

#### AIR SOURCE HEAT PUMPS

#### **DUAL CLIMA**

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









# 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**

Central heating, hot water and cooling functions are available.



#### **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 and/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's energy certification is considered as one of the best in its category

DUAL CLIMA 8 DUAL CLIMA 11 **DUAL CLIMA 16** 









**DUAL CLIMA 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 for an easy and intuitive use.



#### **MONOBLOC SYSTEM**

### With MONOBLOC technology only hydraulic connections are made, which simplifies the installation

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.



#### **EASE OF INSTALLATION**

#### 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:

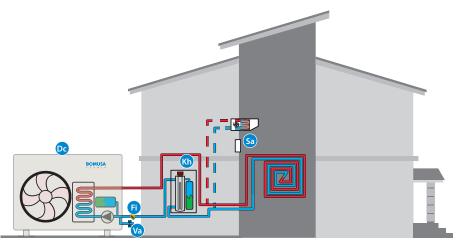
- Anti frost valve that drains the water circuit in the event that water temperatures drop to freezing point.
- · Corrosion Inhibitor/Anti-freeze is added to the system.

# 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.

#### PACK 1 DUAL CLIMA

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



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

MODEL	COMPOSITION			
PACK 1 DUAL CLIMA 8				
PACK 1 DUAL CLIMA 11	Back-up hydraulic kit	1"Water filter	Room sensor	
PACK 1 DUAL CLIMA 16				

Dc	DUAL CLIMA heat pump	Included
Kh	Back-up hydraulic kit	Included
Fi	1" Water filter	Included
Sa	Room sensor	Included
Va	Frost protection valve	Optional

#### COMPONENTS



Monobloc air source

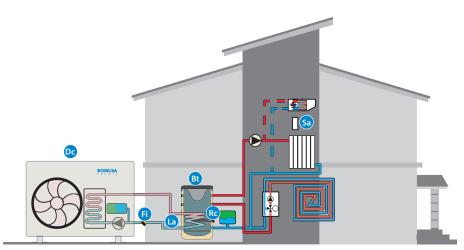




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#### PACK 2 DUAL CLIMA

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.



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

MODEL	COMPOSITION					
PACK 2 DUAL CLIMA 8	BTS 100					
PACK 2 DUAL CLIMA 11	613 100	Antifreeze liquid	1"Water filter	Room sensor		
PACK 2 DUAL CLIMA 16	BTS 150					

Dc	DUAL CLIMA heat pump	Included
Bt	BTS tank	Included
La	Antifreeze liquid	Included
Fi	1" Water filter	Included
Sa	Room sensor	Included
Rc	Electric Heating element	Optional

#### COMPONENTS



Monobloc air source



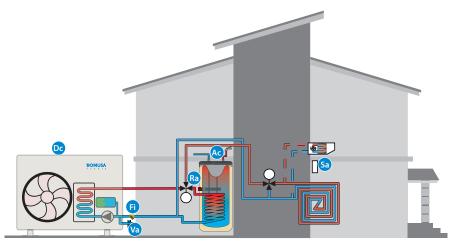
Modulating room sensor



BTS tank

#### PACK 3 DUAL CLIMA

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



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

MODEL	COMPOSITION			
PACK 3 DUAL CLIMA 8/150	SANIT HE 150			
PACK 3 DUAL CLIMA 8/200				
PACK 3 DUAL CLIMA 11/200	SANIT HE 200	1"Water filter	Room sensor	
PACK 3 DUAL CLIMA 16/200				
PACK 3 DUAL CLIMA 16/300	SANIT HE 300			

Dc	DUAL CLIMA heat pump	Included
Ac	SANIT HE DHW tank	Included
Sa	Room sensor	Included
Fi	1" Water filter	Included
Ra	Electric heating element for DHW tank	Optional
Va	Frost protection valve	Optional



Monobloc air source



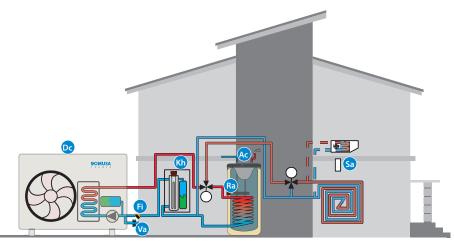
SANIT HE



Modulating room sensor

#### PACK 4 DUAL CLIMA

#### Heating, cooling and DHW with an air source heat pump with electric back-up.



Basic scheme. It does not include filters			

MODEL	COMPOSITION			
PACK 4 DUAL CLIMA 8/150	SANIT HE 150			
PACK 4 DUAL CLIMA 8/200				HP Hydraulic kit
PACK 4 DUAL CLIMA 11/200	SANIT HE 200	1"Water filter	Modulating room sensor	
PACK 4 DUAL CLIMA 16/200			1001113611301	
PACK 4 DUAL CLIMA 16/300	SANIT HE 300			

