

HIGH EF PLUS



Be.On


DC Inverter
Compressor and Fan

Wide operating
range

High efficiency
in heating and
cooling


Refrigerant gas

DESCRIPTION

Variable Refrigerant Flow (VRF) R410A condensing unit, INVERTER heat pump system. Composed of an outdoor unit, sensors, and an electronic control board to be integrated into the electrical panel of the Air Handling Unit.

The system can operate in heating mode with a minimum outdoor temperature of -15°C or in cooling mode with a maximum outdoor temperature of 48°C.

The finned coil heat exchanger is equipped with a hydrophobic coating, offering resistance up to 3 times higher than standard, increasing service life. This treatment protects against corrosion caused by water, air, and other corrosive agents.

Compressors and two high-efficiency DC inverter fans ensure maximum efficiency with minimum noise levels.

They allow:

- 30% reduction in energy consumption.
- 70% reduction in compressor size.
- 50% reduction in weight.

ADVANTAGES

- Silent monobloc Plug & Play units.
- Low energy consumption with variable refrigerant volume system.
- Easy integration with Arfit Air Handling Units and heat recovery units.
- Condensing unit monitoring via AHU control system.
- Possibility of integrating Be.On module with direct cloud connection and Be.Smart monitoring.

CHARACTERISTICS

HIGH EF PLUS		8 10 14			20 26 40		
Power Supply eléctrica	(V F Hz)	220 - 240 1 50			380 - 415 3 50		
Cooling capacity ¹	(kW)	8	9	14	20	26	40
	(W)	2100	2640	3970	5280	10040	15700
	EER (W/W)	3,81	3,41	3,53	3,79	2,59	2,54
Heating capacity ²	(kW)	9	9	16	20	26	40
	(W)	2040	2100	3980	4430	6860	11700
	COP (W/W)	4,41	4,29	4,02	4,51	3,79	3,42
Airflow	m³/h	3750	5200	5200	9000	10000	12500
Sound Pressure	dB (A)	54	54	56	58	59	59
Room temperature	Cooling °C	-15~55	-15~55	-15~55	-5 ~ 48		-15 ~ 55
	Cooling °C	-15 ~ 27			-20 ~ 24		-30 ~ 30
Refrigerant gas (Pre-charge)	Type	R410A					
	kg	1,7	2,35	3,1	6,5		7,4

Notes:

1 - Indoor air temperature 27°C DB, 19°C WB; outdoor air temperature 35°C DB; equivalent refrigerant piping length 7.5 m with zero level difference.

2 - Indoor air temperature 20°C DB; outdoor air temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5 m with zero level difference.

3 - Sound pressure level measured at 1 m in front of the unit and 1.3 m above ground in a semi-anechoic chamber.

DIMENSIONS

HIGH EF PLUS		8	10	14	20	26	40
Dimension	L X A X P (mm)	910x712x426	950x840x426	950x840x440	1.120x1.558x528		1130x1760x580
	Weight (kg)	49	72,5	75	143	144	187
Connection cables	Electrical power supply (mm ²)	3X4	3X4	3X6	4X4+T	4X6+T	4X6+T
	Communication (mm ²)	3X1	3X1	3X1	3X1	3X1	3X1
Piping	Liquid line (mm)	9,53	9,53	9,53	12,7	12,7	12,7 - 1/2"
	Gas line (mm)	15,9	15,9	15,9	19,1	22,2	25,4 - 1"
Distances	Vertical (m) - Outdoor unit above	10	20	30	50	50	50
	Vertical (m) - Outdoor unit below	10	20	20	40	40	40
	Total (m)	35	45	70	90	90	90

ARFIT CONDENSING UNITS WITH DX CONDENSER CONNECTION KIT

HIGH EF PLUS		8	10	14	20	26	40
Condensing unit connections	Gas diameter (mm)	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	19,1 (3/4")	22,2 (7/8")	25,4 (1")
	Liquid diameter (mm)	9,53 (3/8")	9,53 (3/8")	9,53 (3/8")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")
Size Kit		BB001	BB002	BB002	BB002	BB003	BB004
DX kit	Gas diameter (mm)	(E) 9,53 (3/8")	(E) 9,53 (1/2")	(E) 9,53 (1/2")	12,7 (5/8")	12,7 (5/8")	12,7 (5/8")
	Liquid diameter (mm)	(F) 9,53 (3/8")	(F) 12,7 (1/2")	(F) 12,7 (1/2")	(F) 12,7 (5/8")	(F) 12,7 (5/8")	(F) 15,9 (5/8")
Connection cable between kit and condensing unit		Cable Olflex 3x1,5mm ²					
AHU coil	Gas diameter (mm)	(B)	(B)	(B)	(B)	(B)	(B)
	Liquid diameter (mm)	(B)	(B)	(B)	(B)	(B)	(B)

Caption:

A - Notify support 15 days before start-up of the distance between AHU and condensing unit and request commissioning if necessary.

B - Refer to final AHU drawing for approval.

C - For sizing of connection cables to AHU and condenser, refer to AHU technical sheet and condenser catalogue. Power supplies are individual from HVAC electrical panel.

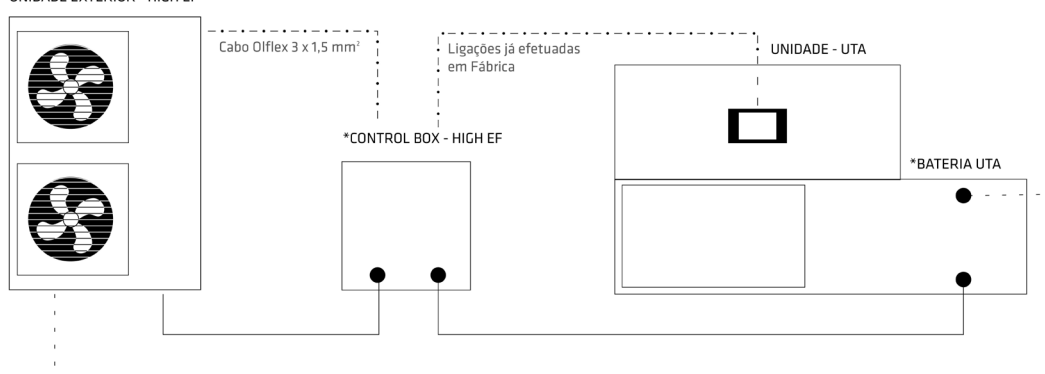
D - Support email: suporte@arfit.pt

E - DX kit is factory supplied with 8 mm – 5/16" inlet and outlet pipes.

F - DX kit is factory supplied with 12.7 mm – 1/2" inlet and outlet pipes.

• During installation of the refrigeration circuit, always respect inlet and outlet directions on the control box (DX kit) and AHU coil.

UNIDADE EXTERIOR - HIGH EF



Legenda:

- -- -- -- -- Ligações elétricas
- Tubagem de líquido
- - - - - Tubagem de gás

* When installing the refrigeration circuit, always follow the inlet and outlet specifications on the control box (DX kit) and the AHU coil