

AIR SOURCE HEAT PUMPS
DUAL CLIMA



COMPLETE INSTALLATION SOLUTION PACK (HEATING, COOLING AND DHW)
FULLY RATED HEATING CAPACITY GUARANTEED FROM -20 °C
CAN BE COMBINED WITH OTHER ENERGIES (SOLAR, GAS, OIL)
SIZES: 8, 11 and 16 kW



The most advanced technology
at the most reasonable price

DUAL CLIMA

DOMUSA TEKNİK introduces in the heating and air conditioning market the **DUAL CLIMA** air source heat pump range and a complete package of solutions to optimize the energy use of the units, the storage and distribution of domestic hot water. With an excellent seasonal efficiency (**A++ rating**), and ease of installation and use, the **DUAL CLIMA** range is an ideal alternative for those who choose a renewable energy source for heating and cooling their homes.

DOMUSA
TEKNİK



Savings of up to 70% of total consumption in your energy bill



SAVINGS

Air source **reduces the total energy consumption of the home by up to 70%**, thanks to the use of free air energy.

This saving in consumption is maintained even when temperatures are below 0°C.



MULTIPURPOSE

If an installation has been designed with emitters that **can transfer heat or cold**, heating, cooling and DHW can be provided by the same unit.



ENVIRONMENTALLY FRIENDLY

Air source is a **clean technology that respects the environment**. It does not emit combustion gases since it does not need to burn anything to bring heat to the heating installation or domestic hot water.



SAFETY

It is a **much safer system and requires less maintenance** than those that need to exchange cooling gas inside the house.

DUAL CLIMA 16





OPERATION

The heat obtained is exchanged in the condenser, transferring it to the heat-transferring fluid, which is responsible for supplying heat to the heating installation or domestic hot water.



WIDE RANGE OF PACKS

DOMUSA TEKNIK offers a wide range of packs that are completed with all types of buffer tanks and DHW tanks.

These tanks are made of stainless steel and have a 10 years commercial corrosion warranty.

The design of the tanks is for specific use with a heat pump, with a large heat exchange surface, and with the possibility of being installed with boilers that use other types of fuels.

The installation solutions offered with the DUAL CLIMA air source heat pump are designed to achieve efficient, durable and reliable installations.



EFFICIENCY

DUAL CLIMA air source heat pumps are equipped with a DC Inverter compressor which is quiet, robust, high efficiency compressor that can modulate the thermal power according to the needs of the house.

Due to the power setting, the on / off cycles are reduced, ensuring greater reliability of the system. As a result, unnecessary consumption is reduced and user comfort is improved.

The DUAL CLIMA range has a system that reduces losses caused by the accumulation of ice in the evaporator. Before the cooling liquid passes through the distributor, it flows through the bottom of the evaporator preventing ice from forming in this area.

DUAL CLIMA has a ErP A++ certificate, one of the best in its category.



DUAL CLIMA 8-11

Comfort at your fingertips

Configure the installation that suits your needs.





EASE OF USE

Reduced maintenance

MONOBLOC technology, in which the entire gas circuit is integrated into the outdoor unit, reduces the risk of cooling gas leaks, thus avoiding gas recharge operations.

In addition, by using electricity as a power source, the maintenance required in the combustion of fossil fuels is avoided, both in the combustion chamber and in the exhaust gas outlet.

Electronic control inside the home

The control board of the DUAL CLIMA air source heat pump is installed inside the home, from which you have complete control of all the components of the system, with an easy and intuitive use.

Quiet night operation mode

Night operation mode reduces fan noise levels during the night hours programmed in the system.

A control board with easy and intuitive use.



EASE OF INSTALLATION

With MONOBLOC technology only hydraulic connections are made, which allows the external unit to be installed further from the building

The gas/water exchanger is incorporated in the outdoor unit, thus avoiding the necessity to manipulate the cooling circuit in the installation process. The connection between the outdoor and indoor units is hydraulic, making the installation simpler and allowing a greater distance between the than if cooling gas was used as a heat-transferring fluid.

Plug and play solutions

DOMUSA TEKNIK offers a wide range of packs that allow the configuration of any kind of heating, DHW or cooling installation.

Among this range of packs, you can find simple solutions such as electrical back-up kits, or more complete solutions including buffer tanks with circuit separation which allows the combination of heat pumps with back-up boilers.

60° C flow temperature

The high flow temperatures, allows the use of the DUAL CLIMA heat pump even with radiators.

