

# TECHNICAL PRODUCT SUBMITTAL

## AMICUS LAHP-1654HTXL LOW NOISE AIR SOURCE HEAT PUMP

Data	Unit	Model
		<b>LAHP-1654HTXL</b>
<b>Heating Data</b>		
Heating Capacity (EN14511) <sup>1</sup>	kW	167
Total Power input (EN14511) <sup>1</sup>	kW	38.9
COP (EN14511) <sup>1</sup>	W/W	4.29
Nominal flow rate	m <sup>3</sup> /h	28.96
Pressure drop across the heat pump	kPa	61.3
Design air flow rate	m <sup>3</sup> /h	56250
<b>EcoDesign data <sup>2</sup></b>		
Energy Label Rating Low temperature		A++
SCOP Low Temperature		3.9
Seasonal Efficiency Low temperature	%	153
Energy Label Rating High temperature		A+
SCOP High Temperature		3.3
Seasonal Efficiency High temperature	%	129
<b>Cooling Data (RV units only)</b>		
Cooling Capacity (EN14511) <sup>3</sup>	kW	143
Total Power input (EN14511) <sup>3</sup>	kW	48.2
EER (EN14511) <sup>3</sup>	W/W	2.97
Nominal flow rate	m <sup>3</sup> /h	24.54
Pressure drop across the heat pump	kPa	45.2
Design air flow rate	m <sup>3</sup> /h	61628
<b>General data</b>		
Refrigerant		R410A
Compressor Type		E.V.I. Scroll
Number of Compressors		4
Number of Circuits		2
Capacity steps		4
Minimum capacity step	%	25
Sound power level	dB(A)	79
Sound pressure level (10m)	dB(A)	47
Minimum water content in the user circuit	litre	820
<b>Electrical Data</b>		
Power supply	V/Ph/Hz	400/3+N/50
Maximum input power	kW	78.5
Maximum input current standard unit	A	144
Peak input current standard unit	A	285
Peak input current unit with soft start option fitted	A	211
Fuse rating (delayed)	A	200
<b>Fans</b>		
Type		Axial AC
Number of fans (standard unit)	n <sup>o</sup>	4

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LAHP-1654HTXL			Heating OUT							Max Outlet
Water Delivery Temperature			35C	40C	45C	50C	55C	60C	63C	
Source air temperature	-10	Heat Output (KW)	96.3	96.8	97.3	97.8	98.7	100.0	101.0	63°C
		Efficiency COP	2.6	2.4	2.2	2.0	1.8	1.6	1.5	
	-8	Heat Output (KW)	101.0	102.0	102.0	102.0	103.0	105.0	106.0	63°C
		Efficiency COP	2.7	2.5	2.3	2.0	1.9	1.7	1.6	
	-6	Heat Output (KW)	106.0	107.0	107.0	108.0	108.0	109.0	111.0	63°C
		Efficiency COP	2.8	2.6	2.4	2.2	1.9	1.8	1.7	
	-4	Heat Output (KW)	113.0	113.0	113.0	114.0	115.0	116.0	118.0	63°C
		Efficiency COP	3.0	2.7	2.5	2.3	2.0	1.9	1.8	
	-2	Heat Output (KW)	123.0	123.0	124.0	125.0	126.0	127.0	130.0	63°C
		Efficiency COP	3.2	2.9	2.7	2.4	2.2	2.0	1.9	
	0	Heat Output (KW)	133.0	134.0	135.0	136.0	137.0	140.0	141.0	63°C
		Efficiency COP	3.5	3.2	2.9	2.6	2.4	2.2	2.1	
	2	Heat Output (KW)	144.0	145.0	146.0	147.0	149.0	152.0	154.0	63°C
		Efficiency COP	3.7	3.4	3.1	2.8	2.6	2.3	2.2	
	4	Heat Output (KW)	154.0	156.0	157.0	159.0	160.0	163.0	165.0	63°C
		Efficiency COP	4.0	3.6	3.3	3.0	2.7	2.5	2.4	
	6	Heat Output (KW)	164.0	165.0	167.0	168.0	170.0	173.0	174.0	63°C
		Efficiency COP	4.2	3.8	3.5	3.2	2.9	2.6	2.5	
	7	Heat Output (KW)	167.0	169.0	170.0	171.0	173.0	176.0	177.0	63°C
		Efficiency COP	4.3	3.9	3.6	3.2	2.9	2.7	2.5	
8	Heat Output (KW)	170.0	172.0	173.0	174.0	176.0	179.0	181.0	63°C	
	Efficiency COP	4.4	4.0	3.6	3.3	3.0	2.7	2.6		
10	Heat Output (KW)	177.0	178.0	180.0	181.0	183.0	185.0	187.0	63°C	
	Efficiency COP	4.6	4.2	3.8	3.4	3.1	2.8	2.6		
15	Heat Output (KW)	194.0	195.0	196.0	198.0	199.0	201.0	203.0	63°C	
	Efficiency COP	5.1	4.6	4.1	3.7	3.3	3.0	2.8		
20	Heat Output (KW)	207.0	209.0	210.0	211.0	212.0	214.0	215.0	63°C	
	Efficiency COP	5.5	4.9	4.4	3.9	3.5	3.2	3.0		
25	Heat Output (KW)	222.0	223.0	225.0	226.0	229.0	231.0	232.0	63°C	
	Efficiency COP	5.9	5.2	4.7	4.2	3.7	3.4	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](http://www.lochinvar.ltd.uk)

