

# HIGH EF PLUS

## INDEX



Be.On

### STANDARDS AND CERTIFICATIONS



DC Inverter Compressor and Fan



Wide Operating Range



High Efficiency in Heating and Cooling



Refrigerant Gas

### ADVANTAGES

- Silent Plug & Play monoblock units
- Low energy consumption with variable refrigerant volume system
- Easy integration with Air Treatment Units and Arfit Air Recovery Units
- Condenser monitoring in AHU control
- Possibility of integrating Be On module with direct connection to the cloud and Be Smart monitoring

### CHARACTERISTICS

HIGH EF PLUS		8   10   14			20   26   40		
Power Supply	(V   F   Hz)	220 - 240   1   50			380 - 415   3   50		
Cooling Capacity <sup>1</sup>	(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 <sup>2</sup>	(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	m <sup>3</sup> /h	3750	5200	5200	9000	10000	12500
Sound Pressure Level	dB (A)	54	54	56	58	59	59
Ambient Temperature	Cooling °C	-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 pipe length 7.5m with zero level difference.

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

3- The sound pressure level is measured at a position 1 m in front of the unit and 1.3 m above the floor in a semi-anechoic chamber.

### DESCRIPTION

Variable refrigerant flow R410A (V.R.F.) condensing unit, INVERTER, heat pump type.

Comprising Outdoor Unit, sensors and electronic board to be integrated into the Air Handling Unit electrical panel.

It 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 heat exchanger fins are coated with a hydrophobic protection, offering resistance three times higher than standard, thus increasing service life. This treatment protects against corrosion caused by water, air or other corrosive agents.

High-efficiency compressors and fans.

The two DC Inverter fans ensure maximum performance with the lowest noise level.

They allow:

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

**DIMENSIONS**

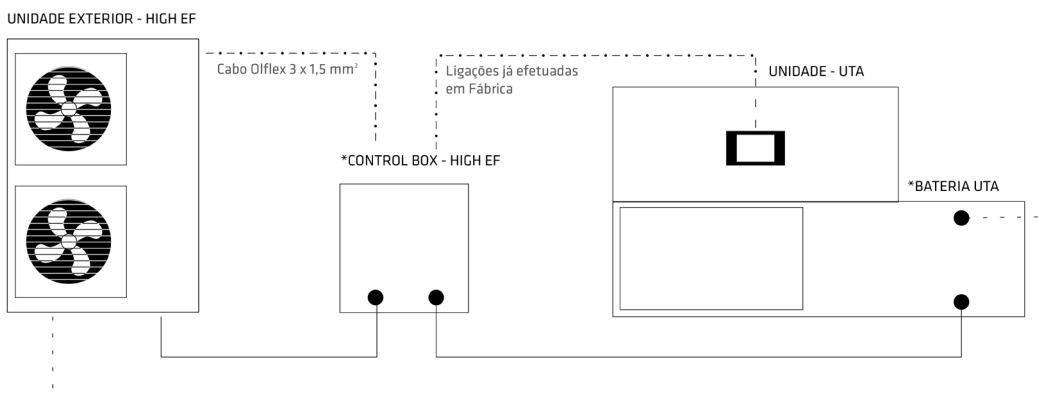
HIGH EF PLUS		8	10	14	20	26	40
Dimension	L X A X P (mm)	910x712x426	950x840x426	950x840x440	1.120x1.558x528		1130x1760x580
Weight (kg)		49	72,5	75	143	144	187
Connection cables	Power supply (mm <sup>2</sup> )	3X4	3X4	3X6	4X4+T	4X6+T	4X6+T
	Communication (mm <sup>2</sup> )	3X1	3X1	3X1	3X1	3X1	3X1
Piping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

**ARFIT CONDENSER UNITS WITH DX CONDENSER CONNECTION KIT**

HIGH EF PLUS		8	10	14	20	26	40
Connections Condenser	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 diam. (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")
Kit size		BB001	BB002	BB002	BB002	BB003	BB004
Kit DX	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 diam. (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")
Condenser Interconnection Cable Kit		Cable Olflex 3x1,5mm <sup>2</sup>					
AHU battery	Gas diameter (mm)	(B)	(B)	(B)	(B)	(B)	(B)
	Liquid diam. (mm)	(B)	(B)	(B)	(B)	(B)	(B)

Caption:

- A - Inform support 15 days before start-up of the distance between the AHU and the Condenser and request start-up if necessary.
- B - Consult AHU final design for approval
- C - For sizing the connection cable to the AHU and the condenser, refer to the AHU technical data sheet and condenser catalog, individual power supplies coming from the HVAC EP.
- D - Support email - suporte@arfit.pt
- E - The Dx Kit is supplied from the factory with 8mm - 5/16" inlet and outlet pipes.
- F - The DX Kit is supplied from the factory with 12.7 mm - 1/2" inlet and outlet pipes.


**Legenda:**

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

\* When installing the refrigeration circuit, always follow the inlet and outlet instructions on the control box (DX kit) and on the ATU battery.