Protection against hydraulic component frost

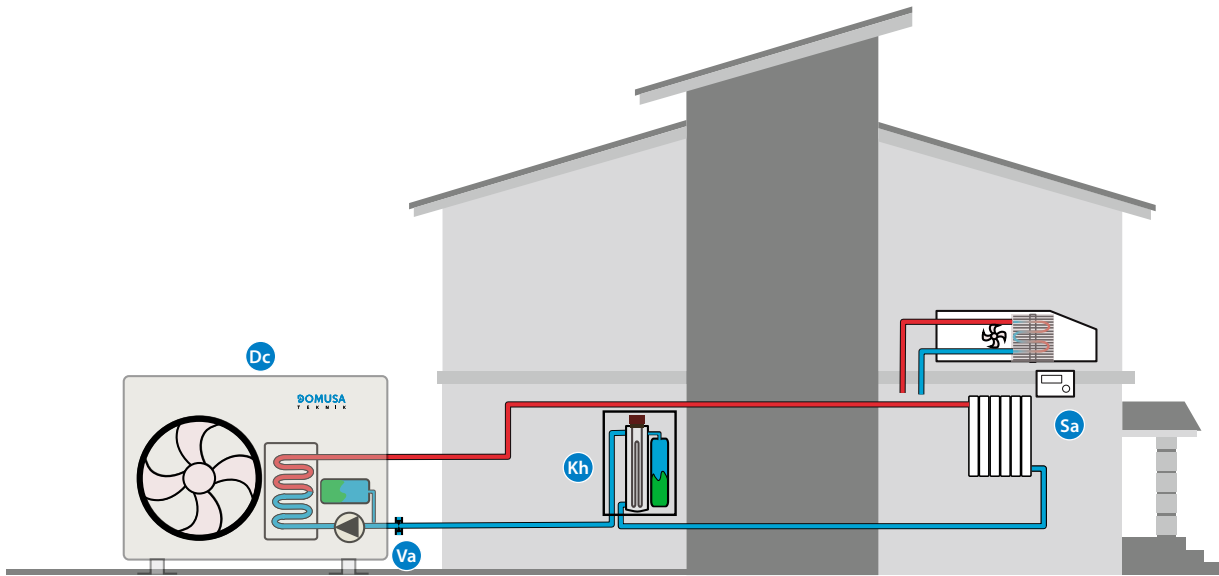
The electronic control of the heat pump activates the circulation pump and the compressor if necessary, in order to prevent the water from falling below freezing point.

To avoid freezing against prolonged power cuts, two solutions are offered:

- Anti frost valve that drains the water circuit in the event that water temperatures drop to freezing point.
- Buffer tanks with integrated separator that allows the use of glycol in a short circuit of small capacity and with no maintenance.

PACK 1 DUAL CLIMA

Air source heat pump for heating with electrical back-up.



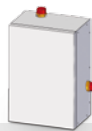
Dc	Dual Clima heat pump	included	Basic scheme. It does not include filters, automatic air vents, expansion vessels, shut-off valves, check or safety valves present in any installation.
Kh	Back-up hydraulic kit	included	
Va	Frost protection valve	included	
Sa	Room sensor	included	

MODEL	COMPOSITION		
PACK 1 DUAL CLIMA 8	Back-up hydraulic kit	Frost protection valve	Modulating room sensor
PACK 1 DUAL CLIMA 11			
PACK 1 DUAL CLIMA 16			

COMPONENTS



MONOBLOC AIR SOURCE HEAT PUMP
With inverter technology available in three sizes 8, 11 and 16 kW.



HYDRAULIC KIT
Composed of a 2.5 kW electric back-up element with limit switch and additional expansion vessel.



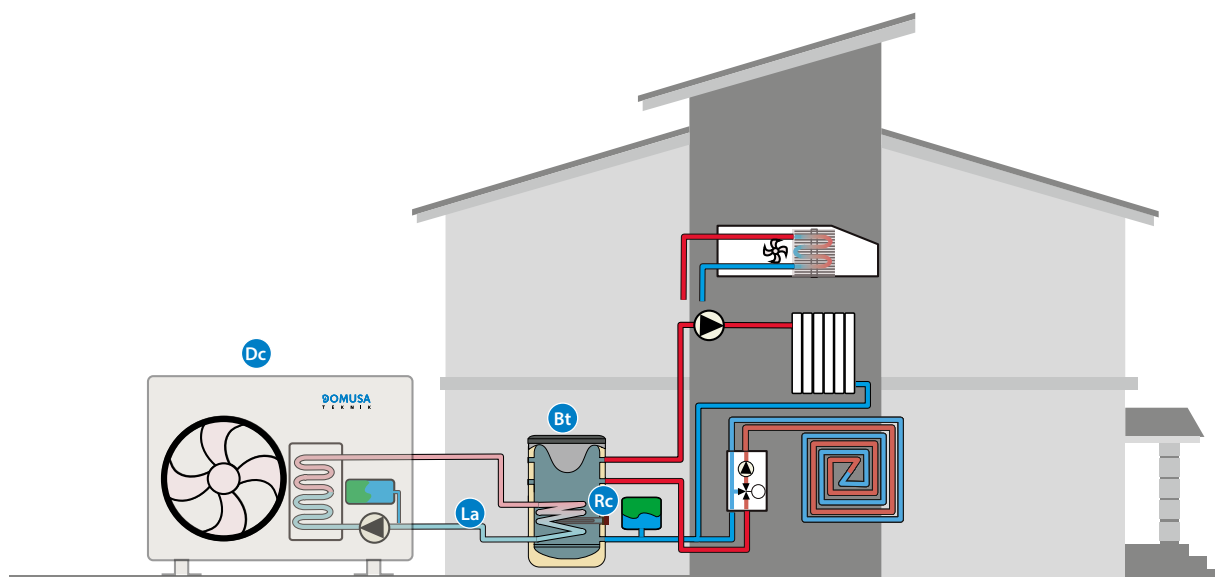
FROST PROTECTION VALVE
Prevents the primary water circuit of the installation from freezing. In case of prolonged power cuts at extreme temperatures, it reduces the risk of the heat transfer fluid freezing by draining the outdoor unit circuit.