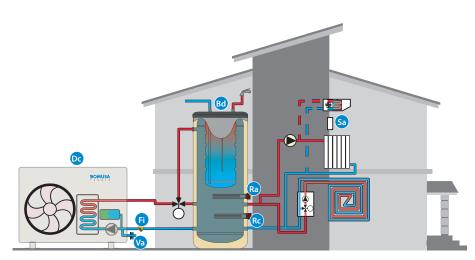
Ra	Electric heating element for DHW tank	Optional
Va	Frost protection valve	Optional
Fi	1" Water filter	Included
Kh	HP Hydraulic kit	Included
Sa	Room sensor	Included
Ac	Sanit HE DHW tank	Included
Dc	DUAL CLIMA heat pump	Included

#### **COMPONENTS**



#### PACK 5 DUAL CLIMA

#### Heating and DHW with an air source heat pump. It allows a combination of a back-up boiler.



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

MODEL	COMPOSITION			
PACK 5 DUAL CLIMA 8				
PACK 5 DUAL CLIMA 11	BT DUO HE 180/60	1"Water filter	Modulating room sensor	
PACK 5 DUAL CLIMA 16			100111301	

Dc	DUAL CLIMA heat pump	Included
Bd	BT DUO HE buffer tank	Included
Fi	1" Water filter	Included
Sa	Room sensor	Included
Ra	Electric Heating element	Optional
Rc	Electric heating element for DHW tank	Optional
Va	Frost protection valve	Optional



Monobloc air source



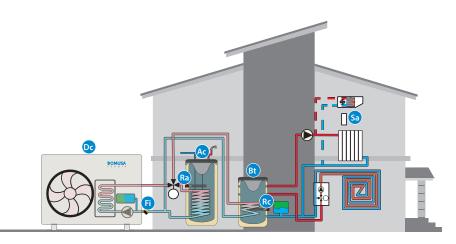
BT DUO HE



Modulating room sensor

#### PACK 6 DUAL CLIMA

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



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

MODEL					
PACK 6 DUAL CLIMA 8/100	BTS 100	Sanit HE 150			
PACK 6 DUAL CLIMA 8/200	BTS 100		1"Water filter	Antifreeze liquid	Modulating room sensor
PACK 6 DUAL CLIMA 11/200	BTS 100	Sanit HE 200			
PACK 6 DUAL CLIMA 16/200	BTS 150				Toom sensor
PACK 6 DUAL CLIMA 16/300	BTS 150	Sanit HE 300			

Dc	DUAL CLIMA heat pump	Included
Bt	BTS tank	Included
Ac	Sanit HE DHW tank	Included
La	Antifreeze liquid	Included
Fi	1" Water filter	Included
Sa	Room sensor	Included
Ra	Eletric heating element for DMW tank	Optional
Rc	Electric heating element for heating	Optional

#### COMPONENTS





Monobloc air source



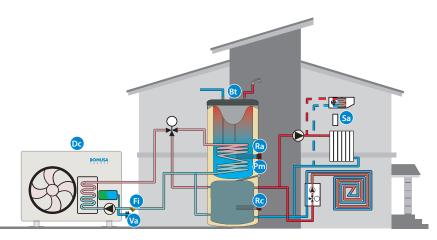




Modulating room sensoi

#### 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.



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

MODEL	COMPC		
PACK 7 DUAL CLIMA 8	BT TRIO 200/50		
PACK 7 DUAL CLIMA 11	BT TRIO 200/80	1"Water filter	Room sensor
PACK 7 DUAL CLIMA 16	BT TRIO 200/80		

Dc	DUAL CLIMA heat pum	Included
Bt	BTS tank	Included
Pm	Manual air vent	Included
Fi	1" Water filter	Included
Sa	Room sensor	Included
Ra	Eletric heating element for DMW tank	Optional
Rc	Electric heating element for heating	Optional
Va	Frost protection valve	Optional



Bomba de calor monobloc

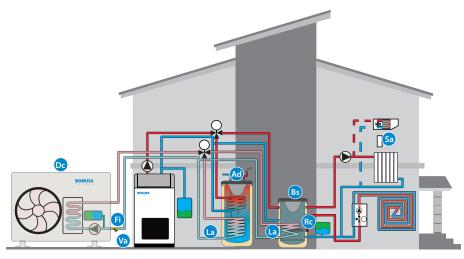




#### PACK 8 DUAL CLIMA

Heating, cooling and DHW with an Air source heat pump with balancing circuit separation buffer and double exchange DHW tank. Allows the use of a back-up boiler.

