

AIR SOURCE HEAT PUMP UNIT



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Outdoor installation
Cooling capacity from 68 to 476 KW
Heating capacity from 70 to 490 KW

- Characteristics**
- Modular design
 - Easy water connection
 - Independent partial smart dynamic defrost
 - Temperature compensation
 - Running in low ambient temperature up to -12°C

Available configurations

FS-U/FS-U-R 60 R(XX)% FC ST A 2
(1) (2) (3) (4) (5) (6)

- (1) Type:
FS-U Cooling type
FS-U-R Heat pump type
- (2) Heat Recovery:
XX Percentage of recovery
- (3) Free-Cooling:
FC Free-Cooling
- (4) Version:
ST Standard
EN Low noise type
- (5) Refrigerants:
A R22
B R407C
C R134a
D R410A
E Other refrigerants
- (6) Power Supply:
2 380/3/50
4 460/3/60
6 Other power supply

Applications



Functions and features



- Optional**
- Plate type heat exchanger
 - Copper fins
 - Stainless steel panel casing
 - Coated steel panel
 - Electric water heater
 - Free-Cooling
 - Heat recovery

Technical data

Model	Size	60	120	180	240	300	360	420	
General	Cooling capacity	KW	68	136	204	272	340	408	476
	Power input	KW	22.5	45	67.5	90	112.5	135	157.5
	Heating capacity	KW	70	140	210	280	350	420	490
	Power input	KW	21.5	43	64.5	86	107.5	129	150.5
Power regulation stage			(50-100)/n(n: Number of modular)						
Compressor	Nr.		2	4	6	8	10	12	14
	Type		Scroll						
	Oil		P.O.E.						
Fan	Oil volume	L	8	16	24	32	40	48	56
	Type		Axial						
Coil	Nr.		2	4	6	8	10	12	14
	Power input	KW	1.1	2.2	3.3	4.4	5.5	6.6	7.7
	Air flow	m³/h	18000	36000	54000	72000	90000	108000	126000
Evaporator	Type		Fin coil						
	Material		Al/Cu						
	Type		Tube in tube						
Refrigerant	Water flow	m³/h	12	24	36	48	60	72	84
	Inlet/outlet nozzle	DN	100						
	Resistance	KPa	45						
Power supply	Nr. of circuits		2	4	6	8	10	12	14
	Type		407C						
	Weight	kg	18	36	54	72	90	108	126
Noise	380V/3P/50Hz								
	Weight	kg	850	1700	2550	3400	4250	5100	5950

Note:
Cooling rated condition: evaporator water inlet/outlet temperature 12°C/7°C, ambient temperature 35°C.
Heating rated condition: evaporator water inlet/outlet temperature 40°C/45°C, ambient temperature 7°C(DB)/6°C(WB).
Noise measured at 1m in open field.

Dimensions

Size	L	W	H	A	B	C	D	E	F
60	2110	1080	1900	260	240	220	1025	1600	255
120	2110	1080x2+345x1	1900	260	240	220	1025	1600	255
180	2110	1080x3+345x2	1900	260	240	220	1025	1600	255
240	2110	1080x4+345x3	1900	260	240	220	1025	1600	255
300	2110	1080x5+345x4	1900	260	240	220	1025	1600	255
360	2110	1080x6+345x5	1900	260	240	220	1025	1600	255
420	2110	1080x7+345x6	1900	260	240	220	1025	1600	255

Note:
345 is the length of the soft connection between the modular units