MODULATING ROOM SENSOR
It allows the reduction of the heat pump flow temperature according to the energy needs of the house, thus improving the efficiency of the system.

PACK 2 DUAL CLIMA

Heating and cooling with an air source heat pump and a separator and circuit balancing buffer tank, allows the installation with a back-up boiler for heating.



Dc	Dual Clima heat pump	Included
Bt	BTS tank	Included
La	Antifreeze liquid	Included
Sa	Electric heating element	Optional

Basic scheme. It does not include filters, automatic air vents, expansion vessels, shut-off valves, check or safety valves present in any installation.

MODEL	COMPOSITION	
PACK 2 DUAL CLIMA 8	100 BTS	Antifreeze liquid
PACK 2 DUAL CLIMA 11		
PACK 2 DUAL CLIMA 16		

COMPONENTS



MONOBLOC AIR SOURCE HEAT PUMP
With inverter technology available in three sizes 8, 11 and 16 kW.



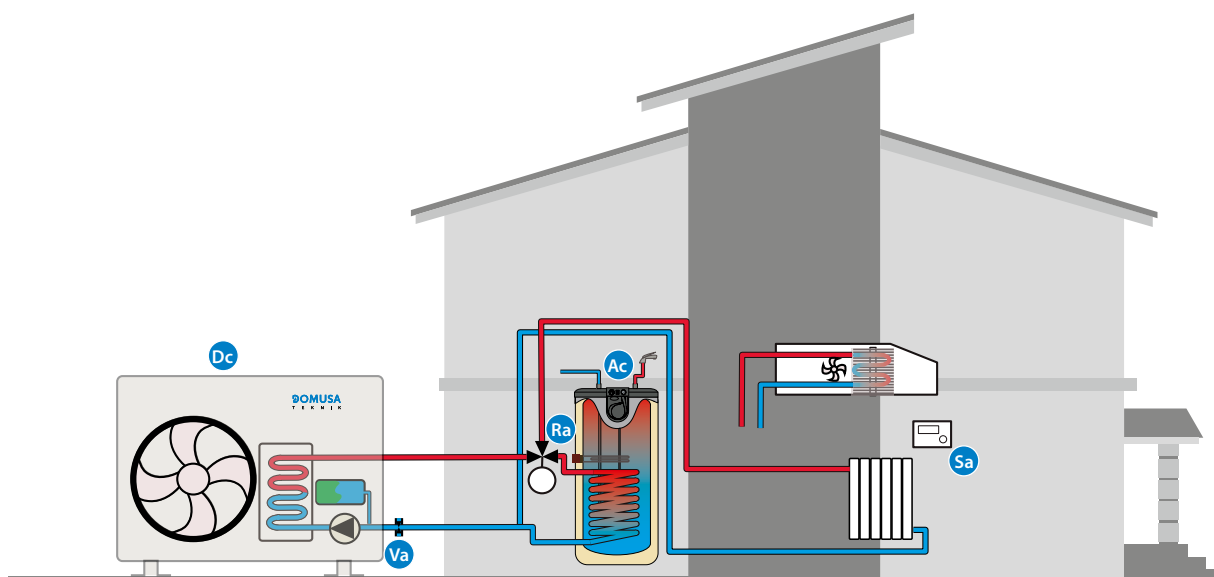
BTS TANK
100 or 150 litre separation buffer tank which reduces the on / off cycles of the compressor, reducing consumption and lengthening the life of the outdoor unit.
The incorporated heat exchanger coil allows the separation of the primary circuit in the outdoor unit from the circuit from the house, being able to use glycolated water as heat-transferring fluid of the outdoor unit thus avoiding frosts, in the case of prolonged power cuts.



ANTIFREEZE LIQUID
Antifreeze liquid for the primary circuit of the outdoor unit.

PACK 3 DUAL CLIMA

Heating, DHW and cooling with an air source heat pump.