DUAL CLIMA heat pump	Included
SANIT HE DHW tank	Included
BTS tank	Included
Room sensor	Included
Antifreeze liquid	Included
1" Water filter	Inluded
Electric heating element for DHW tank	Optional
	SANIT HE DHW tank BTS tank Room sensor Antifreeze liquid 1" Water filter



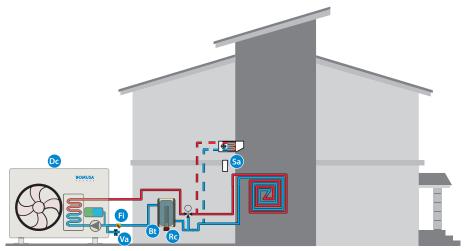
 $Basic\ scheme.\ It\ does\ not\ include\ filters,\ automatic\ air\ vents,\ expansion\ vessels,\ shut-off\ valves,\ check\ or\ safety\ valves\ present\ in\ any\ installation.$ 

MODEL				
PACK 8 DUAL CLIMA 8/200		DTC 100	PTC 100	
PACK 8 DUAL CLIMA 11/200	SANIT HE 200 DS	BTS 100	1"Water filter	Room sensor
PACK 8 DUAL CLIMA 16/200		BTS 150		
PACK 8 DUAL CLIMA 16/300	SANIT HE 300 DS	015 150		



#### PACK 9 DUAL CLIMA

Heating and cooling with an Air Source Heat Pump and buffer tank.



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

MODEL	COMPOSITION					
PACK 9 DUAL CLIMA 8						
PACK 9 DUAL CLIMA 11	BT 50	1" water filter	Room sensor			
PACK 9 DUAL CLIMA 16						

Dc	DUAL CLIMA heat pump	Included
Bt	BT50 tank	Included
Fi	1" Water fi Iter	Inluded
Sa	Room sensor	Included
Va	Frost protection valve	Optional
Rc	Electric heating element for DHW tank	Optional



Monobloc air source





Room sensor

# Hydraulic accesories for heat pumps

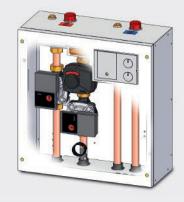


#### Kit BT M









#### Kit BT DM



Mixed circuit



Direct circuit



Weather compensation system



#### Kit BT 2M



Mixed circuit







#### Kit BT 2MS



Mixed circuit





Weather compensation system

HYDRAULIC MODULE FOR HEAT PUMP

## **HP HYDRAULIC KIT**

INTEGRATED EXPANSION VESSEL

2,5 kW BACK UP ELECTRIC HEATING ELEMENT

#### **SPECIFICATIONS**

MODEL	ELECTRIC HEATING ELEMENT POWER	DIMENSIONS mm			
	kW	HEIGHT	WIDTH	DEPTH	
HP HYDRAULIC KIT	2,5	710	365	230	





#### **BUFFER TANK**

## **BT** 50

**PRIMARY TANK** 

FOR COOLING AND HEATING



**CAPACITY:** 50 L

#### **SPECIFICATIONS**

MODEL	DIMENSIONS mm		ENERGY EFFICIENCY CLASS
	HEIGHT	DIAMETER	
BT 50	586	530	C

#### **BUFFER TANK WITH SEPARATOR**

## **BTS** 100-150



FOR COOLING OR HEATING





#### SPECIFICATIONS

MODEL	DIMENSIONS mm		ENERGY EFFICIENCY CLASS	EXCHANGE SURFACE m <sup>2</sup>	
	HEIGHT	DIAMETER			
BTS 100	852	581		1.9	
BTS 150	1,132	581		2.4	



