

SINGLE-PACKAGE CONSOLE UNIT RÊVE

R 410 A

APPLICATIONS

**COMMUNAL OR INDIVIDUAL HOUSING,
COMMERCIAL**



Excellence and imagination
with “RÊVE” Single-package console
with remote control
and 5 functions:

**Cooling only,
Cooling and heating (heat pump),
Water radiator,
Dehumidifier,
Fan with air filtration.**

- 4 models
- Water condensing or air condensing units
- Without outdoor unit
- Quick installation
- R 410 A
- A class

SINGLE-PACKAGE CONSOLE UNITS



 **Technibel**
Climatisation

UNE AVANCE DANS L'AIR DU TEMPS

Direct expansion

Single-package console unit

RÊVE	90
Air cooled	92
Water cooled	94



RÊVE,

Excellence and imagination with this original concept

RÊVE is born to satisfy the desire of many people that, approaching the purchase of an air conditioner Cooling only or Cooling and Heating, wish to integrate it in their house or office without taking new space, without installing outdoor units and, if possible, choosing one product able to cool, heat and dehumidify; RÊVE satisfies all these desires!

Nobody is perfect?

RÊVE, a revolutionary product for the air conditioning: the first air conditioner able to do also the water radiator.

In winter, when the boiler is fired, RÊVE works as a water radiator; in summer, when the boiler is off, it works as an air conditioner and in the mid-seasons it is also a heat pump.

Thanks to a careful design and to first-quality materials, it elegantly adapts to every housing context, solving also space problems as it can be installed in the place of a standard water radiator.

Beautiful, silent & without outdoor unit : perfect, faultless
Characterised by elegant, essential and discrete design, RÊVE is equipped with a surprisingly silent fan, is treated with special antinoise materials and doesn't have any outdoor unit.

Perfect, but where to put it?

Where before there was the water radiator, now RÊVE is. It takes only 26 cm of thickness and replaces exactly, both for dimensions and for functionality, the classic water radiator composed of 10/12 elements installed on a perimetral wall. Easy and quick installation : about one hour of labour.

The solution for all the seasons.

RÊVE answers to every change of season with the desired climate in one only simple click on the remote control. The remote control is equipped with programmable timer and digital display on a remote control that, thanks to a special sensor combined with the "I Feel" function, points out and keeps the desired temperature in the precise point of the room in which is positioned.

In autumn, winter, spring or summer RÊVE is the 365 day solution!

So many innovations in one concept only

Air conditioner, heat pump, water radiator, dehumidifier and fan with air filtration.... Many functions in one only extraordinary product conceived, realized and signed by Technibel. Moreover, Rêve uses ecological refrigerants of the last generation, compliant to the European rules, and "travels" only in first class because it belongs to the best energy efficiency category: the A Class.

Controls

On the front panel of the unit there are some controllers and indicators:

- infrared receiver for remote control
- blue led indicating the operation of the timers
- yellow led indicating the "stand by" status
- green led indicating the operation in air conditioning/heat pump mode
- micro-switch control to activate or disable the unit in case of remote control loss.



Air flow

The air intake is mainly placed on the front of the unit with the addition of two small lateral grilles; the air intaken pass through a big anti-mould and anti-bacteria washable filter, easy to be extracted and washed, assuring clean air and maximum operating efficiency, both in air conditioning and water radiator modes. The air filtration and the ventilation (three-speeds by remote control) avoid the forming of the typical "black moustaches" around the standard water radiators.





Technical description

RÊVE is a product that combines the functions of air conditioner/heat pump and water radiator.

As air conditioner, it belongs to the category of “packaged double ducts”, defined by the 2002/31/CE European Directive as “air conditioners completely positioned inside the conditioned space, with the condenser air intake and air discharge outside by means of two ducts”.

It can operate in 5 modes:

- air conditioning
- heat pump
- dry only
- ventilation with air filtration
- water radiator.

RÊVE has always the **“water radiator” function**, that can be used or not used; to use this function it’s necessary to connect RÊVE to the heating plant, independent or centralised. The connection can be made by means of a special optional kit, the interface module between RÊVE and the heating plant; without this kit RÊVE can be installed with the maximum flexibility as air conditioner/heat pump without outdoor unit (i.e., where there isn’t a heating plant for climatic reasons).

Joint Kit

The joint kit to the heating plant is symmetric and can be installed on the right side as well as on the left side; it has been realised to best adapt to the various existing conditions (pipes on right, pipes on left, outlet on right and return on left, outlet on top and return lower...). This means that the same kit (code 397011902) can be used for both the sides; the dimension and the shape of the kit allow to elegantly cover the majority of the hydraulic connections; moreover the thickness of the plastic of the top and lower parts has been reduced to facilitate the adaptation to the plant.