Dc	Dual Clima air source heat pump	Included
Ac	Sanit HE DHW tank	Included
Va	Frost protection valve	Included
Sa	Room sensor	Included
Ra	Electric heating element for DHW tank	Optional

Basic scheme. It does not include filters, automatic air vents, expansion vessels, shut-off valves, check or safety valves present in any installation.

MODEL	COMPOSITION		
PACK 3 DUAL CLIMA 8/150	SANIT HE 150		
PACK 3 DUAL CLIMA 8/200	SANIT HE 200	Frost protection valve	Modulating room sensor
PACK 3 DUAL CLIMA 11/200			
PACK 3 DUAL CLIMA 16/200			
PACK 3 DUAL CLIMA 16/300			

COMPONENTS



MONOBLOC AIR SOURCE HEAT PUMP
With inverter technology available in three sizes 8, 11 and 16 kW.



SANIT HE
High exchange DHW tank made of high quality stainless steel. Capacities of 150, 200 and 300 litres.



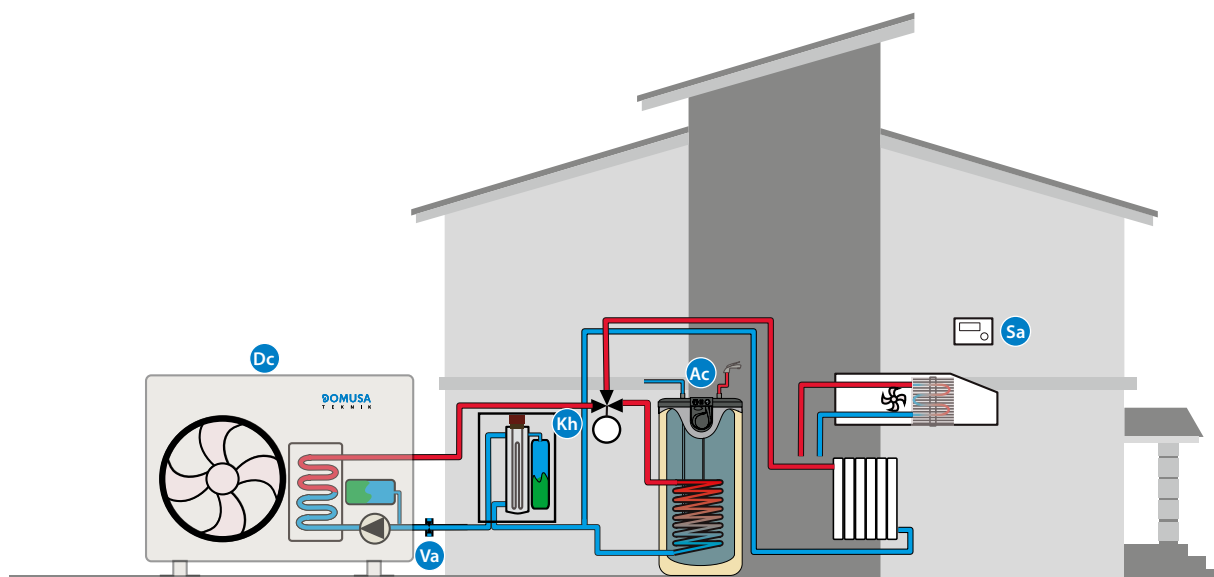
FROST PROTECTION VALVE
Prevents the primary water circuit of the installation from freezing. In case of prolonged power cuts at extreme temperatures, it reduces the risk of the heat transfer fluid freezing by draining the outdoor unit circuit.



MODULATING ROOM SENSOR
Permits the reduction of the heat pump flow temperature, according to the energy needs of the home, thus improving the efficiency of the system.

PACK 4 DUAL CLIMA

Heating and DHW with an air source heat pump.



Dc	Dual Clima air source heat pump	Included
Ac	Sanit HE DHW tank	Included
Va	Frost protection valve	Included
Sa	Room sensor	Included
Ra	Electric heating element for DHW tank	Included

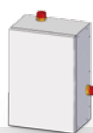
Basic scheme. It does not include filters, automatic air vents, expansion vessels, shut-off valves, check or safety valves present in any installation.

MODEL	COMPOSITION			
PACK 4 DUAL CLIMA 8/150	SANIT HE 150			
PACK 4 DUAL CLIMA 8/200				
PACK 4 DUAL CLIMA 11/200	SANIT HE 200	Frost protection valve	Modulating room sensor	Back-up hydraulic kit
PACK 4 DUAL CLIMA 16/200				
PACK 4 DUAL CLIMA 16/300	SANIT HE 300			

COMPONENTS



MONOBLOC AIR SOURCE HEAT PUMP
With inverter technology available in three sizes 8, 11 and 16 kW.



HYDRAULIC KIT
Composed of a 2.5 kW electric back-up element with limit switch and additional expansion vessel.



