

TECHNICAL PRODUCT SUBMITTAL

AMICUS LAHP-1854HTS STANDARD AIR SOURCE HEAT PUMP

Data	Unit	Model
		LAHP-1854HTS
Heating Data		
Heating Capacity (EN14511) ¹	kW	182
Total Power input (EN14511) ¹	kW	42.1
COP (EN14511) ¹	W/W	4.32
Nominal flow rate	m ³ /h	31.4
Pressure drop across the heat pump	kPa	32.8
Design air flow rate	m ³ /h	51675
EcoDesign data ²		
Energy Label Rating Low temperature		A++
SCOP Low Temperature		3.89
Seasonal Efficiency Low temperature	%	153
Energy Label Rating High temperature		A+
SCOP High Temperature		3.17
Seasonal Efficiency High temperature	%	124
Cooling Data		
Cooling Capacity (EN14511) ³	kW	157
Total Power input (EN14511) ³	kW	53.6
EER (EN14511) ³	W/W	2.93
Nominal flow rate	m ³ /h	27.03
Pressure drop across the heat pump	kPa	23.5
Design air flow rate	m ³ /h	55822
General data		
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)	88
Sound pressure level (10m)	dB(A)	56
Minimum water content in the user circuit	litre	900
Electrical Data		
Power supply	V/Ph/Hz	400/3+N/50
Maximum input power	kW	76
Maximum input current standard unit	A	142
Peak input current standard unit	A	283
Peak input current unit with soft start option fitted	A	213
Fuse rating (delayed)	A	200
Fans		
Type		Axial EC
Number of fans (standard unit)	n ^o	3

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LAHP-1854HTS			Heating OUT							Max Outlet
Water Delivery Temperature		35C	40C	45C	50C	55C	60C	63C		
Source air temperature	-10	Heat Output (KW)	105	105	106	105	105	106	106	63°C
		Efficiency COP	2.46	2.26	2.09	1.9	1.73	1.59	1.5	
	-8	Heat Output (KW)	111	111	111	111	111	111	111	63°C
		Efficiency COP	2.59	2.38	2.18	1.99	1.82	1.65	1.56	
	-6	Heat Output (KW)	116	116	116	116	116	115	116	63°C
		Efficiency COP	2.7	2.74	2.26	2.06	1.89	1.71	1.62	
	-4	Heat Output (KW)	121	121	122	124	121	121	124	63°C
		Efficiency COP	2.81	2.57	2.36	2.19	1.96	1.79	1.72	
	-2	Heat Output (KW)	130	130	131	132	132	132	132	63°C
		Efficiency COP	3	2.74	2.52	2.32	2.12	1.94	1.84	
	0	Heat Output (KW)	141	142	143	144	144	145	146	63°C
		Efficiency COP	3.24	2.98	2.74	2.51	2.29	2.11	2.01	
	2	Heat Output (KW)	152	153	154	155	157	158	159	63°C
		Efficiency COP	3.48	3.19	2.93	2.69	2.48	2.28	2.17	
	4	Heat Output (KW)	164	165	166	168	170	172	173	63°C
		Efficiency COP	3.74	3.43	3.14	2.89	2.66	2.46	2.34	
	6	Heat Output (KW)	175	176	178	179	181	184	185	63°C
		Efficiency COP	4	3.67	3.37	3.08	2.83	2.62	2.5	
	7	Heat Output (KW)	180	181	183	185	187	189	190	63°C
		Efficiency COP	4.13	3.78	3.47	3.18	2.92	2.69	2.56	
8	Heat Output (KW)	184	185	186	188	190	192	193	63°C	
	Efficiency COP	4.23	3.87	3.54	3.24	2.97	2.74	2.61		
10	Heat Output (KW)	191	191	192	194	196	198	199	63°C	
	Efficiency COP	4.41	4.01	3.66	3.36	3.08	2.83	2.7		
15	Heat Output (KW)	209	209	209	210	212	214	215	63°C	
	Efficiency COP	4.89	4.45	4.03	3.66	3.35	3.08	2.93		
20	Heat Output (KW)	227	225	225	226	227	229	230	63°C	
	Efficiency COP	5.37	4.83	4.38	3.98	3.62	3.32	3.16		
25	Heat Output (KW)	242	240	239	240	241	243	244	63°C	
	Efficiency COP	5.73	5.17	4.67	4.27	3.86	3.53	3.36		

