

TECHNICAL PRODUCT SUBMITTAL

AMICUS LAHP-432HTXL LOW NOISE AIR SOURCE HEAT PUMP

Data	Unit	Model LAHP-432HTXL
Heating Data		
Heating Capacity (EN14511) ¹	kW	41.2
Total Power input (EN14511) ¹	kW	9.56
COP (EN14511) ¹	W/W	4.31
Nominal flow rate	m ³ /h	7.19
Pressure drop across the heat pump	kPa	26.5
Design air flow rate	m ³ /h	13005
EcoDesign data ²		
Energy Label Rating Low temperature		A++
SCOP Low Temperature		3.84
Seasonal Efficiency Low temperature	%	151
Energy Label Rating High temperature		A+
SCOP High Temperature		3.19
Seasonal Efficiency High temperature	%	125
Cooling Data (RV units only)		
Cooling Capacity (EN14511) ³	kW	36.8
Total Power input (EN14511) ³	kW	13.3
EER (EN14511) ³	W/W	2.77
Nominal flow rate	m ³ /h	6.25
Pressure drop across the heat pump	kPa	23.6
Design air flow rate	m ³ /h	13853
General data		
Refrigerant		R410A
Compressor Type		E.V.I. Scroll
Number of Compressors		2
Number of Circuits		1
Capacity steps		2
Minimum capacity step	%	50
Sound power level	dB(A)	73
Sound pressure level (10m)	dB(A)	41
Minimum water content in the user circuit	litre	425
Electrical Data		
Power supply	V/Ph/Hz	400/3+N/50
Maximum input power	kW	20.7
Maximum input current standard unit	A	35.9
Peak input current standard unit	A	121
Peak input current unit with soft start option fitted	A	72
Fuse rating (delayed)	A	100
Fans		
Type		Axial AC
Number of fans (standard unit)	n°	2

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LAHP-432HTXL			Heating OUT							Max Outlet
Water Delivery Temperature			35C	40C	45C	50C	55C	60C	63C	
Source air temperature	-10	Heat Output (KW)	23.8	23.9	24.0	24.2	24.4	N/A	N/A	55°C
		Efficiency COP	2.5	2.3	2.1	1.9	1.8	N/A	N/A	
	-8	Heat Output (KW)	25.1	25.1	25.2	25.4	25.6	25.9	N/A	60°C
		Efficiency COP	2.7	2.4	2.2	2.0	1.8	1.7	N/A	
	-6	Heat Output (KW)	26.3	26.3	26.4	26.6	26.7	27.0	27.1	63°C
		Efficiency COP	2.8	2.5	2.3	2.1	1.9	1.7	1.6	
	-4	Heat Output (KW)	27.6	27.6	27.7	27.8	27.8	28.1	28.4	63°C
		Efficiency COP	2.9	2.7	2.4	2.2	2.0	1.8	1.7	
	-2	Heat Output (KW)	29.7	29.8	29.9	30.0	30.2	30.6	31.0	63°C
		Efficiency COP	3.1	2.8	2.6	2.3	2.1	1.9	1.8	
	0	Heat Output (KW)	32.2	32.3	32.5	32.8	33.1	33.4	33.9	63°C
		Efficiency COP	3.4	3.1	2.8	2.5	2.3	2.1	2.0	
	2	Heat Output (KW)	34.7	34.9	35.2	35.5	35.9	36.3	36.8	63°C
		Efficiency COP	3.6	3.3	3.0	2.7	2.5	2.2	2.1	
	4	Heat Output (KW)	37.6	37.7	38.0	38.4	38.9	39.5	40.0	63°C
		Efficiency COP	3.9	3.6	3.2	2.9	2.7	2.4	2.3	
	6	Heat Output (KW)	40.0	40.3	40.5	41.0	41.5	42.2	42.7	63°C
		Efficiency COP	4.2	3.8	3.4	3.1	2.8	2.6	2.4	
	7	Heat Output (KW)	41.2	41.4	41.7	42.1	42.6	43.3	43.7	63°C
		Efficiency COP	4.3	3.9	3.5	3.2	2.9	2.6	2.5	
	8	Heat Output (KW)	41.9	42.2	42.5	42.8	43.3	44.0	44.4	63°C
		Efficiency COP	4.4	4.0	3.6	3.3	3.0	2.7	2.5	
	10	Heat Output (KW)	43.5	43.7	44.0	44.4	44.9	45.4	45.8	63°C
		Efficiency COP	4.6	4.2	3.8	3.4	3.1	2.8	2.6	
	15	Heat Output (KW)	47.4	47.6	47.8	48.1	48.6	49.0	49.4	63°C
		Efficiency COP	5.1	4.6	4.1	3.7	3.3	3.0	2.8	
	20	Heat Output (KW)	51.1	51.1	51.2	51.5	51.9	52.4	52.7	63°C
		Efficiency COP	5.5	5.0	4.4	4.0	3.6	3.2	3.0	
	25	Heat Output (KW)	53.9	53.9	53.9	54.1	54.4	54.8	55.1	63°C
		Efficiency COP	5.9	5.2	4.7	4.2	3.7	3.3	3.1	

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

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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
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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