SANIT HE
High exchange DHW tank made of high quality stainless steel. Capacities of 150, 200 and 300 litres.



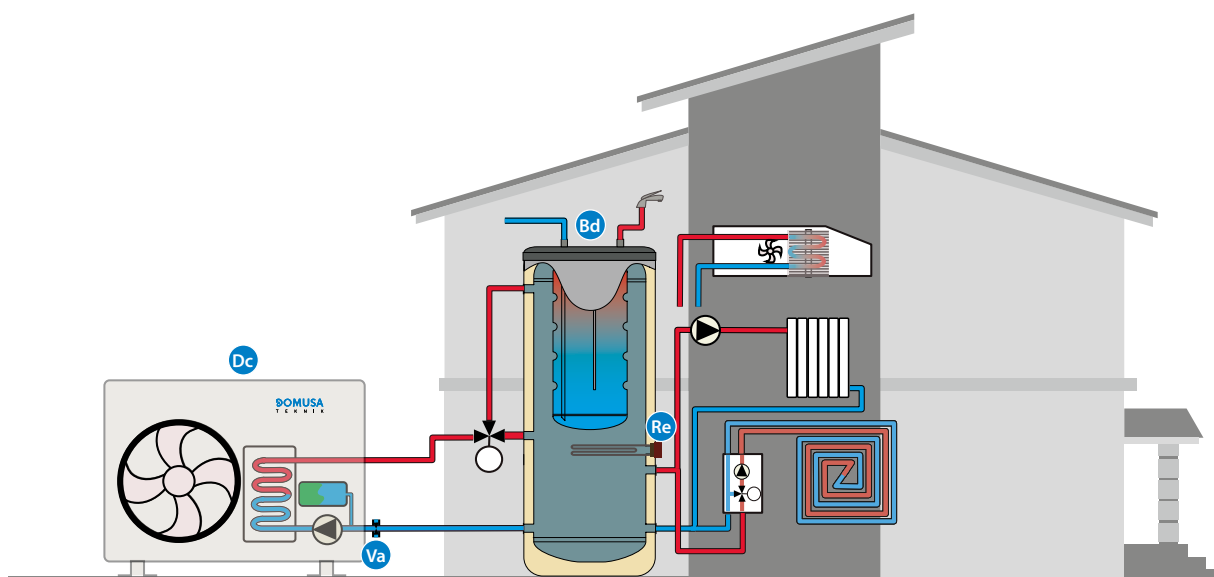
FROST PROTECTION VALVE
Prevents the primary water circuit of the installation from freezing. In case of prolonged power cuts at extreme temperatures, it reduces the risk of the heat transfer fluid freezing by draining the outdoor unit circuit.



MODULATING ROOM SENSOR
Permits the reduction of the heat pump flow temperature, according to the energy needs of the home, thus improving the efficiency of the system.

PACK 5 DUAL CLIMA

Heating and DHW with an air source heat pump.



Dc	Dual Clima heat pump	Included
Bd	BT DUO HE buffer tank	Included
Va	Frost protection valve	Included
Re	Electric heating element	Optional

Basic scheme. It does not include filters, automatic air vents, expansion vessels, shut-off valves, check or safety valves present in any installation.

MODEL	COMPOSITION	
PACK 5 DUAL CLIMA 8	BT DUO HE 165/80	Frost protection valve
PACK 5 DUAL CLIMA 11		
PACK 5 DUAL CLIMA 16		

COMPONENTS



MONOBLOC AIR SOURCE HEAT PUMP
With inverter technology available in three sizes 8, 11 and 16 kW.