The kit is composed of the plastic cover and of all the components (electronic and hydraulic) necessary to work in “water radiator” mode; the installer will have to do only the hydraulic connections to the outlet and the return of the heating plant.

The plastic cover of the kit is equipped with two shutter doors, one to access to the top part of the hydraulic connections and the other to access to the lower part of them; between the spaces there are the main controllers of the product:

- change-over switch from water radiator to air conditioner mode (winter/summer);
- fan speed controller in water radiator mode;
- Controller of the water radiator temperature (from 6°C to 40°C).

When the change-over switch is on “winter” position (water radiator mode) RÊVE can’t operate as air conditioner; in this position the three-way bypass valve (provided with the joint kit) allows the hot water to flow from the heating plant. A temperature sensor stops the fan operation if the temperature of the water is lower than 40°C; a high precision thermostat controls the ventilation to keep a room temperature adjustable from 6°C to 40°C.

When the change-over switch is on “summer” position (air conditioner mode) RÊVE can operate as air conditioner or heat pump (it depends on the model) and the bypass valve insulates the product from the heating plant, assuring no water flow inside the air/water exchanger. RÊVE pressure drops and water flowrate are equivalent to these of the traditional water radiator, thus the installation of RÊVE doesn’t require any plant modification.



SINGLE-PACKAGE CONSOLE UNIT RÊVE AIR COOLED

R 410 A



RÊVE 247 C

COOLING ONLY

RÊVE 237 R

COOLING AND HEATING

Well dedicated for:

- > Communal or individual housing
- > Commercial
- > Co-property
- > Listed building
- > Hotel applications

- Single package Cooling only or Cooling and Heating air-conditioner as console type, without outdoor unit
- Water radiator with ventilation (with optional water connection module)
- Air-cooled condensation by means of two holes connecting with the external
- Automatic changeover between Heating and Cooling functions to maintain selected temperature (Cooling and Heating model)
- Installation on a parametral wall
- Dry function for dehumidification
- Ventilation only feature
- "I Feel" feature, granting the best comfort conditions
- Temperature sensor inside the remote control
- Double temperature indication (set and room)
- Infrared remote control with digital timers to be set on the 24h or week-end
- Sleep function with automatic adaptation to the night temperature
- Special function during heat pump start-up and defrosting cycle to avoid cool air emission in the room (Cooling and Heating model)
- Variable speed of the condensing fan to reduce at minimum the sound

- Horizontal flap swinging by remote control
- Horizontal flap to be set to a fixed position
- Vertical flap by manual control
- Washable filter
- Three-speed tangential fan with auto or speed manual selection
- Cold Draft Prevention device with water temperature less than 40°C in water radiator mode
- High precision thermostat with adjustment from 6°C to 40°C in water radiator mode
- Auto restart after a black out, with feature setting saving
- Electronic protection against over-pressures
- HFC refrigerant R410A
- High efficiency rotary compressor

To use the water radiator function, it's necessary to add an optional water connection module (fitted with a three-way bypass valve).

Feet are available as option for floor installation, for example in front of glass walls.

ACCESSORIES

Type	Models	Code
Water connection module	RÊVE 247 C/237 R	397011902
Support kit (2 feet)	RÊVE 247 C/237 R	397011903





COOLING ONLY + WATER RADIATOR WITH VENTILATION

Model		RÊVE 247 C	
Code	230/1/50	MRF 247 C5T	
Cooling capacity (kW)		2.45	
Heating capacity in water radiator mode (kW)		2.1	
Input power cooling (in A/C mode) (kW)		0.935	
Input power heating (water radiator mode) (kW)		0.027	
Energy class		A	
Annual energy consumption in cooling h (kW/h)		467.5	
EER		2.62	
Air flow (m³/s-m³/h)	LS	0.078 - 280	
	MS	0.083 - 300	
	HS	0.092 - 330	
Running current (A)	cooling	4.3	
	heating (water radiator mode)	0.01	
Dehumidification (l/h)	HS	1.2	
Fan speeds		3 + auto	
Deflection	horizontal	auto	
	vertical	manual	
Refrigerant type		R 410 A	
Ducts diameter	(mm)	162	
Water connection diameter	(pouce)	1/2"	
Condensate drain pipe		not necessary	
Sound power (dBA)	(A/C mode)	LS/MS/HS	49 / 51 / 53
	(water radiator mode)	LS/MS/HS	40 / 47 / 50
Sound pressure (dBA)	(A/C mode)	LS/MS/HS	41 / 43 / 45
	(water radiator mode)	LS/MS/HS	32 / 39 / 42
Height x Width x Depth	(mm)	735 x 839 x 260-280	
Weight	(Kg)	50	

