

# Adveco L70 Air Source Heat Pump

## ASHP Range for DHW and Heating Applications



The Adveco L70 is a high capacity air-to-water variable speed heat pump rated at 70 kW and designed to provide high temperature domestic hot water and heating for large scale commercial and industrial applications.

The L70 ASHP can provide heating outputs of up to 90 kW from a single compact unit, or as part of a cascade installation to deliver even greater capacity, and is specially calibrated for the UK climate with an ambient temperature operating band of -20 to +35°C and an output of 63 kW at -5°C.

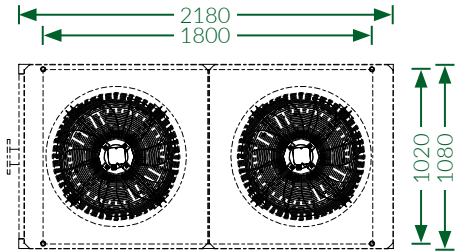
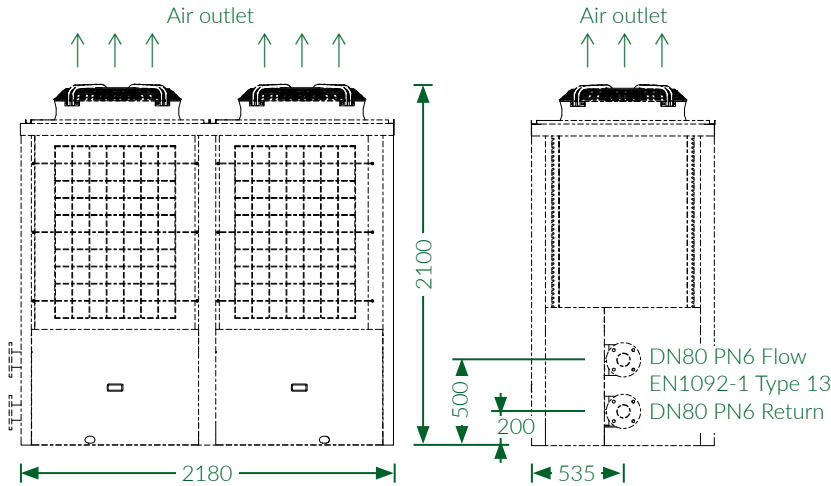
Using an evaporator and internal compressor to extract usable heat from the air, the Adveco L70 transfers energy through a refrigerant circuit into a building as a low carbon source of DHW and heating, minimising environmental impact and increasing overall energy efficiency.

The L70 can deliver flow temperatures up to 60°C and is ideal for inclusion within a hybrid heating or hot water system, ensuring high efficiencies and temperatures throughout the year.

### FEATURES

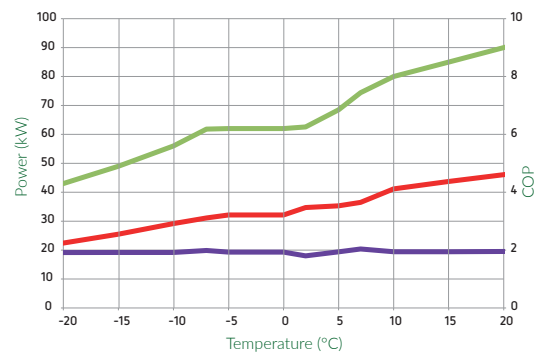
- High capacity output up to 90 kW for hot water and heating
- Compact design ensures efficient use of space
- Cascade support for large and highly demanding applications
- Eligible for Non-Domestic RHI
- Specifically designed for the UK climate, supporting ambient temperatures from -20°C to +35°C
- Large DHW output range from 25°C to 60°C
- Built-in automatic reverse cycle frost protection



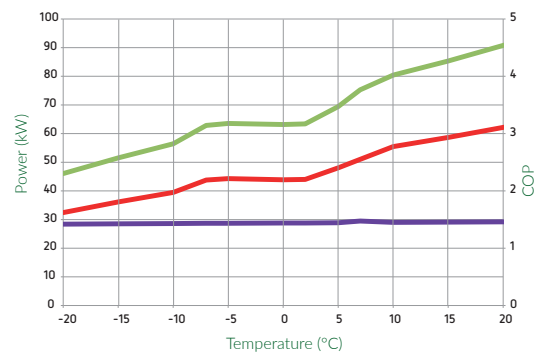


		units	Adveco L70					
Electrical Input		(1)	20.39					
		(2)	18.01					
		(3)	19.88					
		(4)	19.20					
Average Climate Conditions	Space Heating Seasonal Energy Efficiency ( $\eta_s$ )	35°C	133%					
	Seasonal Coefficient of Performance (SCOP)	55°C	112%					
	ErP Rating	35°C	A+					
	ErP Rating	55°C	A+					
Warmer Climate Conditions	Space Heating Seasonal Energy Efficiency ( $\eta_s$ )	35°C	160					
	Seasonal Coefficient of Performance (SCOP)	55°C	149					
	ErP Rating	35°C	A++					
	ErP Rating	55°C	A++					
Coefficient of Performance (COP)		(1)	3.65					
		(2)	3.47					
		(3)	3.11					
		(4)	2.83					
Power Supply	V / Hz / Phase		400 / 50 / 3ph					
Rated current	A		74					
Staged start-up current	Compressor 1	A	135					
	Compressor 1+2	A	171					
Electrical Protection			MCB Type C 100 A					
Maximum Working Pressure	High Side (HP)	bar	44.0					
	Low Side (LP)	bar	14.0					
Maximum Working Temperature Range	Ambient Air	°C	-20 to 35					
	Water Side	°C	25 to 65					
Refrigerant	Type		R410A					
	Fill Mass	kg	2x 9.0					
Oil	Type		POE					
	Fill Volume	L	3.24					
Fan	Quantity		2					
	RPM		900					
	Power input	W	2x 1100					
Nominal Pressure Drop - Water Side Heat Exchanger	kPa		50					
Water flow rate	Nominal	m <sup>3</sup> /h	15.5					
	Minimum	m <sup>3</sup> /h	10.0					
Dry mass	kg		800					
Octave Band Sound Pressure Level (Hz) dB re: 2x10 <sup>-5</sup> Pa @ 1m								
Noise Data	63	125	250	500	1k	2k	4k	8k
Advenco L70	66	69	66	69	68	64	55	46

L70 Performance at 35°C Outlet Temperature



L70 Performance at 55°C Outlet Temperature



— Power Output (kW) — Power Input (kW) — COP

- Heating conditions: Water temperature 35°C, Ambient temperature 7°C
  - Heating conditions: Water temperature 35°C, Ambient temperature 2°C
  - Heating conditions: Water temperature 35°C, Ambient temperature -7°C
  - Heating conditions: Water temperature 35°C, Ambient temperature -10°C
- Climate conditions ref. Regulation (EU) No. 811/2013 Annex VII Table 10.