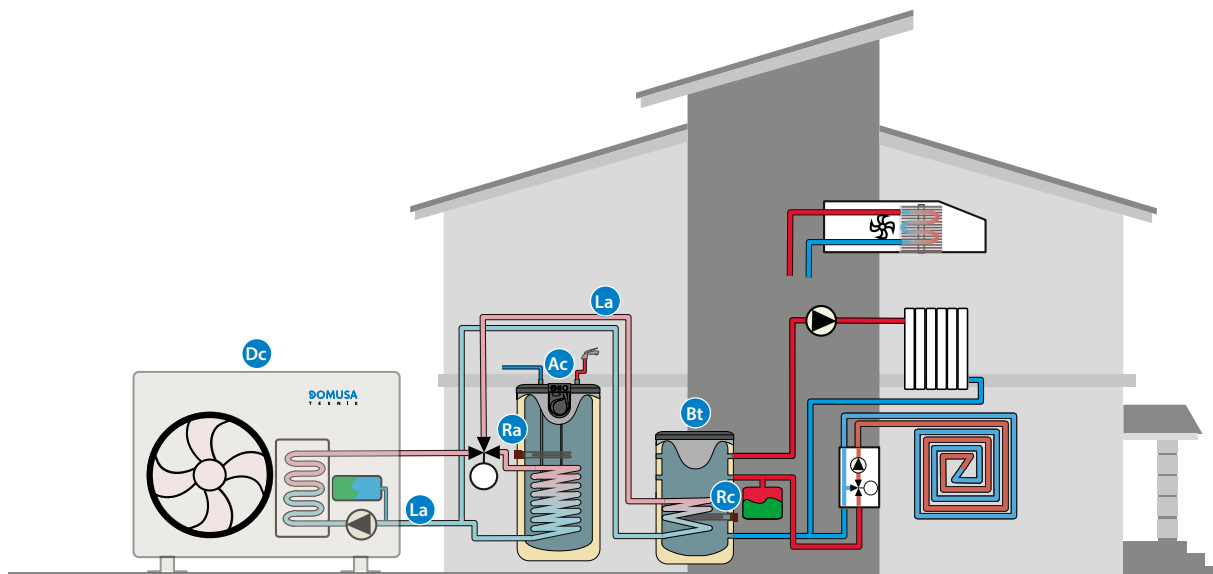
BT DUO HE 165/80 BUFFER TANK
80 litre buffer tank with a 165 litre stainless steel tank inside the primary circuit which reduces the on/off cycles of the compressor, thus reducing the consumption and lengthening the life of the outdoor unit.



FROST PROTECTION VALVE
Prevents the primary water circuit of the installation from freezing. In case of prolonged power cuts at extreme temperatures, it reduces the risk of the heat transfer fluid freezing by draining the outdoor unit circuit.

PACK 6 DUAL CLIMA

Heating and DHW with an air source heat pump, DHW tank and circuit balancing unit. Allows the use of a back-up boiler for heating.



Dc	Dual Clima air source heat pump	Included
Bt	BTS tank	Included
Ac	Sanit HE DHW tank	Included
La	Antifreeze liquid	Included
Ra	Electric heating element for DHW tank	Optional
Rc	Electric heating element for heating	Optional

Basic scheme. It does not include filters, automatic air vents, expansion vessels, shut-off valves, check or safety valves present in any installation.

MODEL	COMPOSITION			
PACK 6 DUAL CLIMA 8/100	BTS 100	SANIT HE 150	Antifreeze liquid	Back-up hydraulic kit
PACK 6 DUAL CLIMA 8/200	BTS 100	SANIT HE 200		
PACK 6 DUAL CLIMA 11/200	BTS 100			
PACK 6 DUAL CLIMA 16/200	BTS 150			
PACK 6 DUAL CLIMA 16/300	BTS 150			

COMPONENTS



MONOBLOC AIR SOURCE HEAT PUMP
With inverter technology available in three sizes 8, 11 and 16 kW.



BTS TANK
100 or 150 litre separation buffer tank which reduces the on / off cycles of the compressor, reducing consumption and lengthening the life of the outdoor unit.
The incorporated heat exchanger coil allows the separation of the primary circuit in the outdoor unit from the circuit from the house, being able to use glycolated water as heat-transferring fluid of the outdoor unit thus avoiding frosts, in the case of prolonged power cuts.



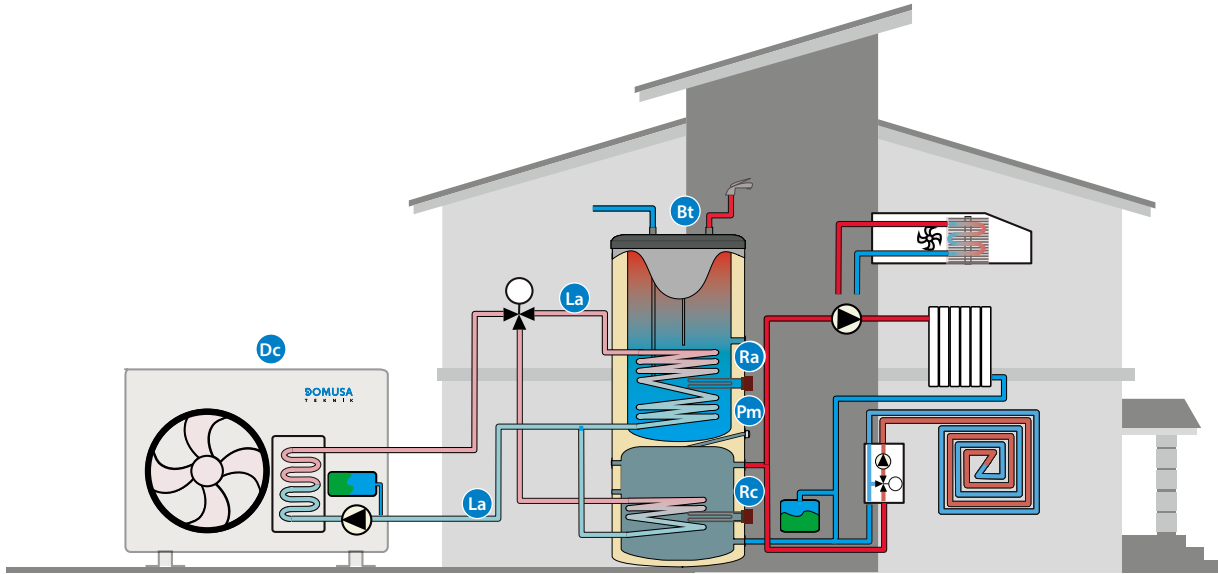
SANIT HE
High exchange DHW tank made of high quality stainless steel. Capacities of 150, 200 and 300 litres.