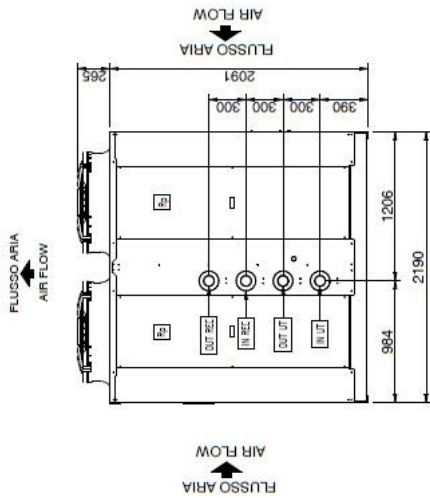
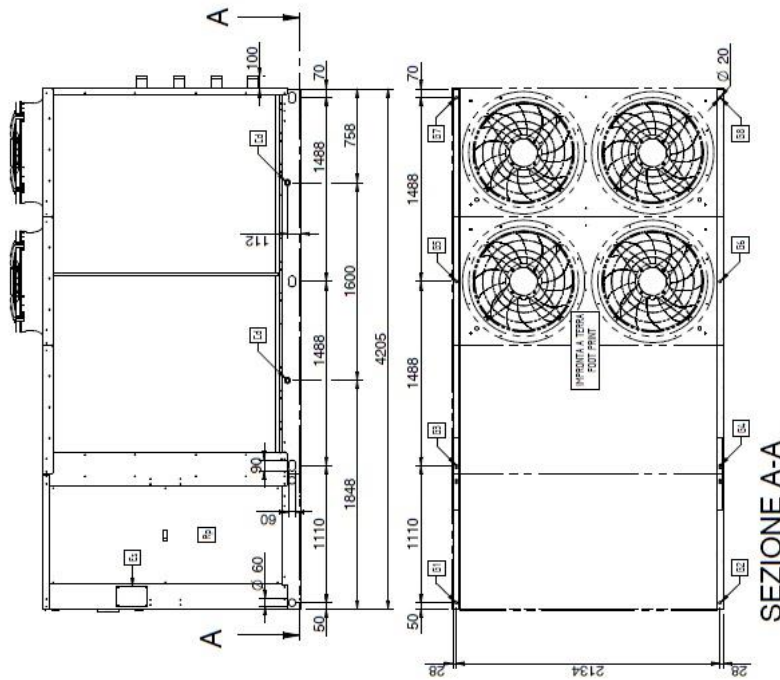
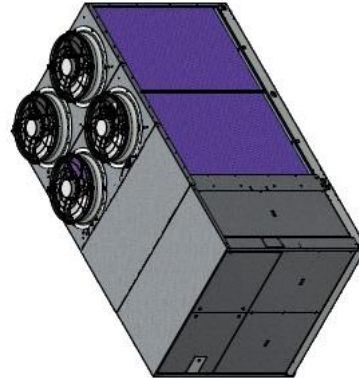
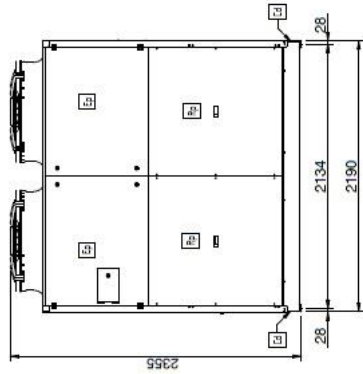
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model	octave bands (hz)								lw		lp
	63	125	250	500	1k	2k	4k	8k	db	db	db
	db	db	db	db	db	db	db	db	db	db	db
252HTXL	83.1	74.3	68.2	66.7	65.6	60.2	56.8	47.7	83.9	70	42
302HTXL	83.1	74.3	68.2	66.7	65.6	60.2	56.8	47.7	83.9	70	42
432HTXL	85.1	76.3	70.2	68.7	67.6	62.2	58.8	49.7	85.9	72	44
492HTXL	85.1	76.3	70.2	68.7	67.6	62.2	58.8	49.7	85.9	72	44
602HTXL	87.1	78.3	72.2	70.7	69.6	64.2	60.8	51.7	87.9	74	46
752HTXL	87.1	78.3	72.2	70.7	69.6	64.2	60.8	51.7	87.9	74	46
852HTXL	87.1	78.3	72.2	70.7	69.6	64.2	60.8	51.7	87.9	74	46
1002HTXL	88.1	79.3	73.2	71.7	70.6	65.2	61.8	52.7	88.9	75	43
1202HTXL	88.1	79.3	73.2	71.7	70.6	65.2	61.8	52.7	88.9	75	43
1454HTXL	92.1	83.3	77.2	75.7	74.6	69.2	65.8	56.7	92.9	79	47
1654HTXL	92.1	83.3	77.2	75.7	74.6	69.2	65.8	56.7	92.9	79	47
1854HTXL	93.1	84.3	78.2	76.7	75.6	70.2	66.8	57.7	93.9	80	48
2154HTXL	93.1	84.3	78.2	76.7	75.6	70.2	66.8	57.7	93.9	80	48

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Rp	PANNELLO ASPORTABILE - REMOVABLE PANEL
Ep	QUADRO ELETTRICO - ELECTRICAL PANEL
En	INGRESSO ALIMENTAZIONE ELETTRICA - POWER SUPPLY INLET
Cd	SCARICO CONDENSA - CONDENSATE DRAIN
IN UT	INGRESSO ACQUA UTENTE - USER WATER INLET
OUT UT	USCITA ACQUA UTENTE - USER WATER OUTLET
IN REC	INGRESSO ACQUA RECUPERO - RECOVERY WATER INLET
OUT REC	USCITA ACQUA RECUPERO - RECOVERY WATER OUTLET