COOLING AND HEATING + WATER RADIATOR WITH VENTILATION

Model		RÊVE 237 R	
Code	230/1/50	MRF 237 R5T	
Cooling capacity (kW)		2.35	
Heating capacity in water radiator mode (kW)		2.1	
Heating capacity in heat pump mode (kW)		2.25	
Input power cooling (A/C mode) (kW)		0.9	
Input power heating (water radiator mode) (kW)		0.027	
Input power heating (heat pump mode) (kW)		0.85	
Energy class cooling/heating		A / C	
Annual consumption in cooling 500 h (kW/h)		450	
EER / COP		2.61 / 2.64	
Air flow (m³/s-m³/h)	LS	0.078 - 280	
	MS	0.083 - 300	
	HS	0.092 - 330	
Running current (A)	cooling/heating	4.2 / 4.0	
	heating (water radiator mode)	0.01	
Dehumidification (l/h)	HS	1	
Fan speeds		3 + auto	
Deflection	horizontal	auto	
	vertical	manual	
Refrigerant type		R 410 A	
Ducts diameter	(mm)	162	
Water connection diameter		1/2"	
Condensate drain pipe		By duct, outside or inside the room	
Sound power (dBA)	(A/C mode)	LS/MS/HS	49 / 51 / 53
	(water radiator mode)	LS/MS/HS	40 / 47 / 50
Sound pressure (dBA)	(A/C mode)	LS/MS/HS	41 / 43 / 45
	(water radiator mode)	LS/MS/HS	32 / 39 / 42
Height x Width x Depth	(mm)	735 x 839 x 260-280	
Weight	(Kg)	52	

The pressure levels here indicated are in compliance with the European standard EN 12102

Nominal conditions

COOLING	T indoor air	27°C (DB) / 19°C (WB)	HEATING	T indoor air	20°C (DB)
	T outdoor air	35°C (DB)		T outdoor air	7°C (DB) / 6°C (WB)

OPERATING LIMITS

COOLING	maximum	T indoor air	32°C (DB) / 23°C (WB)	HEATING	maximum	T indoor air	27° C (DB)
	minimum	T outdoor air	43°C (DB)		minimum	T outdoor air	24°C (DB) / 18°C (WB)
		T outdoor air	19°C (DB) / 14°C (WB)			T outdoor air	-8°C (DB) / -9°C (WB)
		T outdoor air	19°C (DB)				

SINGLE-PACKAGE CONSOLE UNIT RÊVE WATER COOLED

R 410 A



RÊVE 248 C H₂O

COOLING ONLY

RÊVE 237 R H₂O

COOLING AND HEATING

Ideal for business premises:

- > New or refurbished office areas
- > Office zones on industrial sites

- Single package Cooling only or Cooling and Heating air-conditioner as console type, without outdoor unit
- Water radiator with ventilation (with optional water connection module)
- Water-cooled condensation with a water medium consumption of about 1 meter cube for 8 hours operation. Projected to operate with both town water (water inlet from 13° C to 18° C) or sink/stratum water ; it can be used also as terminal unit of a closed circuit plant (water loop) with water at 30° C, according to EN14511 standard specifications.
- To be freely installed, not necessarily on a parametral wall, because no holes in the wall are requested
- High efficiency spiral plates heat exchanger
- With pressostatic valve fitted (town water) (MROF 248 C5T)
- Solenoid valve to stop the town water flowrate when the compressor is off (MROF 237 R5T)
- Anti-freeze protection on the condensation water circuit
- It's suggested the installation of a filter to be inspected on the inlet of the network water (by the installer)
- Automatic changeover between Heating and Cooling modes to maintain selected temperature (Cooling and Heating model)
- Dry function for dehumidification
- Ventilation only feature
- "I Feel" feature, granting the best comfort conditions
- Temperature sensor inside the remote control
- Double temperature indication (set and room)
- Infrared remote control with digital timers to be set on the 24h or week-end
- Sleep function with automatic adaptation to the night

temperature

- Special function during heat pump start-up and defrosting cycle to avoid cool air emission in the room (Cooling and Heating model)
- Horizontal flap swinging by remote control
- Horizontal flap to be set to a fixed position
- Vertical flap by manual control
- Washable filter
- Three-speed tangential fan with auto or speed manual selection
- Cold Draft Prevention device with water temperature less than 40°C in water radiator mode and with evaporator temperature less than 40°C in heat pump mode (only MROF 237 R5T)
- High precision thermostat with adjustment from 6°C to 40°C in water radiator mode
- Auto restart after a black out, with feature setting saving
- Electronic protection against over-pressures
- HFC refrigerant R410A
- High efficiency rotary compressor

To use the water radiator function, it's necessary to add an optional water connection module (fitted with a three-way bypass valve).

Feet are available as option for floor installation, for example in front of glass walls.