ANTIFREEZE LIQUID
Antifreeze liquid for the primary circuit of the outdoor unit.

PACK 7 DUAL CLIMA

Air source heat pump with a triple service tank: balances the installation, DHW and heating, DHW and cooling. Allows the use of a back-up boiler for heating.



Dc	Dual Clima air source heat pump	Included	La	Antifreeze liquid	Included
Bt	BT Trio tank	Included	Ra	Electric heating element for DHW tank	Optional
Pm	Manual air vent	Included	Rc	Electric heating element for heating	Optional

Basic scheme. It does not include filters, automatic air vents, expansion vessels, shut-off valves, check or safety valves present in any installation.

MODEL	COMPOSITION	
PACK 7 DUAL CLIMA 8	BT TRIO 200/80	Antifreeze liquid
PACK 7 DUAL CLIMA 11	BT TRIO 200/120	
PACK 7 DUAL CLIMA 16	BT TRIO 200/120	

COMPONENTS



MONOBLOC AIR SOURCE HEAT PUMP
With inverter technology available in three sizes 8, 11 and 16 kW.



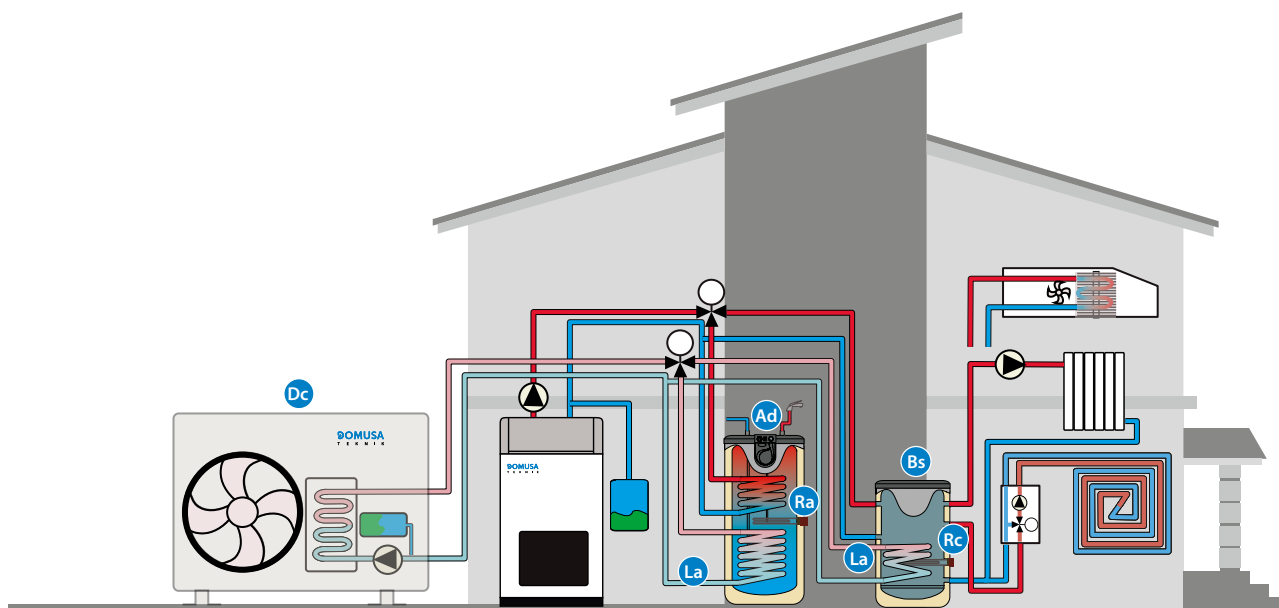
BT TRIO
Separation 80 or 120 litres buffer tank for heating or DHW with 200 litres stainless steel DHW tank that reduces the on/off cycles of the compressor, thus minimizing the consumption and lengthening the life of the outdoor unit.



ANTIFREEZE LIQUID
Antifreeze liquid for the primary circuit of the outdoor unit.

PACK 8 DUAL CLIMA

Air source heat pump with balancing separation buffer tank and double exchange DHW tank. Allows the use of a back-up boiler for heating or DHW.



