

H(R)AF 40÷50

Cooling capacity: 37.4÷50kW

Heating capacity: 41.5÷55.6 kW



FEATURES

STRUCTURE

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

HERMETIC COMPRESSORS

Three phase scroll compressor, with thermal overload cut-out and crankcase heater mounted on rubber vibration isolators.

AXIAL FANS

External rotor type axial fans, equipped with single phase direct drive motors, low noise 6 poles, protection level IP54, provided with a protective outlet grille.

EVAPORATOR

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

CONDENSER

Coils are consisting of seamless copper tubes mechanically expanded into blue hydrophilic aluminum fins, protected with flexible plastic grill.

REFRIGERANT CIRCUIT

Copper tube connection with charge valve, filter drier, sight glass, gas-liquid separator, thermostatic expansion valve, low pressure switch with automatic reset, high pressure switch with manual reset.

The heat pump unit is completed also with 4-way valve, liquid receiver and one way valve.

HYDRONIC CIRCUIT

Built with air vent valve, water drain connection, male-threaded hydraulic connectors and water storage tank.

ELECTRIC PANEL

consists of:

- Compressor contactor;
- Compressor protection breaker;
- Fan motor protection breaker;
- Control circuit protection breaker;
- Phase sequence relay ;
- Programmable microprocessor controller;
- Heat recovery functions

NOMENCLATURE

H R A F 160 L

① ② ③ ④ ⑤ ⑥

① Mini chiller

② Unit type:

R : heat pump

-- : cooling only

③ Refrigerant type

--: R22

A: R410a

B: R290

C: R407c

④ Air cooled

⑤ Size

⑥ Air discharge

--: Top discharge

L: Side discharge

TECHNICAL DATA

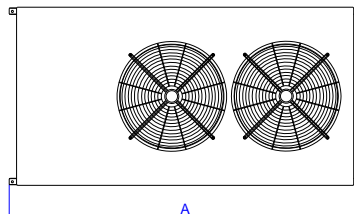
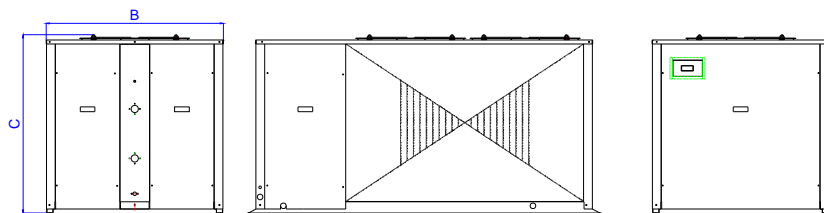
Model	HRAF/HAF	40	45	50
Cooling capacity*	kW	37.4	43.4	50
Heating capacity**	kW	41.5	46.3	55.6
Compressors				
Qty/refrigerant circuit	Nr.	2/2	2/2	2/2
Cooling power input*	kW	14	16.2	18.3
Heating power input**	kW	16.3	17.4	20.5
Refrigerant charge R410A	kg	4.4X2	4.8X2	5.6X2
Axial fans				
Quantity	Nr.	2	2	2
Airflow	m ³ /h	16500	18700	21800
Evaporator				
Water flow	m ³ /h	6.43	7.46	8.60
Water side pressure drop	kPa	62	66	71
Storage tank	l	80	80	80
Power supply	/	380V/3Ph/50Hz		
Noise level***	dB(A)	65	68	68
Dimensions				
Length	mm	2200	2200	2200
Width	mm	1111	1111	1111
Height	mm	1100	1100	1100
Net weight	kg	392	403	406

* Ambient temperature 35°C; evaporator water in/out 12/7 °C;

** Ambient temperature DB 7 °C, WB 6 °C; condenser water in/out temperature 40/45 °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.	40	45	50
A	2200	2200	2200
B	1111	1111	1111
C	1100	1100	1100

