TECHNICAL PRODUCT SUBMITTAL

AMICUS LAHP-4004LTS AIR SOURCE HEAT PUMP

Heating Data [1]		
Heating Capacity (EN14511)	kW	364.9
Total Power input (EN14511)	kW	88.8
COP (EN14511)	W/W	4.11
Nominal flow rate	m^3/h	63.53
Pressure drop across the heat pump	kPa	53.6
Design air flow rate	m^3/h	120444
EcoDesign data [2]		
Energy Label Rating Low temperature		A++
SCOP Low Temperature		3.89
Seasonal Efficiency Low temperature	**%**	152.4
Cooling Data (RV units only) [3]		
Cooling Capacity (EN14511)	kW	320
Total Power input (EN14511)	kW	120
EER (EN14511)	W/W	2.67
Nominal flow rate	m^3/h	54.86
Pressure drop across the heat pump	kPa	45
Design air flow rate	m^3/h	119867
General		
Refrigerant type		R410A
Compressor Type		Scroll
Number of Compressors		4
Number of Circuits		2
Capacity steps		4
Minimum capacity step	**%**	25
Electrical Data		
Power supply	V/Ph/Hz	400/3+N/50
Maximum input power	kW	156
Maximum input current standard unit	A (per phase)	280
Peak input current standard unit	A (per phase)	524
Peak input current unit with soft start option fitted	A (per phase)	400
Fuse rating (delayed)	A	400
Optional Hydraulic kit input power	kW	5.5
Optional Hydraulic kit maximum input current	A	10.4
Fans		
Fan type (standard unit)		Axial
Number of fans (standard unit)		6
Air flow rate for design	m^3/h	126205
Sound power level [2]	dB(A)	90
Sound pressure level [3]	dB(A)	58

ErP Data including Product Fiche and Energy Labels where applicable and Warranty information are available at www.lochinvar.ltd.uk

TECHNICAL PRODUCT SUBMITTAL

AMICUS LAHP-4004LTS AIR SOURCE HEAT PUMP

LAHP-4004LTS			Heating OUT						
Water Delivery Temperature			35C	40C	45C	50C	55C	59C	Max outlet
performance data	-10	Heat Output (KW)	198.0	195.0	194.0	N/A	N/A	N/A	45c
		Efficiency COP	2.2	2.0	1.8	N/A	N/A	N/A	
	-7	Heat Output (KW)	215.0	212.0	209.0	N/A	N/A	N/A	45c
		Efficiency COP	2.4	2.2	1.9	N/A	N/A	N/A	
	-5	Heat Output (KW)	227.0	223.0	219.0	216.0	N/A	N/A	50c
		Efficiency COP	2.5	2.3	2.0	1.8	N/A	N/A	
	-4	Heat Output (KW)	233.0	229.0	224.0	220.0	N/A	N/A	50c
		Efficiency COP	2.6	2.3	2.1	1.8	N/A	N/A	
	-3	Heat Output (KW)	240.0	235	231	228.0	N/A	N/A	50c
		Efficiency COP	2.7	2.4	2.14	1.9	N/A	N/A	
	-2	Heat Output (KW)	248.0	245.0	242.0	239.0	N/A	N/A	50c
		Efficiency COP	2.8	2.5	2.2	2.0	N/A	N/A	
	0	Heat Output (KW)	275.0	269.0	266.0	264.0	262.0	N/A	55c
		Efficiency COP	3.1	2.8	2.5	2.2	2.0	N/A	
	5	Heat Output (KW)	339.0	335.0	331.0	328.0	326.0	N/A	55c
		Efficiency COP	3.8	3.4	3.1	2.8	2.5	N/A	
	10	Heat Output (KW)	400.0	393.0	385.0	378.0	371.0	367.0	59c
		Efficiency COP	4.6	4.2	3.7	3.3	2.9	2.7	
	15	Heat Output (KW)	444.0	435.0	426.0	416.0	408.0	402	59c
		Efficiency COP	5.2	4.7	4.2	3.7	3.3	2.98	
	20	Heat Output (KW)	488.0	477.0	465.0	454.0	445.0	438.0	59c
		Efficiency COP	5.8	5.2	4.6	4.0	3.6	3.2	

Amicus air to water heat pumps must be installed and maintained in line with the Installation Commissioning and Maintenance Instructions which are available on the Literature & Downloads section of www.lochinvar.ltd.uk

ErP Data including Product Fiche and Energy Labels where applicable and Warranty information are available at www.lochinvar.ltd.uk