Dc	Dual Clima air source heat pump	Included	La	Antifreeze liquid	Included
Ad	Sanit HE DS DHW tank	Included	Ra	Electric heating element for DHW tank	Optional
Bs	BTS tank	Included	Rc	Electric heating element for heating	Optional

Basic scheme. It does not include filters, automatic air vents, expansion vessels, shut-off valves, check or safety valves present in any installation.

MODEL	COMPOSITION		
PACK 3 DUAL CLIMA 8/150	BTS 100	SANIT HE 150DS	Antifreeze liquid
PACK 3 DUAL CLIMA 8/200			
PACK 3 DUAL CLIMA 11/200			
PACK 3 DUAL CLIMA 16/200	BTS 150	SANIT HE 200DS	
PACK 3 DUAL CLIMA 16/300			

COMPONENTS



MONOBLOC AIR SOURCE HEAT PUMP
With inverter technology available in three sizes 8, 11 and 16 kW.



BTS TANK
100 or 150 litre separation buffer tank which reduces the on / off cycles of the compressor, reducing consumption and lengthening the life of the outdoor unit.
The incorporated heat exchanger coil allows the separation of the primary circuit in the outdoor unit from the circuit from the house, being able to use glycolated water as heat-transferring fluid of the outdoor unit thus avoiding frosts, in the case of prolonged power cuts.



SANIT HE DS
High exchange DHW tank made of high quality stainless steel. Capacities of 150, 200 and 300 litres with double exchanger coil for a back-up boiler connection.



ANTIFREEZE LIQUID
Antifreeze liquid for the primary circuit of the outdoor unit.

TECHNICAL CHARACTERISTICS

		DUAL CLIMA 8	DUAL CLIMA 11	DUAL CLIMA 16
COP (Air T. 7°C, Water T. 30/35 EN 14511)		4.59	4.12	4.50
SCOP		4,16	4,32	4,23
Seasonal efficiency η_s	%	166	172	170
Energy efficiency class		A++		
Heating output (Air T. 7°C, Water T. 30/35 EN 14511)	kW	7.80	10.30	15.50
Cooling output (Air T. 7°C, Water T. 30/35 EN 14511)	kW	8.40	9.45	15.70
Ingress protection		IPX 4		
Heat Pump Type		Air to Water, Inverter, Monobloc		
Use		Heating, Cooling and DHW		
Cooling		R410A		
Load	kg	2.30	3.30	3.90
Voltage	V	230V/50Hz		
Maximum absorbed cooling power	kW	1.70	2.50	3.44
Maximum absorbed heating power	kW	2.25	3.05	4.40
Noise level	db(A)	46	49	52
Max. flow temperature	°C	60		
Working temperature range	°C	-20/46		
Nominal working flow	m ³ /h	1.50	1.85	2.80
Weight	kg	90	125	150
Dimensions (width/depth/height)	mm	1,115/425/700	1,115/425/960	1,115/425/1,270

TANKS

Model	Primary Circuit L	DHW Volume L	Use	Energy efficiency class	Diameter mm	Height mm
BT DUO HE 165/80	80	165	Heating and DHW	B	581	2,100
BT TRIO 200/80	80	200	Heating, cooling and DHW		608	1,750
BT TRIO 200/120	120	200	Heating, cooling and DHW		608	2,100
BTS 100	100	-	Heating, cooling		581	800
BTS 150	150	-	Heating, cooling		581	110
SANIT HE 150	-	150	DHW		581	1,035
SANIT HE 200	-	200	DHW		581	1,335
SANIT HE 300	-	300	DHW		608	1,758
SANIT HE 200 DS	-	200	Two coil DHW Exchange		581	1,435
SANIT HE 300 DS	-	300	Two coil DHW Exchange		608	1,858

OPTIONS

Back-up hydraulic kit:

2,5 kW electric heating element

Expansion vessel

Limit switch

1,5 kW electric heating element for DHW

2,5 kW electric heating element for DHW

3,5 kW electric heating element for DHW

1,5 kW electric heating element for heating

2,5 kW electric heating element for heating

3,5 kW electric heating element for heating

Antifreeze liquid (5L)

Room sensor

Frost protection valve

EQUIPMENT

DC Inverter air source heat pump

High efficiency pump

Heating circuit expansion vessel

Control unit

Flow limiter

Water pressure gauge

DOMUSA
T E K N I K

POSTAL ADDRESS

Apdo. 95
20730 AZPEITIA
(Gipuzkoa) España

HEADQUARTERS & FACTORY

Bº San Esteban, s/n.
20737 ERREZIL (Gipuzkoa) España
Tel: +34 943 813 899

domusatechnik@domusatechnik.com
www.domusatechnik.com

WAREHOUSE

Atxubiaga, 13
Bº Landeta
20730 AZPEITIA
(Gipuzkoa) España

