

# TECHNICAL PRODUCT SUBMITTAL

## AMICUS LAHP-492HTS STANDARD AIR SOURCE HEAT PUMP

Data	Unit	Model
		<b>LAHP-492HTS</b>
<b>Heating Data</b>		
Heating Capacity (EN14511) <sup>1</sup>	kW	50.9
Total Power input (EN14511) <sup>1</sup>	kW	13
COP (EN14511) <sup>1</sup>	W/W	3.92
Nominal flow rate	m <sup>3</sup> /h	8.84
Pressure drop across the heat pump	kPa	61
Design air flow rate	m <sup>3</sup> /h	17722
<b>EcoDesign data <sup>2</sup></b>		
Energy Label Rating Low temperature		A+
SCOP Low Temperature		3.45
Seasonal Efficiency Low temperature	%	135
Energy Label Rating High temperature		A+
SCOP High Temperature		2.99
Seasonal Efficiency High temperature	%	116
<b>Cooling Data</b>		
Cooling Capacity (EN14511) <sup>3</sup>	kW	46.8
Total Power input (EN14511) <sup>3</sup>	kW	16.4
EER (EN14511) <sup>3</sup>	W/W	2.85
Nominal flow rate	m <sup>3</sup> /h	7.97
Pressure drop across the heat pump	kPa	43.4
Design air flow rate	m <sup>3</sup> /h	18186
<b>General data</b>		
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)	84
Sound pressure level (10m)	dB(A)	52
Minimum water content in the user circuit	litre	510
<b>Electrical Data</b>		
Power supply	V/Ph/Hz	400/3+N/50
Maximum input power	kW	24.6
Maximum input current standard unit	A	43.6
Peak input current standard unit	A	153
Peak input current unit with soft start option fitted	A	80
Fuse rating (delayed)	A	100
<b>Fans</b>		
Type		Axial EC
Number of fans (standard unit)	n <sup>o</sup>	2

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LAHP-492HTS		Heating OUT							Max Outlet	
Water Delivery Temperature		35C	40C	45C	50C	55C	60C	63C		
Source air temperature	-10	Heat Output (KW)	29.0	29.1	29.2	29.4	29.5	N/A	N/A	55°c
		Efficiency COP	2.6	2.4	2.2	2.0	1.8	N/A	N/A	
	-8	Heat Output (KW)	30.6	30.6	30.9	31.0	31.3	N/A	N/A	55°c
		Efficiency COP	2.7	2.5	2.3	2.1	1.9	N/A	N/A	
	-6	Heat Output (KW)	32.1	32.1	32.3	32.4	32.7	32.9	N/A	60°c
		Efficiency COP	2.8	2.6	2.4	2.2	2.0	1.8	N/A	
	-4	Heat Output (KW)	33.7	33.8	33.7	34.0	34.1	34.3	N/A	60°c
		Efficiency COP	2.9	2.7	2.4	2.2	2.1	1.9	N/A	
	-2	Heat Output (KW)	35.7	35.6	35.7	35.8	36.1	36.1	36.0	63°c
		Efficiency COP	3.1	2.8	2.6	2.3	2.2	2.0	1.9	
	0	Heat Output (KW)	39.1	39.0	39.0	39.2	39.4	39.7	39.7	63°c
		Efficiency COP	3.3	3.0	2.8	2.5	2.3	2.1	2.0	
	2	Heat Output (KW)	42.3	42.5	42.4	42.6	42.8	42.9	43.3	63°c
		Efficiency COP	3.5	3.2	2.9	2.7	2.5	2.3	2.2	
	4	Heat Output (KW)	45.7	45.9	46.1	46.1	46.3	46.6	46.9	63°c
		Efficiency COP	3.8	3.5	3.2	2.9	2.7	2.4	2.3	
	6	Heat Output (KW)	49.3	49.5	49.8	50.0	50.1	50.5	50.8	63°c
		Efficiency COP	4.0	3.7	3.4	3.1	2.8	2.6	2.5	
	7	Heat Output (KW)	51.1	51.4	51.7	51.8	52.1	52.5	52.8	63°c
		Efficiency COP	4.1	3.8	3.5	3.2	2.9	2.7	2.6	
8	Heat Output (KW)	52.6	52.9	53.1	53.4	53.5	53.9	54.2	63°c	
	Efficiency COP	4.2	3.9	3.6	3.3	3.0	2.8	2.6		
10	Heat Output (KW)	55.1	55.3	55.4	55.7	55.9	56.1	56.3	63°c	
	Efficiency COP	4.4	4.0	3.7	3.4	3.1	2.8	2.7		
15	Heat Output (KW)	61.7	61.7	61.7	61.8	61.9	62.1	62.1	63°c	
	Efficiency COP	4.8	4.4	4.0	3.6	3.3	3.1	2.9		
20	Heat Output (KW)	69.4	69.2	68.9	68.8	68.7	68.7	68.7	63°c	
	Efficiency COP	5.2	4.8	4.3	4.0	3.6	3.3	3.2		
25	Heat Output (KW)	77.5	77.1	76.6	76.3	76.1	75.9	75.7	63°c	
	Efficiency COP	5.7	5.2	4.7	4.3	3.9	3.6	3.4		

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			
252HTS	91.1	82.3	76.2	74.7	73.6	68.2	64.8	55.7	91.9	82	50
302HTS	91.1	82.3	76.2	74.7	73.6	68.2	64.8	55.7	91.9	83	51
432HTS	92.1	83.3	77.2	75.7	74.6	69.2	65.8	56.7	92.9	84	52
492HTS	93.1	84.3	79.2	76.7	75.6	70.2	66.8	57.7	93.9	84	52
602HTS	93.1	84.3	79.2	76.7	75.6	70.2	66.8	57.7	93.9	83	51
752HTS	93.1	84.3	79.2	76.7	75.6	70.2	66.8	57.7	93.9	84	52
852HTS	93.1	84.3	79.2	76.7	75.6	70.2	66.8	57.7	93.9	84	52
1002HTS	93.1	84.3	79.2	76.7	75.6	70.2	66.8	57.7	93.9	84	52
1202HTS	93.1	84.3	79.2	76.7	75.6	70.2	66.8	57.7	93.9	87	55
1454HTS	100.1	91.3	85.2	83.7	82.6	77.2	73.8	64.7	100.9	88	56
1654HTS	100.1	91.3	85.2	83.7	82.6	77.2	73.8	64.7	100.9	89	57
1854HTS	101.1	92.3	86.2	84.7	83.6	78.2	74.8	65.7	101.9	88	56
2154HTS	102.1	93.3	87.2	85.7	84.6	79.2	75.8	66.7	102.9	89	57

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