TECHNICAL PRODUCT SUBMITTAL

AMICUS LAHP-4004LTS AIR SOURCE HEAT PUMP

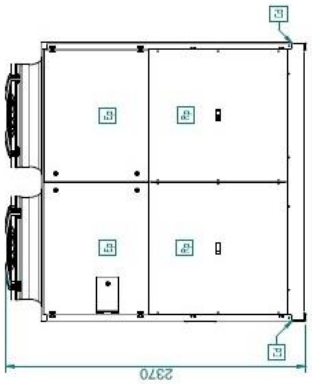
Model	Octave band (Hz)								Lw		Lp
	63	125	250	500	1K	2K	4K	8K			
	dB	dB	dB	dB	dB	dB	dB	dB	Db	dB(A)	dB(A)
242	86.1	77.3	71.2	69.7	68.6	63.2	59.8	50.7	86.9	78	46
292	87.1	78.3	72.2	70.7	69.6	64.2	60.8	51.7	87.9	79	47
412	87.1	78.3	72.2	70.7	69.6	64.2	60.8	51.7	87.9	74	42
432	88.1	79.3	73.2	71.7	70.6	65.2	61.8	52.7	88.9	80	48
492	89.1	80.3	74.2	72.7	71.6	66.2	62.8	53.7	89.9	79	47
602	89.1	80.3	74.2	72.7	71.6	66.2	62.8	53.7	89.9	80	48
702	90.1	81.3	75.2	73.7	72.6	67.2	63.8	54.7	90.9	81	49
802	91.1	82.3	76.2	74.7	73.6	68.2	64.8	55.7	91.9	82	50
902	95.1	86.3	80.2	78.7	77.6	72.2	68.8	59.7	95.9	86	54
1002	96.1	87.3	81.2	79.7	78.6	73.2	69.8	60.7	96.9	87	55
1202	98.1	89.3	83.2	81.7	80.6	75.2	71.8	62.7	98.9	88	56
1402	99.1	90.3	84.2	82.7	81.6	76.2	72.8	63.7	99.9	89	58
1602	100.1	91.3	85.2	83.7	82.6	77.2	73.8	64.7	100.9	89	57
1802	100.1	91.3	85.2	83.7	82.6	77.2	73.8	64.7	100.9	90	58
2002	100.1	91.3	85.2	83.7	82.6	77.2	73.8	64.7	100.9	90	58
2302	102.1	93.3	87.2	85.7	84.6	79.2	75.8	66.7	102.9	92	60
2502	104.1	95.3	89.2	87.7	85.6	81.2	77.8	68.7	104.9	93	61
2504	101.1	92.3	86.2	84.7	83.6	78.2	74.8	65.7	101.9	91	59
3004	102.1	93.3	87.2	85.7	84.6	79.2	75.8	66.7	102.9	92	60
3204	103.1	94.3	88.2	86.7	85.6	80.2	76.8	67.7	103.9	92	60
3504	103.1	94.3	88.2	86.7	85.6	80.2	76.8	67.7	103.9	93	61
4004	103.1	94.3	88.2	86.7	85.6	80.2	76.8	67.7	103.9	94	64
4504	105.1	96.3	90.2	88.7	87.6	82.2	78.8	69.7	105.9	96	64
5004	105.1	96.3	90.2	88.7	87.6	82.2	78.8	69.7	105.9	94	62

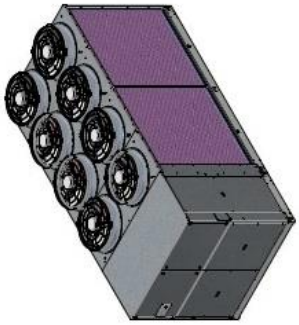
Lw: sound power level according to ISO 3744

