



Air to Air Packaged Rooftop Unit

Cooling capacity from 10.6 to 188.5 kW

Heating capacity from 11.3 to 202 kW

Functions



Cooling



C&H



Free Cooling



Characteristics

Structure

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

Direct expansion coils with condensate drain tray.

Hermetic compressor

High efficiency scroll compressor for the whole range, with built-in thermal overload cut-out and crankcase heater, mounted on rubber vibration dampers

Ripple type acoustic insulation for compressor section, and thermal insulation for coil and fan section, low noise

Centrifugal fan

Forward curve centrifugal fans for air treatment section and axial fans for condensation section

Front, side and underside air discharge of the treatment unit

High external pressure, long air supply distance

Electric panel

Electric panel consists of breakers and contactors for compressors and fan motors, phase sequence relay and other necessary protection devices for the main components

Easy operation line controller

Cooling/Heating/Auto

Error indication
Timing on/off

Optional

Economizer with fresh, return air dampers and fresh air hood
Free cooling function for low ambient temperature
Low ambient control device for operation of outdoor units at ambient temperatures from less than 20°C down to -10°C
BMS devices
T3 (Tropical climate)
Roof curb
Metal / aluminum filter
Heat recovery to 100%
Evaporating section: double skin with 50mm polyurethane foam
Optional water heating coil
Metal or plastic mesh on condenser coil
Optional supply / return air configurations
Upgraded plug fan
G4 filter, plate and bag filter



Nomenclature

L AA H C P 10

① ② ③ ④ ⑤ ⑥

① L: Lark 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 Refrigerant type

--: R22

A: R410a

B: R134a

C: R407C

⑤ Type of unit

P: Packaged type

S: Split type

⑥ Model



Technical Data

Model	Unit	10	12	14	16	20	25	28
Cooling*								
Cooling capacity*	kW	10.6	12.1	14.3	16.2	21.2	24.2	28.6
Nominal current*	A	7	7.7	9.3	10	13.4	17.7	18.7
Nominal power input*	kW	3.55	4.17	4.92	5.37	6.75	8.25	9.95
Heating*								
Heating capacity*	kW	11.3	12.8	15	17.3	22.6	25.6	30.2
Nominal current*	A	6.5	7.2	8.6	9.2	12.4	14.3	17.3
Nominal power input*	kW	3.26	3.83	4.5	5	6.17	7.57	9.1
Power supply		380~415v/3ph/50Hz						
Refrigerant charge	Kg	3.2	4.2	5	5.8	7.3	8.4	9.8
Compressor								
Qty	Nr.	1	1	1	1	2	2	2
Type		Scroll						
Air treatment section								
Centrifugal fans number	Nr.	1	1	1	1	1	1	1
Drive type	/	Direct drive						
Air flow	m³/h	1950	2400	2920	3150	4250	5400	5700
External static pressure	Pa	150	150	180	180	150	235	305
Motor power	kW	0.5	0.5	0.7	0.7	0.7	1.1	1.5
Condensation section								
Axial fans number	Nr.	1	1	1	1	1	1	1
Air flow	m³/h	4100	4150	6100	7020	8640	9430	11230
Motor power	kW	0.25	0.37	0.37	0.55	0.45	0.55	0.75
Dimensions								
Length	mm	1350	1350	1350	1350	1820	1820	1820
Width	mm	990	990	990	990	1400	1400	1400
Height	mm	880	880	880	880	1000	1000	1000
Net weight	kg	240	250	260	260	380	430	480
Sound pressure level **	dB(A)	67	68	70	71	72	70	72

Model	Unit	32	36	42	48	55	64	72
Cooling*								
Cooling capacity*	kW	32.4	36.2	41.6	47.2	53.2	63.3	71.4
Nominal current*	A	19.5	23.3	25.7	31.3	32.5	37	45.5
Nominal power input*	kW	10.5	12.7	13.85	16.4	18.7	21.5	26.5
Heating*								
Heating capacity*	kW	34.6	38	44.6	50.2	56.4	67	75.6
Nominal current*	A	18	21.3	23.7	29	30.3	34.3	42
Nominal power input*	kW	9.55	11.6	12.65	15	17	19	24.1
Power supply	380~415V/3Ph/50Hz							
Refrigerant charge	Kg	10.5	12	13	13.5	15.2	18.1	20.4
Compressor								
Qty	Nr.	2	2	2	2	2	2	2
Type	Scroll							
Air treatment section								
Centrifugal fans number	Nr.	1	1	1	1	1	1	1
Drive type	/	Belt drive						
Air flow	m ³ /h	6300	6800	7900	9350	10450	11700	14400
External static pressure	Pa	290	270	250	290	280	275	380
Motor power	kW	1.5	2.2	2.2	2.2	3	3	4
Condensation section								
Axial fans number	Nr.	1	2	2	2	2	2	2
Air flow	m ³ /h	12300	14200	18830	19200	21420	24620	28400
Motor power	kW	0.75	2*0.37	2*0.37	2*0.55	2*0.55	2*0.75	2*0.75
Dimensions								
Length	mm	2420	2420	2520	2520	2520	3090	3390
Width	mm	1620	1620	1820	1820	1820	2200	2200
Height	mm	1100	1100	1170	1170	1420	1430	1590
Net weight	kg	500	780	800	830	850	1200	1400
Sound pressure level **	dB(A)	72	72	72	75	73	75	75

Model	Unit	88	104	120	150	170	190
Cooling*							
Cooling capacity*	kW	87.2	103.3	118.8	153.4	168.6	188.5
Nominal current*	A	53	68.7	79.7	88.5	113.8	135.3
Nominal power input*	kW	30.6	39.8	46	55	65.8	78.3
Heating*							
Heating capacity*	kW	93.3	110.5	126.8	164.3	182	202
Nominal current*	A	47.2	62.3	74.2	84.6	102.5	124.8
Nominal power input*	kW	27.3	36	43	49	59.3	72.2
Power supply	380~415V/3Ph/50Hz						
Refrigerant charge	Kg	24.9	29.5	34	43.8	48	54
Compressor							
Qty	Nr.	2	4	4	4	4	4
Type	Scroll						
Air treatment section							
Centrifugal fans number	Nr.	1	1	1	1	1	1
Drive type	/	Belt drive					
Air flow	m ³ /h	16600	19940	22000	29000	31400	34900
External static pressure	Pa	345	390	390	360	420	430
Motor power	kW	4	5.5	7.5	7.5	11	15
Condensation section							
Axial fans number	Nr.	2	4	4	4	4	4
Air flow	m ³ /h	37500	43680	49200	67500	72000	84000
Motor power	kW	2*1.1	4*0.75	4*0.75	4*1.1	4*1.5	4*2.2
Dimensions							
Length	mm	3690	4700	4700	5800	5800	4800
Width	mm	2200	2240	2240	2240	2240	2240
Height	mm	1590	1650	1650	1650	1650	2320
Net weight	kg	1500	1700	1750	2300	2500	2500
Sound pressure level **	dB(A)	75	75	80	80	82	84

* Performance values refer to the following conditions:

Cooling: room air temperature 27.0°C DB RH 50%, ambient air temperature 35°C.

Heating: room air temperature 21.0°C DB, ambient air temperature 7°C DB / 6°C WB.

** Noise level measured by adopting average value in the noise lab with background noise of 25 dB(A), at a distance of 1.5m high fan speed.