LUANECO

HLHK Series | Heating & Cooling

Low Ambient DC Inverter Air-to-Water Heat Pump

R32 refrigerant | EVI-enhanced compressor | Wide ambient operation: -35°C to 53°C

Product Overview

The HLHK series is designed for reliable space heating and cooling in low ambient conditions. It combines an EVI-enhanced compressor, DC inverter control and optimized refrigerant flow management for stable output and efficient operation.

Suitable Applications

- Residential houses and villas
- Apartments, offices and commercial buildings
- Hydronic heating/cooling systems

At a Glance

Ambient Range -35°C to 53°C	**Capacity Range** 17.0 - 45.0 kW rated heating
Refrigerant R32	**Power Supply** 380V / 50Hz

Key Features

Stable, energy-saving operation Dedicated EVI compressor helps maintain stable operation and high COP at low ambient temperatures.	**Wide operating envelope** Electronic expansion valve and bypass control improve efficiency in heating and cooling modes.	**Efficient heat exchange** Internally grooved copper-tube heat exchanger improves refrigerant flow and heat transfer.
Freeze protection design Anti-freeze water-side heat exchanger with multiple protection functions.	**Remote intelligent control** Remote intelligent control for easier system operation and monitoring.	**Quiet operation & smart defrost** Low-noise drive and intelligent defrost control for reliable operation.

Format follows common international data-sheet conventions: model columns, unit column, A/W condition notation and performance notes.

Technical Specifications

HLHK low ambient air-to-water heat pump series - English data table for website and product documentation.

Parameter	Unit	HLHK-6LNCDII-1A	HLHK-8LNCDII-1A	HLHK-10LNCDII-1A	HLHK-12LNCDII-1A	HLHK-15LNCDII-1A
Power supply	-	380V / 50Hz	380V / 50Hz	380V / 50Hz	380V / 50Hz	380V / 50Hz
Rated heating capacity (A7/W45)	kW	17.0	22.0	30.0	35.0	45.0
Rated heating power input (A7/W45)	kW	4.64	6.13	8.52	9.86	12.82
Rated heating COP (A7/W45)	W/W	3.66	3.59	3.52	3.55	3.51
Nominal heating capacity (A-12/W41)	kW	12.5	15.2	20.5	24.0	30.3
Nominal heating power input (A-12/W41)	kW	4.84	6.03	7.82	9.41	12.07
Nominal heating COP (A-12/W41)	W/W	2.58	2.52	2.62	2.55	2.51
Low ambient heating capacity (A-20/W41)	kW	10.8	13.0	17.5	20.0	27.0
Low ambient heating power input (A-20/W41)	kW	4.86	5.91	7.88	9.12	12.51
Low ambient heating COP (A-20/W41)	W/W	2.22	2.20	2.22	2.19	2.16
Nominal cooling capacity (A35/W7)	kW	13.0	16.0	21.0	24.0	30.0
Nominal cooling power input (A35/W7)	kW	4.73	6.06	7.81	8.49	10.79
Nominal cooling COP (A35/W7)	W/W	2.75	2.64	2.69	2.83	2.78
Maximum input power	kW	5.8	7.2	9.4	12.38	16.27
Maximum input current	A	10	12	16	20.8*	27.4*
APF (W41)	W/W	3.30	3.15	3.32	3.26	3.21
HSPF (W35/W55)	W/W	3.70 / 2.67	3.65 / 2.61	3.61 / 2.64	3.73 / 2.66	3.71 / 2.63
Refrigerant	-	R32	R32	R32	R32	R32
Circulating water flow	m³/h	2.40	2.80	3.65	4.95	6.19
Water connection	-	DN32	DN32	DN32	Female thread DN32	Female thread DN40
Sound pressure level	dB(A)	58	60	63	48-63	50-63
Net weight	kg	118	135	175	188	205
Dimensions (L x W x H)	mm	1000 x 390 x 1380	1000 x 390 x 1380	1170 x 430 x 1535	1170 x 430 x 1535	1260 x 440 x 1635

Performance conditions:

1. Nominal cooling condition: outdoor DB/WB 35°C/24°C; outlet water temperature 7°C.
2. Rated heating condition: outdoor DB/WB 7°C/6°C; outlet water temperature 45°C.
3. Nominal heating condition: outdoor DB/WB -12°C/-13.5°C; outlet water temperature 41°C.
4. Low ambient heating condition: outdoor DB/WB -20°C; outlet water temperature 41°C.
5. Product models, specifications and performance data may change due to continuous product improvement. Final data should be confirmed by the product nameplate and official technical documentation.

* Source table shows long decimal values for the two maximum-current cells. They are rounded to one decimal place here for standard data-sheet readability.