BoxAir Inverter Split

NEW DESIGN OF EXTERNAL UNITS

air - water | inverter | -20°C Minimal Source temp. | 60°C Heating water temperature | A+++ Energy efficiency | Heating and cooling | Ecological Refrigerant R410a | Apps | Czech product

air to water, split, inverter, outdoor or indoor installation

MasterTherm HEAT PUMPS

Model	A7W35	Heat loss Qz (kW)	A7W35 60Hz[1]		A2W35 60Hz		A-7W35 80Hz		A-15W35 90Hz		Seasonal heating energy efficiency - low-temperature operation 35°C				Seasonal heating energy efficiency - medium-temperature operation 55°C				Circuit breake[2]		Compressor, supply voltage 3ph/1ph	Weight (kg)	Leakage control of refrigerant circuit EP 517/2014	Price EUR EXW CZ
	Power (kW)		Power (kW)	COP	Power (kW)	COP	Power (kW)	COP	Power (kW)	COP	Power (kW)	SCOP	ηs %	Class	Power (kW)	SCOP	ηs %	Class	3 phase units	1 phase units				
BoxAir-22IS	**2-7**	**to 5,5**	4,9	**4,7**	3,6	3,5	3,6	2,8	3,2	2,6	5	**4,18**	164	**A++**	4	**3,22**	126	**A++**	16A"B"	20A"B"	1x230/1x230 V~	160	no	**on request**
BoxAir-26IS	**3-9**	**to 8,5**	8,1	**4,6**	5,6	3,5	5,5	2,8	5,1	2,4	6,5	**4,28**	168	**A++**	6,3	**3,24**	126	**A++**	20A"B"	20A"B"	1x230/1x230 V~	165	no	**on request**
external unit - single fan																						50		**FOC**
BoxAir-37IS	**5-17**	**to 13**	11,5	**4,7**	8,8	3,7	8,7	2,8	8,2	2,3	11	**4,48**	176	**A+++**	10	**3,50**	137	**A++**	25A"B"		3x400 V~	170	no	**on request**
BoxAir-45IS	**7-22**	**to 16**	15,3	**4,7**	10,6	3,5	11,1	2,75	9,8	2,2	14	**4,30**	169	**A++**	13	**3,32**	130	**A++**	32A"B"		3x400 V~	180	no	**on request**
external unit - 2 fans																						70		**FOC**

[1] Performance data according to ČSN EN 14 511, in accordance with the EHPA requirements for quality mark Q. A7W35 60 Hz - air 7 °C, water 35 °C, compressor frequency 60 Hz

[2] Recommended value of el. 3x400V fuse, incl. Auxiliary integrated electric boiler. The units can also be connected to a 1x230V network with 40A"B"(22I), resp. 50A"B"(26I).

[3] Design power at outdoor temperature -10 °C according to ČSN EN 14 825.

Options

- Internet HP control Master
- Full Cooling reversing
- Desuperheater
- Terminal pAD temperature compensation
- Terminal pADh floor cooling
- Expanded control module
- Evap. with Corrosion Resistant Coating (single fan)
- Evap. with Corrosion Resistant Coating (2 fans)
- Modification to IndoorSplit
- External unit colour on demand RAL code
- External unit 4legs vertical or console
- External unit (silver colour)
- Internal unit (silver or red colour)

RAL 9006 | RAL 3020

Standard equipment

- ✔ Graphic terminal PGD
- ✔ Variable output Inverter Compressor
- ✔ New low-noise fan
- ✔ Equitherm control system MaR
- ✔ Built-in immersion heater and circulation pump
- ✔ Main power supply switch
- ✔ Electronically controlled coolant injection

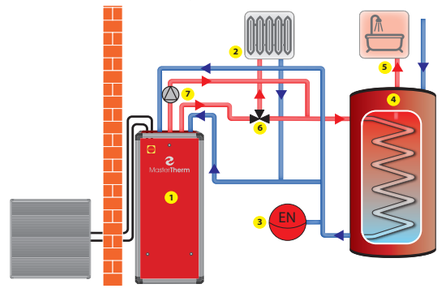
Features

- ▶ Split construction
- ▶ Use for heating and cooling
- ▶ The temperature of heating water to 60 °C
- ▶ Temperatures range from +35 °C to -20 °C
- ▶ Very easy installation, quiet operation
- ▶ No buffer tank required
- ▶ Control up to 6 heating circuits

Heat pump connected directly to the heating system with 3wv for domestic hot water (dhw) preparation.

