



Cooling



C&H



Sanitary Geothermal



Rotary



Scroll

## LWWHPC 05 ÷ 140

**Cooling capacity: 4.5 ÷ 140.1 kW**

**Heating capacity: 4.9 ÷ 163.9 kW**

**Heat recovery rate: 20-25%**



## FEATURES

### STRUCTURE

Panels and frame are made from galvanized steel protected with polyester powder painting to ensure total resistance to atmospheric agents.

### HERMETIC COMPRESSORS

Single phase rotary type (mod.05÷07), single phase (mod. 08, 10, 12) and 3-phase (mod.08÷140) scroll type compressors, with built-in thermal overload cut-out and crankcase heater, mounted on rubber vibration dampers.

### EVAPORATOR

High efficiency plate type heat exchanger, factory insulated with flexible close cell material.

### CONDENSER

High efficiency plate type heat exchanger, factory insulated with flexible close cell material.

### DESUPERHEATER

High efficiency stainless steel brazed plate heat exchanger, factory insulated with flexible close cell material. **(optional)**

### REFRIGERANT CIRCUIT

Copper tube connection with charge valves, filter drier, thermostatic expansion valve, gas-liquid separator, high pressure switch and low pressure switch.

The heat pump units are complete also with 4-way valve and one way valve.

### HYDRAULIC CIRCUIT

Built with user side and source side water inlet/outlet connectors, water discharge connectors, air vent valve, mod.05÷30 the user side is complete also with expansion vessel, water pump and flow switch.

### ELECTRIC PANEL

Consists of:

- Compressor contactor,
- Compressor protection breaker,
- User side water pump contactor (for mod.05÷140)
- User side water pump breaker (for mod.05÷140)
- Microprocessor with function display

### OPTIONAL

- Sight glass which must be installed in factory,
- Source side flow switch,
- Source side water pump,
- Anti-vibration rubber,
- Metallic filter for the water circuit.
- Heat recovery exchanger

## NOMENCLATURE

L WW H R P A 10  
① ② ③ ④ ⑤ ⑥ ⑦

- ① L: ATD air product  
② Unit type  
AA: Air to Air  
AW: Air to Water  
WA: Water to Air  
WW: Water to Water

- ③ C: Cooling only  
H: Heat pump  
④ Heat Recovery type:  
--: without heat recovery  
R: with heat recovery  
⑤ Heat exchanger  
T: tube in tube type  
P: plate type

- ⑥ Refrigerant type  
--: R22  
A: R410a  
B: R134a  
C: R407c  
⑦ Model

## TECHNICAL DATA

Mod. LWWHPC		05	07	08	10	12	14	16	20	25	30
<b>Nominal cooling capacity*</b>	kW	4.77	6.90	9.02	10.82	12.83	14.75	17.18	20.89	26.62	31.93
<b>Nominal heating capacity**</b>	kW	5.10	7.38	9.67	11.86	14.35	17.16	18.82	22.36	28.70	34.22
<b>Hermetic compressors</b>											
Type	/	Rotary				Scroll					
Qty/circuit nr.	Nr.	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Cooling power input*	kW	1	1.4	1.7	2	2.4	2.7	3	3.5	4.5	5.35
Heating power input**	kW	1.2	1.7	2.1	2.8	3.4	4.2	4.2	4.88	6	7.1
<b>User side heat exchanger</b>											
Pressure drop	kPa	20			25			25			
Water flow	m <sup>3</sup> /h	0.77	1.12	1.46	1.75	2.08	2.39	2.79	3.39	4.32	5.18
<b>Source side heat exchanger</b>											
Pressure drop	kPa	8			12--18			12--18			
Water flow	m <sup>3</sup> /h	0.43	0.62	0.8	0.95	1.13	1.32	1.47	1.81	2.31	2.57
<b>User side water pump</b>											
Available pressure head	kPa	77	68	196	188	167	195	154	166	162	165
<b>Power supply</b>	V/Ph/Hz	230/1/50			230/1/50&400/3/50			400/3/50			
<b>Sound pressure level***</b>	dB(A)	56	56	56	56	58	58	61	68	68	71
<b>Net weight</b>	kg	92	96	110	120	130	140	150	250	280	300

Mod. LWWHPC		38	50	56	65	75	90	110	130	140
<b>Nominal cooling capacity*</b>	kW	37.1	50.5	56.4	64.7	75.3	90.4	110.1	130.1	140.1
<b>Nominal heating capacity**</b>	kW	39.5	54.1	61.2	72	84	105.8	128.8	152.2	163.9
<b>Hermetic compressors</b>										
Type	/	Scroll								
Qty/circuit nr.	Nr.	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2
Cooling power input*	kW	6.8	9.2	9.9	11.6	13.5	16.2	19.3	22.8	24.6
Heating power input**	kW	8.9	12.4	13.6	15.6	18.1	23	27.4	32.4	34.9
<b>User side heat exchanger</b>										
Pressure drop	kPa	42	38	40	43	45	40	40	42	42
Water flow	m <sup>3</sup> /h	6.38	8.68	9.7	11.13	12.95	15.5	18.9	22.4	24.1
<b>Source side heat exchanger</b>										
Pressure drop	kPa	60	51	53	58	58	41	41	44	45
Water flow	m <sup>3</sup> /h	7.55	10.27	11.4	13.12	15.27	18.33	22.25	26.29	28.32
<b>Power supply</b>	V/Ph/Hz	400/3/50								
<b>Sound pressure level***</b>	dB(A)	63	67	69	70	72	74	77	77	77
<b>Net weight</b>	kg	330	450	460	540	560	440	550	558	562

Performance values refer to the following conditions:

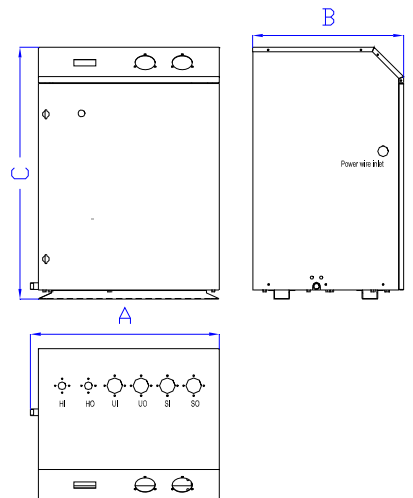
\* Source side water inlet/outlet temperature 25°C/30°C, user side water inlet/outlet temperature 12°C/7°C,

\*\* Source side water inlet/outlet temperature 13°C/8°C, user side water inlet/outlet temperature 40°C/45°C,

\*\*\* Sound pressure measured at a distance of 1 m and a height of 1.5 m above the ground in a dear field.

## OVERALL DIMENSIONS

Mod.	05	07	08	10	12	14	16	20	25	30
<b>A</b>	585	585	585	585	585	585	585	585	585	585
<b>B</b>	488	488	488	488	488	488	488	520	520	520
<b>C</b>	817	817	817	880	880	880	880	1050	1050	1050
Mod.	38	50	56	65	75	90	110	130	140	
<b>A</b>	625	655	1025	1025	1025	1255	1750	1750	1750	
<b>B</b>	580	580	852	852	852	852	1000	1000	1000	
<b>C</b>	1050	1050	850	850	850	850	850	850	850	



The technical data in this documents are not binding. Lark air reserves the right to make whatever modifications it deems necessary to improve the product at any time.

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