#### **BUFFER TANK**

## BT DUO HE

#### PRIMARY AND DHW ACCUMULATION

**FOR HEATING** 

ErP CLASSEC



**CAPACITY:** 180/60 L

#### **SPECIFICATIONS**

MODEL*	PRIMARY VOLUME	DHW VOLUME	APLICATION	DIMENSIONS mm		mm EFFICIEN	ENERGY EFFICIENCY CLASS
	L	L		DIMENSIONS	HEIGHT	CLASS	
BT DUO HE 180/60	60	180	Heating and DHW	581	1,740	C	





#### **BUFFER TANK WITH SEPARATOR**

## **BT TRIO**

PRIMARY AND DHW ACCUMULATION

FOR COOLING OR HEATING WITH INOX DHW TANK

**CAPACITYES:** 200/50 - 200/80 L





#### **SPECIFICATIONS**

MODEL*	PRIMARY VOLUME	DHW VOLUME	APLICATION	DIMENSIONS mm		ENERGY EFFICIENCY	EXCHANGE SURFACE
	L	L		DIMENSIONS	HEIGHT	CLASS	m²
BT TRIO 200/50	50	200	Heating,	608	1,718	C	2.5
BT TRIO 200/80	80	200	cooling and DHW	608	1,790		2.5

#### **DHW CYLINDORS FOR HEAT PUMPS**

## **SANIT** HE

STAINLESS STEEL TANK

SIMPLE EXCHANGE

**CAPACITYES:** 150 - 200 - 300 L





#### **SPECIFICATIONS**

MODEL	VOLUME L	APLICATION		DIMENSIONS		EXCHANGE SURFACE
			DIMENSIONS	HEIGHT	CLASS	""
SANIT HE 150	150		581	1.227	В	2,25
SANIT HE 200	200	ACS	581	1,563	В	2.5
SANIT HE 300	300		581	1,790	C	3.1



## **SANIT** HE DS

STAINLESS STEEL TANK

**DOBLE INTERCAMBIO** 

CAPACITYES: 200 - 300 L



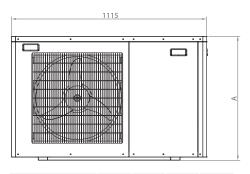


#### **SPECIFICATIONS**

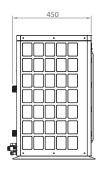
MODEL	VOLUME L	APLICATION	DIMENSI mm	ONS	ENERGY EFFICIENCY CLASS	EXCHANGE SURFACE
			DIMENSIONS	HEIGHT	CLASS	m²
SANIT HE 200 DS	200	DHW	581	1,563	В	2.5 + 0,6
SANIT HE 300 DS	300	double exchange	608	1,790	C	3.1 + 0,6



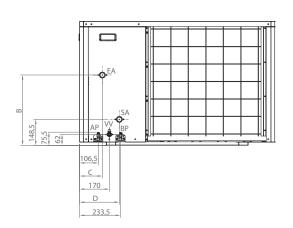
#### **DIMENSIONS**



	Α	В	С	D
DUAL CLIMA 8	710	402	130	230
DUAL CLIMA 11	970	419	230	130
DUAL CLIMA 16	1,270	419	230	130



EA: Water inlet SA: Water outlet VV: Empty valve AP: High pressure valve BP: Low pressure valve



MAIN CHARACTERISTICS		DUAL CLIMA 8	DUAL CLIMA 11	DUAL CLIMA 16		
η, Seasonal efficiency	%	163	170	176		
SCOP		4.16	4.32	4.48		
SEER		4.10	3.40	3.90		
COP (T. aire 7°C, T. agua 30/35-EN14511)		4.59	4.24	4.50		
Energy efficiency class		Α	++	A+++		
Heating output (Air T. 7°C, Water T. 30/35-EN14511)	kW	7.80	10.30	15.50		
Cooling output (Air T. 7oC, Water T. 30/35-EN14511)	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		60				
Working temperature range		-20/46				
Nominal working flow	m³/h	1.50	1.85	2.80		
Weight	kg	90	125	150		

#### **OPTIONS**

1" water filter

HP hydraulic kit

1,5 kW electric heating element

2,5 kW electric heating element

3,5 kW electric heating element

Antifreeze liquid (5L)

Room sensor

Frost protection valve

MYDOMO WiFi remote control



#### **EQUIPMENT**

DC Inverter air source heat pump

High efficiency pump

Heating circuit expansion vessel

Control unit

Flow limiter

Water pressure gauge



### **DOMUSA**

TEKNIK

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