ACCESSORIES

Type	Models	Code
Water connection module	RÊVE 248 CH ₂ O/237 RH ₂ O	397011902
Support kit (2 feet)	RÊVE 248 CH ₂ O/237 RH ₂ O	397011903



COOLING ONLY + WATER RADIATOR WITH VENTILATION

Model		RÈVE 248 C H ₂ O	
Code	230/1/50	MROF 248 C5T	
		Town water	Water loop
Cooling capacity (kW)		2.83	2.7
Input power in cooling (in A/C mode) (kW)		0.640	0.650
Energy class		-	B
Annual consumption in cooling 500 h (kW/h)		-	325
EER		4.42	4.15
Air flow (m ³ /h)	LS/MS/HS	280/300/330	280/300/330
Running current Cooling (A)		2.9	2.9
Dehumidification (l/h)		1.2	1.2
Fan speeds		3 + auto	3 + auto
Flow of cooling water (m ³ /h)		0.150	0.525
Pressure drop (kPa)		2.9	38.0
Refrigerant type		R 410 A	R 410 A
Water connection diameter (inlet / outlet)		1/2" gaz	3/4" gaz
Ø Condensate drain pipe (Ø inlet or outlet)		18	18
Heating capacity back to water in cooling (kW)		3.47	3.35
Sound power (in A/C mode) (dBA)	LS/MS/HS	49/50/52	49/50/52
Sound pressure (in A/C mode) (dBA)	LS/MS/HS	41/42/44	41/42/44
Heating capacity in water radiator mode (kW)		2.1	
Input power in A/C mode (kW)		0.027	
Running current Heating in water radiator mode (A)		0.01	
Water flow in water radiator mode (m ³ /h)		0.19	
Pressure drop in water radiator mode (kPa)		2.9	
Hydraulic connection diameter on heating plant (in water radiator mode)		1/2"	
Sound power (in water radiator mode) (dBA)	LS/MS/HS	40/47/50	
Sound pressure (in water radiator mode) (dBA)	LS/MS/HS	32/39/42	
Height x Width x Depth	(mm)	735 x 839 x 260-280	
Weight	(kg)	46	

COOLING AND HEATING + WATER RADIATOR WITH VENTILATION

Model		RÈVE 237 R H ₂ O	
Code	230/1/50	MROF 237 R5T	
		Town water	Water loop
Cooling capacity (kW)		2.95	3.00
Heating capacity in heat pump mode (kW)		3.15	3.56
Input power cooling/heating (in heat pump mode) (kW)		0.630/0.830	0.680/0.860
Energy class cooling/heating		-	A / C
Annual consumption in cooling 500 h (kW/h)		-	340
EER / COP		4.68 / 3.80	4.41 / 4.14
Air flow (m ³ /h)	LS/MS/HS	280/300/330	280/300/330
Running current cooling/heating (A)		2.8 / 3.8	3.0 / 3.8
Dehumidification (l/h)		1.3	1.3
Fan speeds		3 + auto	3 + auto
Flow of cooling water (m ³ /h)		0.150	0.525
Refrigerant type		R410A	R410A
Water connection diameter (inlet / outlet)		1/2" gaz	3/4" gaz
Ø Condensate drain pipe (Ø inlet / outlet)		18	18
Heating capacity back to water in cooling (kW)		3.58	3.68
Cooling capacity back to water in heating (kW)		2.04	2.7
Sound power (in A/C mode) (dBA)	LS/MS/HS	49/50/52	49/50/52
Sound pressure (in A/C mode) (dBA)	LS/MS/HS	41/42/44	41/42/44
Heating capacity in water radiator mode (kW)		2.1	
Input power in A/C mode (kW)		0.027	
Running current heating in water radiator mode (A)		0.01	
Water flow in water radiator mode (m ³ /h)		0.19	
Pressure drop in water radiator mode (kPa)		2.9	
Hydraulic connection diameter on heating plant (in water radiator mode)		1/2"	
Sound power (in water radiator mode) (dBA)	LS/MS/HS	40/47/50	
Sound pressure (in water radiator mode) (dBA)	LS/MS/HS	32/39/42	
Height x Width x Depth	(mm)	735 x 839 x 260-280	
Weight	(kg)	48	

The pressure levels here indicated are in compliance with the European standard EN 12102

Nominal conditions

Town water

Cooling :
 T indoor air : 27° C (DB) / 19° C (WB)
 T water inlet : 18° C – T water outlet 36° C
 Heating :
 T indoor air : 20° C (DB)
 T water inlet : 18° C – T water outlet 6° C

Water loop

Cooling :
 T indoor air : 27° C (DB) / 19° C (WB)
 T water inlet : 30° C – T water outlet 35° C
 Heating :
 T indoor air : 20° C (DB)
 T water : 15° C

in water radiator mode

T indoor air : 20° C
 T water inlet : 70° C – T water outlet : 60° C