Multiple assemblies configured on demand

Absorption heating-cooling modules can be pre-assembled on a single underbase rack to make assemblies specifically configured on demand consisting of a combination of one or more heat pumps, chillers with or without heat recovery and condensing boilers.
Here follow some examples:

EXAMPLES	COMPOSITION OF THE MULTIPLE ASSEMBLY CONFIGURED ON DEMAND					OPERATION MODE			
	Air source condensing gas absorption heat pump GAHP-A	Air source reversible gas absorption heat pump GAHP-AR	gas absorption chiller with heat recovery GA ACF60-00 HR	Gas absorption chiller GA ACF60-00	Gas condensing boiler AY 00-120 Condensing	HEATING	COOLING	DHW WITH HEAT RECOVERY	DHW
ASSEMBLY RTRH p. 45		✓ +	✓		✓ +	✓	✓	✓	✓
ASSEMBLY RTAH p. 46		✓ +	✓			✓	✓	✓	
ASSEMBLY RTRC p. 47		✓ +		✓ +	✓	✓	✓		✓
ASSEMBLY RTCR p. 48		✓ +		✓		✓	✓		
ASSEMBLY RTYR p. 49		✓ +			✓	✓	✓		✓
ASSEMBLY RTYH p. 50			✓ +	✓ +	✓		✓	✓	✓
ASSEMBLY RTHF p. 51			✓ +	✓			✓	✓	
ASSEMBLY RTYF p. 52				✓ +	✓	✓	✓		✓
ASSEMBLY RTAY p. 53	✓ +				✓	✓			✓

✓ = 1 or more Robur units

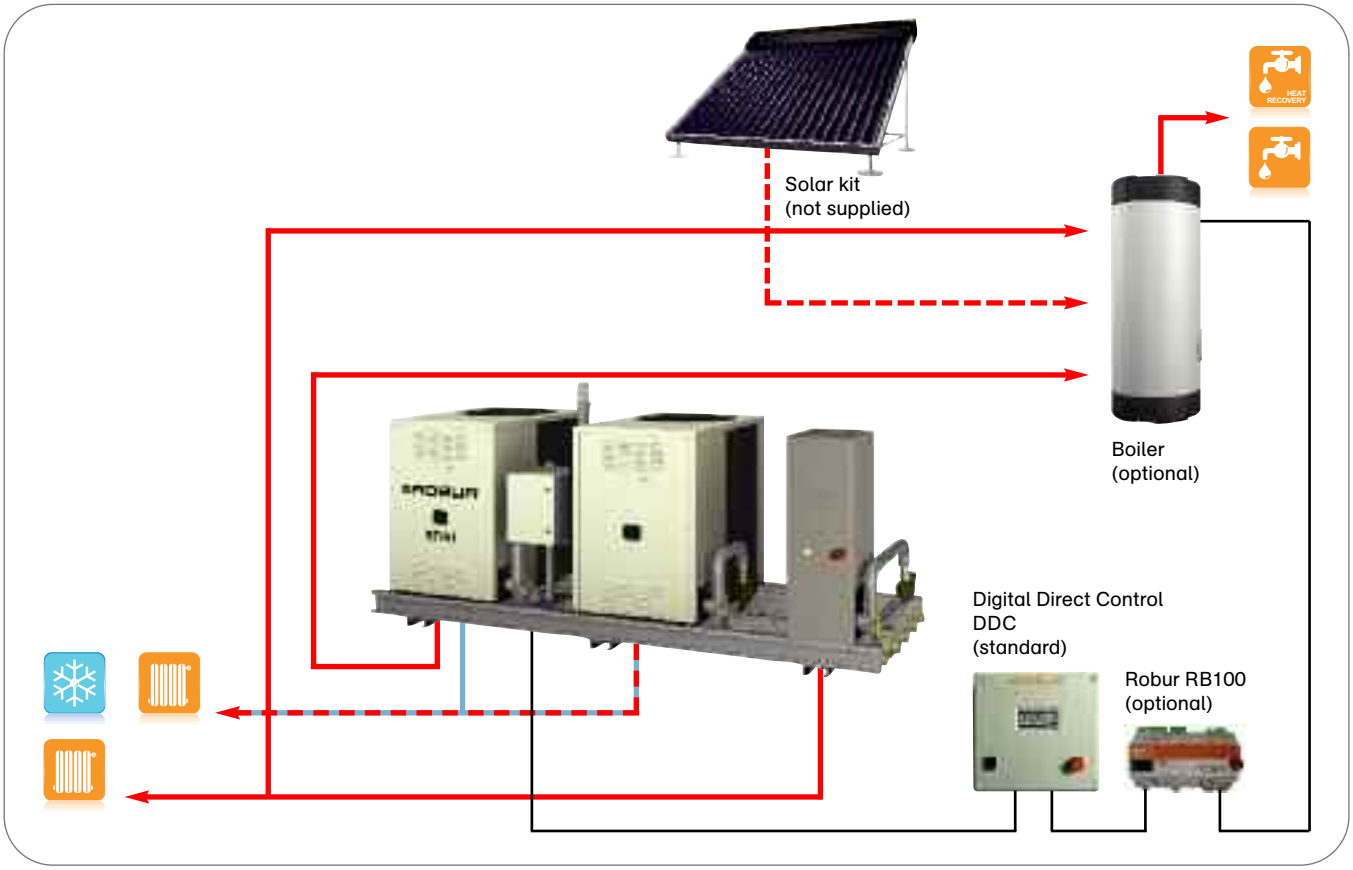
The RTRH assembly consists of one or more reversibile gas absorption heat pumps, one or more gas absorbtion chillers with heat recovery and one or more gas condensing boilers.