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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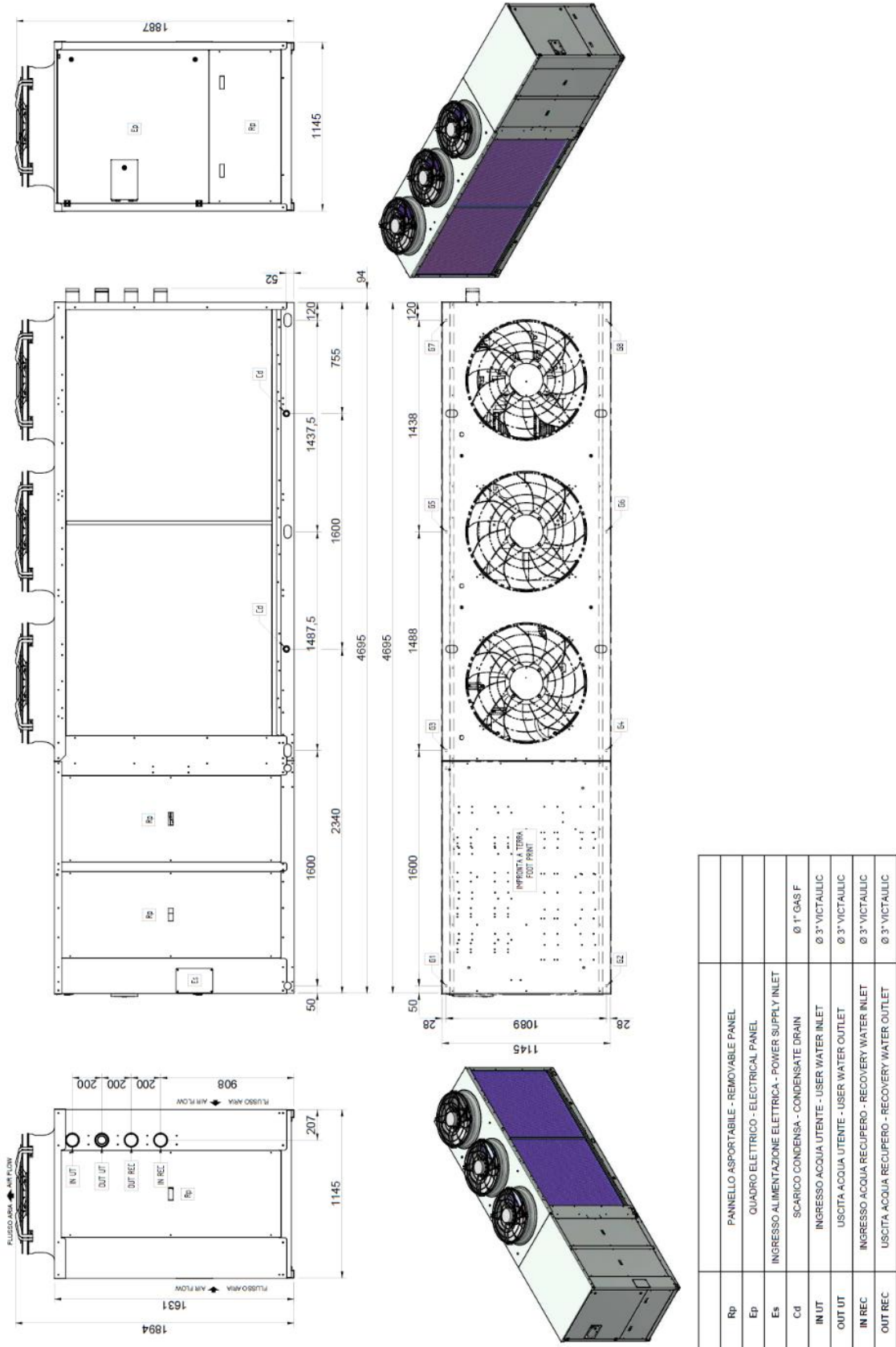


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model	octave bands (hz)								lw		lp
	63	125	250	500	1k	2k	4k	8k	db	db	db
	db	db	db	db	db	db	db	db			
252HTS	91.1	82.3	76.2	74.7	73.6	68.2	64.8	55.7	91.9	82	50
302HTS	91.1	82.3	76.2	74.7	73.6	68.2	64.8	55.7	91.9	83	51
432HTS	92.1	83.3	77.2	75.7	74.6	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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Rp	PANNELLO ASPORTABILE - REMOVABLE PANEL	
Ep	QUADRO ELETTTRICO - ELECTRICAL PANEL	
Es	INGRESSO ALIMENTAZIONE ELETTRICA - POWER SUPPLY INLET	
Cd	SCARICO CONDENSA - CONDENSATE DRAIN	Ø 1" GAS F
IN UT	INGRESSO ACQUA UTENTE - USER WATER INLET	Ø 3" VICTAULIC
OUT UT	USCITA ACQUA UTENTE - USER WATER OUTLET	Ø 3" VICTAULIC
IN REC	INGRESSO ACQUA RECUPERO - RECOVERY WATER INLET	Ø 3" VICTAULIC
OUT REC	USCITA ACQUA RECUPERO - RECOVERY WATER OUTLET	Ø 3" VICTAULIC