

# TECHNICAL PRODUCT SUBMITTAL

## AMICUS LAHP-2154HT AIR SOURCE HEAT PUMP

EFFICIENCY DATA -Part L2		
Heating Capacity (EN14511) external air+7C 30/35 flow		kW
Total Power input (EN14511) external air+7C 30/35 flow		kW
COP (EN14511) external air+7C 30/35 flow		W/W
EFFICIENCY DATA -ErP and Energy Label		
Energy Label Rating Low temperature		A++
SCOP Low Temperature		3.92
Seasonal Efficiency Low temperature	%	154
Energy Label Rating High temperature		A++
SCOP High Temperature		3.28
Seasonal Efficiency High temperature	%	128
GENERAL		
Refrigerant type		R410A
Compressor Type		E.V.I. Scroll
Number of Compressors		4
Number of Circuits		2
Capacity steps		4
Minimum capacity step	%	25
ELECTRICAL DATA		
Power supply	V/Ph/Hz	415/3+N/50
Maximum input power	kW	98
Maximum input current standard unit	A (per phase)	170
Peak input current standard unit	A (per phase)	319
Peak input current unit with soft start option fitted	A (per phase)	245
Fuse rating (delayed)	A	200
Optional Hydraulic kit input power	kW	3.40
Optional Hydraulic kit maximum input current	A	6.46
FANS		
Fan type (standard unit)		Axial
Number of fans (standard unit)		6
Air flow rate for design	m <sup>3</sup> /h	28921
Sound power level <sup>2</sup>	dB(A)	80
Sound pressure level <sup>3</sup>	dB(A)	48
WATER		
Flow/Return connections	inch	3
Nominal flow rate	L/sec	13.18
Pressure drop across the heat exchanger	kPa	64.6
Minimum water content in the user circuit	litre	1050
BREEAM DATA		
Total refrigerant charge	kg	57.2
Operational life	Years	20
Global warming potential		2088

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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## AMICUS LAHP-2154HT AIR SOURCE HEAT PUMP

LAHP-2154HT		Heating OUT						Max Outlet	
Water Delivery Temperature		35C	40C	45C	50C	55C	60C		
performance data	-10	Heat Output (KW)	128.0	129.0	129.0	130.0	131.0	N/A	55°C
		Efficiency COP	2.5	2.3	2.1	1.9	1.7	N/A	
	-9	Heat Output (KW)	132.0	132.0	132.0	133.0	133.0	135.0	60°C
		Efficiency COP	2.6	2.4	2.1	2.0	1.8	1.6	
	-8	Heat Output (KW)	135.0	136.0	135.0	136.0	137.0	138.0	60°C
		Efficiency COP	2.7	2.4	2.2	2.0	1.8	1.6	
	-7	Heat Output (KW)	138.0	138.0	138.0	139.0	140.0	141.0	60°C
		Efficiency COP	2.7	2.5	2.2	2.0	1.8	1.7	
	-6	Heat Output (KW)	141.0	141.0	141.0	142.0	143.0	144.0	60°C
		Efficiency COP	2.8	2.5	2.3	2.1	1.9	1.7	
	-5	Heat Output (KW)	144.0	145.0	145.0	145.0	146.0	148.0	60°C
		Efficiency COP	2.8	2.6	2.3	2.1	1.9	1.7	
	-4	Heat Output (KW)	149.0	150.0	151.0	152.0	153.0	156.0	60°C
		Efficiency COP	2.9	2.7	2.4	2.2	2.0	1.8	
	-3	Heat Output (KW)	156.0	157.0	158.0	159.0	159.0	163.0	60°C
		Efficiency COP	3.1	2.8	2.5	2.3	2.1	1.9	
	-2	Heat Output (KW)	162.0	163.0	164.0	166.0	166.0	170.0	60°C
		Efficiency COP	3.2	2.9	2.6	2.4	2.2	2.0	
	0	Heat Output (KW)	176.0	177.0	178.0	180.0	181.0	185.0	60°C
		Efficiency COP	3.4	3.1	2.9	2.6	2.3	2.2	
5	Heat Output (KW)	210.0	211.0	214.0	216.0	218.0	220.0	60°C	
	Efficiency COP	4.2	3.8	3.5	3.2	2.8	2.6		
10	Heat Output (KW)	231.0	232.0	233.0	234.0	236.0	239.0	60°C	
	Efficiency COP	4.7	4.3	3.9	3.5	3.1	2.8		
15	Heat Output (KW)	251.0	251.0	252.0	254.0	256.0	258.0	60°C	
	Efficiency COP	5.2	4.7	4.2	3.8	3.4	3.1		
20	Heat Output (KW)	269.0	269.0	269.0	270.0	271.0	273.0	60°C	
	Efficiency COP	5.6	5.0	4.5	4.0	3.6	3.3		
25	Heat Output (KW)	287.0	287.0	288.0	289.0	291.0	293.0	60°C	
	Efficiency COP	5.9	5.3	4.8	4.3	3.9	3.5		