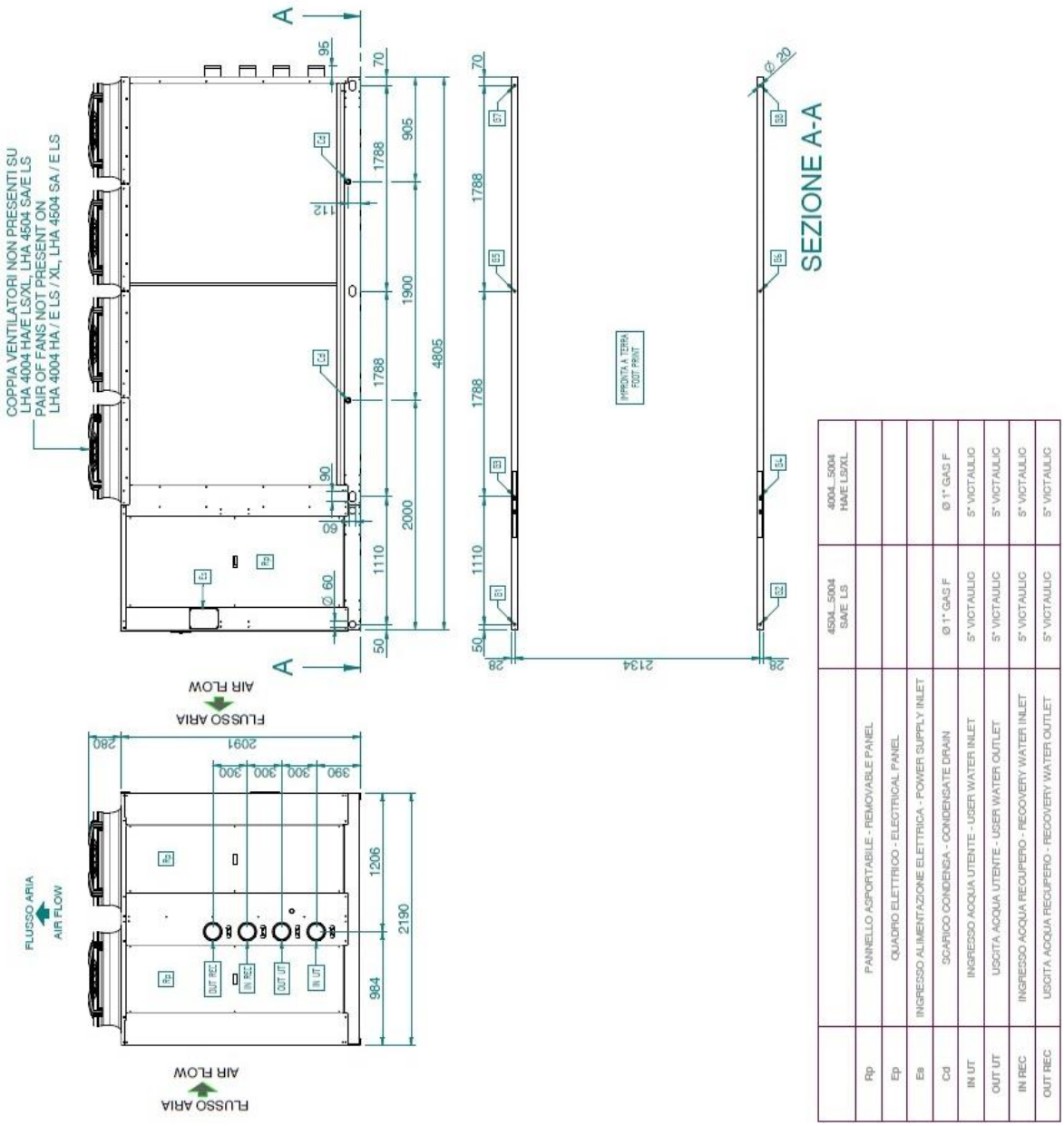
Lp: sound pressure level at 10mtrs from unit in free field conditions, direction factor Q=2 according to ISO 3744

ErP Data including Product Fiche and Energy Labels where applicable and Warranty information are available at www.lochinvar.ltd.uk

TECHNICAL PRODUCT SUBMITTAL
AMICUS LAHP-4004LTS AIR SOURCE HEAT PUMP







			4504_5004 SA/E LS	4004_5004 HA/E LS/XL
Rp	PANNELLO ASPORTABILE - REMOVABLE PANEL			
Ep	QUADRO ELETTRICO - ELECTRICAL PANEL			
Es	INGRESSO ALIMENTAZIONE ELETTRICA - POWER SUPPLY INLET			
Cd	SCARICO CONDENSA - CONDENSATE DRAIN		Ø 1" GAS F	Ø 1" GAS F
IN UT	INGRESSO ACQUA UTENTE - USER WATER INLET		5" VICTAULIC	5" VICTAULIC
OUT UT	USCITA ACQUA UTENTE - USER WATER OUTLET		5" VICTAULIC	5" VICTAULIC
IN REC	INGRESSO ACQUA RECUPERO - RECOVERY WATER INLET		5" VICTAULIC	5" VICTAULIC
OUT REC	USCITA ACQUA RECUPERO - RECOVERY WATER OUTLET		5" VICTAULIC	5" VICTAULIC

ErP Data including Product Fiche and Energy Labels where applicable and Warranty information are available at www.lochinvar.ltd.uk