

AIR SOURCE with build-in circulator

Description

The commercial range S1 of air source heat pumps offers an optimal solution for any type of application. The new air-source series is specifically designed to utilize the ambient heat to produce hot water or heating up to 60 °C, while offering savings up to 75%.

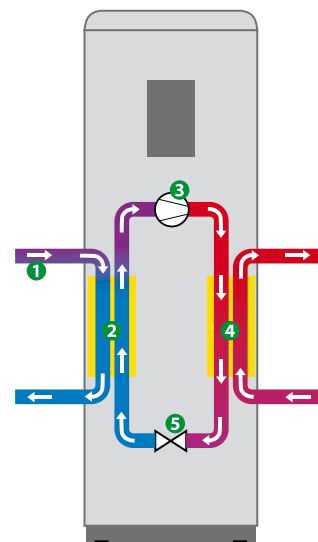
The build in circulator together with the unique slim line design offers optimal space saving and ideal for upgrading of existing systems.

The design is modular and can be coupled together to comply with any capacity demand. The centralized control is programmed with the capacity and quantity of the entire system, which enables the plant to perform optimal at any load and also ensure even running hours on all modules.



Diagram

1. The ambient air provides the source of energy from nature
2. In a fin-coil (evaporator) the ambient heat meets the liquid refrigerant circulating in a closed loop. The refrigerant absorbs energy, heats up and vaporizes.
3. A compressor increases the pressure of the refrigerant, and by doing so the temperature increases to a much higher level.
4. In the second heat exchanger (condenser) the refrigerant releases its heat in to the heating circuit. As this occurs the refrigerant is cooled down and becomes liquid again.
5. The refrigerant continues to circulate. In an expansion valve its pressure is reduced and so is the temperature and boiling point. This reduces the temperature and the refrigerant returns to liquid form. The process recommences when the refrigerant again meets the source (ambient heat).



Technical Data

Model		WI-18WB-S1	WI-27WB-S1	WI-36WB-S1	WI-46WB-S1
Type		Air-To-Water	Air-To-Water	Air-To-Water	Air-To-Water
Ave. ambient temp.	°C	28	28	28	28
Water Initial/Final	°C	15/55	15/55	15/55	15/55
Heating Capacity	kW	7.2	10.8	14.4	18.4
ELECTRICAL					
Power supply	V/Ph/Hz	220-240/1/50	220-240/1/50	380-415/1/50	380-415/1/50
Input power	kW	1.5	2.3	3	3.8
Rated current	A	6.8	10.5	5.6	7.3
Max. operating current	A	10.2	15.8	8.4	11
WATER					
Connections	inch	3/4" female	3/4" female	1" female	1" female
Design flow rate	m3/hr	2	2	3	4
Design pressure drop	kPa	35	40	50	60
Design pump pressure	m	5	5	8	15
Max. temperature	°C	60	60	60	60
Condensate water connection	mm	OD 26.7	OD 33.4	OD 33.4	OD 33.4
AIR					
Flow rate	m3/hr	1200	2800	3800	3500*2
Air throw		side	side	side	side
GENERAL					
Refrigerant type		R417A	R417A	R417A	R417A
Level against electric shock		I	I	I	I
Water-proof grade		IPX4	IPX4	IPX4	IPX4
Noise level @ 1 m	db(A)	48	48	50	52
Weight	kg	67	84	95	110
Dimensions (L*W*H)	mm	805*266*760	835*315*985	1200*390*920	1345*350*1260

Installations