1-heat pump, 2-heating system, 3-expansion vessel, 4-dhw tank with coil, 5-dhw outlet, 6-3way valve, 7- desuperheater circulator pump

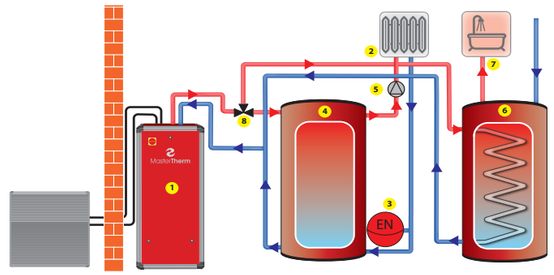
The heat pump (1) is directly connected to heating system. Heating water temperature is controlled according to a weather compensation curve. Production of hot water is a priority over the heating system by switching the 3wv (6) to the dhw tank (4). The heat pump increases the outlet water temperature until the requested dhw temperature is achieved, once achieved the heat pump switches the 3wv back to heating operation. This type of system is ideally suited to underfloor heating systems (ufh) but also systems with radiators with a large volume of heating water utilising our pAD room terminal. The desuperheater (optional equipment) is a additional exchanger which harvests high potential energy from compressor outlet. An independent circuit with circulator pump (9) is used for high efficiency dhw preparation during heating mode. This solution limits the possibility of local zone control (independent loop ufh, thermostatic valves on radiators).



Heat pump connected to a buffer tank and 3wv to the domestic hot water cylinder (dhw)

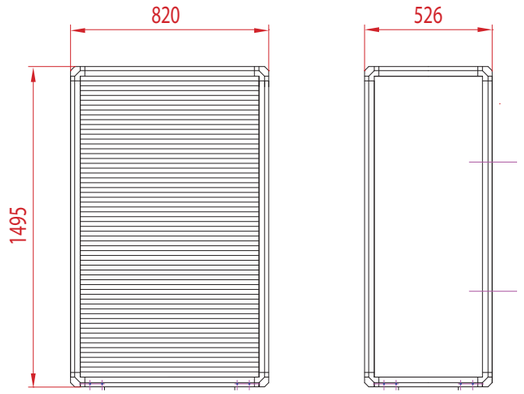
1-heat pump, 2-heating system, 3-expansion vessel, 4-buffer tank, 5-heating circulator pump, 6-dhw tank with coil, 7- dhw outlet, 8-3way valve

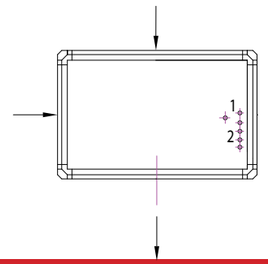
The heat pump (1) is directly connected to heating system. Heating water temperature is controlled according to a weather compensation curve. Production of hot water is a priority over the heating system by switching the 3wv (6) to the dhw tank (4). The heat pump increases the outlet water temperature until the requested dhw temperature is achieved, once achieved the heat pump switches the 3wv back to heating operation. This type of system is ideally suited to underfloor heating systems (ufh) but also systems with radiators with a large volume of heating water utilising our pAD room terminal. This solution limits the possibility of local zone control (independent loop ufh, thermostatic valves on radiators). The desuperheater (optional equipment) is a additional exchanger which harvests high potential energy from compressor outlet. An independent circuit with circulator pump (9) is used for high efficiency dhw preparation during heating mode.



Heating circuits control	PLUS (pCO5)
Intended for	multi-circuit heating systems
Main heating circuit	Yes
Secondary heating circuit	2 independent including mixing
Room temperature	In 2 zones
SHW	Yes
Optional	Up to 6 heating circuits

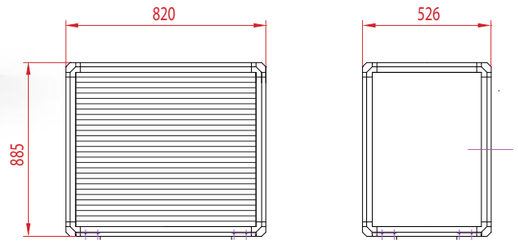
External unit BA37IS and 45IS:

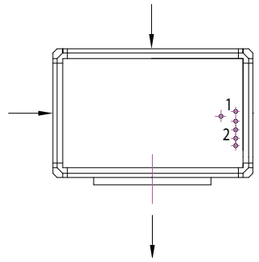




1 - Refrigerant
2 - Power supply

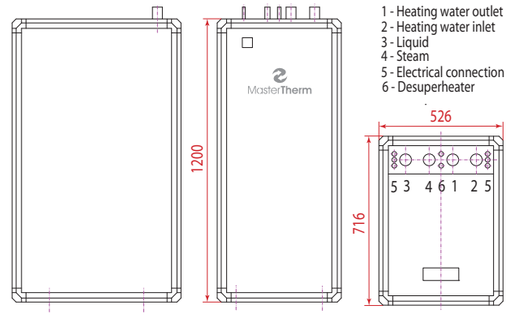
External unit BA22IS and 26IS:





1 - Refrigerant
2 - Power supply

Internal unit:



1 - Heating water outlet
2 - Heating water inlet
3 - Liquid
4 - Steam
5 - Electrical connection
6 - Desuperheater