<b>MOTOR ELECTRIC POWER DRAW</b>													
Power draw	W	16	27	33	20	34	42	42	73	88	68	117	136
Max power draw	A	0.19			0.24			0.47			0.74		
<b>SOUND DATA</b>													
Return + radiated sound power	dB(A)	43	48	41	42	46	39	46	51	45	59	63	56
Delivery sound power	dB(A)	41	46	39	40	44	37	44	49	43	54	61	54
Return + radiated sound pressure (*)	dB(A)	34	39	32	33	37	30	37	42	36	50	54	47
Delivery sound pressure (*)	dB(A)	32	37	30	31	35	28	35	40	34	45	52	35

(\*) = the sound pressure levels are lower than power levels by 9 dB(A) for a 100 m<sup>3</sup> space and a reverberation time of 0.5 sec.  
The human hearing is more perceivable to frequencies above 2000 Hz while the sound data here declared include all the band middle frequencies. For more details, refer to the technical manual.

# LNH EC

## EC MOTOR 2-PIPE SYSTEM

		3			6			8			12		
		4 rows			4 rows			4 rows			4 rows		
SPEED (DRIVE VOLTAGE)	V	1	3.5	10	1	3.5	10	1	3.5	10	1	3.5	10
Air flow	m3/h	110	210	430	180	335	670	270	450	860	255	530	1140
<b>COOLING - air 27°C dry bulb, 19°C wet bulb - water inlet 7°C, outlet 12°C</b>													
Total capacity	kW	0.77	1.33	2.28	1.24	2.07	3.48	1.88	2.89	4.76	1.79	3.30	5.80
Sensitive capacity	kW	0.57	1.00	1.80	0.92	1.58	2.77	1.38	2.17	3.70	1.31	2.49	4.60
Water flow rate	l/h	133	228	393	212	355	597	324	497	818	308	567	997
Δp (water)	kPa	7.5	11.1	16.0	1.5	3.7	9.2	4.0	8.5	20.5	4.8	14.0	37.7
<b>HEATING - air 20°C - water inlet 45°C, outlet 40°C</b>													
Capacity	kW	0.78	1.40	2.52	1.27	2.22	3.92	1.90	3.02	5.16	1.80	3.45	6.45
Water flow rate	l/h	135	242	436	219	384	678	329	522	893	312	598	1115
Δp (water)	kPa	6.8	10.4	15.6	1.3	3.5	9.5	3.4	7.7	19.7	4.0	12.7	38.0
<b>MOTOR ELECTRIC POWER DRAW</b>													
Power draw	W	4	6	20	4	7	23	4	8	32	4	11	69
Max power draw	A	0.22			0.21			0.27			0.53		
<b>SOUND DATA</b>													
Return + radiated sound power	dB(A)	44	43	46	41	41	46	38	44	48	40	47	54
Delivery sound power	dB(A)	42	41	44	39	39	44	32	41	46	34	44	52
Return + radiated sound pressure (*)	dB(A)	35	34	37	32	32	37	29	35	39	31	38	45
Delivery sound pressure (*)	dB(A)	33	32	35	30	30	37	29	35	39	25	35	43

## EC MOTOR 4-PIPE SYSTEM

		3 + B1			6 + B1			8 + B1			12 + B1		
		4 rows + 1			4 rows + 1			4 rows + 1			4 rows + 1		
SPEED (DRIVE VOLTAGE)	V	1	3.5	10	1	3.5	10	1	3.5	10	1	3.5	10
Air flow	m3/h	110	210	430	180	335	670	270	450	860	255	530	1140
<b>COOLING - air 27°C dry bulb, 19°C wet bulb - water inlet 7°C, outlet 12°C</b>													
Total capacity	kW	0.77	1.33	2.28	1.24	2.07	3.48	1.88	2.89	4.76	1.79	3.30	5.80
Sensitive capacity	kW	0.57	1.00	1.80	0.92	1.58	2.77	1.38	2.17	3.70	1.31	2.49	4.60
Water flow rate	l/h	133	228	393	212	355	597	324	497	818	308	567	997
Δp (water)	kPa	7.5	11.1	16.0	1.5	3.7	9.2	4.0	8.5	20.5	4.8	14.0	37.7
<b>HEATING - air 20°C - water inlet 65°C, outlet 55°C</b>													
Capacity	kW	0.73	1.14	1.81	1.23	1.88	2.96	1.76	2.50	3.82	1.69	2.79	4.44
Water flow rate	l/h	64	100	158	107	164	258	154	218	333	148	243	387
Δp (water)	kPa	6.8	10.4	15.6	3.9	8.3	18.5	1.4	2.5	5.3	1.7	3.9	9.0
<b>MOTOR ELECTRIC POWER DRAW</b>													
Power draw	W	4	6	20	4	7	23	4	8	32	4	11	69
Max power draw	A	0.22			0.21			0.27			0.53		
<b>SOUND DATA</b>													
Return + radiated sound power	dB(A)	44	43	46	41	41	46	38	44	48	40	47	54
Delivery sound power	dB(A)	42	41	44	39	39	44	32	41	46	34	44	52
Return + radiated sound pressure (*)	dB(A)	35	34	37	32	32	37	29	35	39	31	38	45
Delivery sound pressure (*)	dB(A)	33	32	35	30	30	37	29	35	39	25	35	43

(\*) = the sound pressure levels are lower than power levels by 9 dB(A) for a 100 m<sup>3</sup> space and a reverberation time of 0.5 sec.  
The human hearing is more perceivable to frequencies above 2000 Hz while the sound data here declared include all the band middle frequencies.  
For more details, refer to the technical manual.

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