Gas absorption assembly for heating, cooling with heat recovery and DHW production throughout the year

RTRH Series

Advantages

- Ensures efficiency levels up to 150% guaranteeing up to 40% reduction in annual heating costs compared to the best condensing boilers.
- Reduces electricity requirements by up to 86% compared to traditional electrical systems, thanks to the prevalent use of gas.
- Produces DHW for free in cooling mode.
- Enables the most efficient heating and cooling performances, matching the variable seasonal loads by means of the plant interface for heating curve management when supported by heating controller.
- Easy integration with solar (not supplied) for DHW production throughout the year.
- Available in the 4 or 6 pipes version.



Model	Units	Heating capacity kW	Cooling capacity kW
RTRH118-312/6 HR SM	1 AR + 1 ACF HR + 1 AY00-120	92.9	34.8

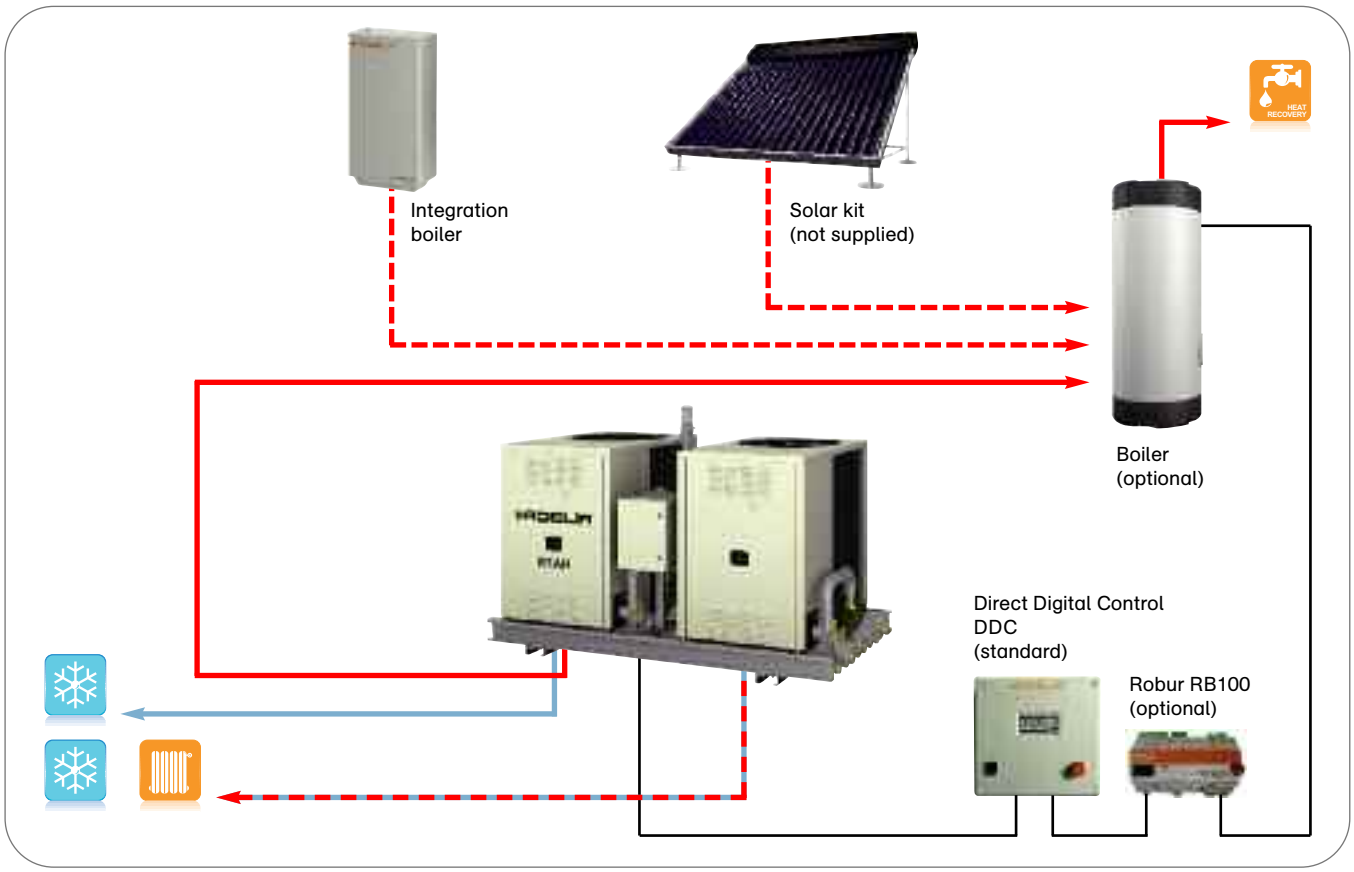
Example of composition of heating and cooling, 6 pipes version, with standard circulation pumps (S) on heating and cooling circuits and high-head pumps (M) on recovery circuit. Different compositions are possible in order to make heating-cooling assemblies matching the different heating-cooling needs of each installation.

The RTAH assembly consists of one or more reversibile gas absorption heat pumps and one or more gas absorption chillers with heat recovery.

Gas absorption assembly for heating, cooling with indirect production of DHW
RTAH Series

Advantages

- Ensures efficiency levels up to 150% guaranteeing up to 40% reduction in annual heating costs compared to the best condensing boilers.
- Supply DHW for free in cooling mode and reduces electricity requirements by up to 86% compared to traditional electrical systems, thanks to the prevalent use of gas.
- Enables the most efficient heating and cooling performances, matching the variable seasonal loads by means of the plant interface for heating curve management when supported by heating controller.
- Easy integration with solar (not supplied) and traditional or condensing boiler for DHW production throughout the year.



Model	Units	Heating Capacity kW	Cooling capacity kW
RTAH118-192/4 HR SM	n. 1 AR + n. 1 ACF HR	58.5	34.8

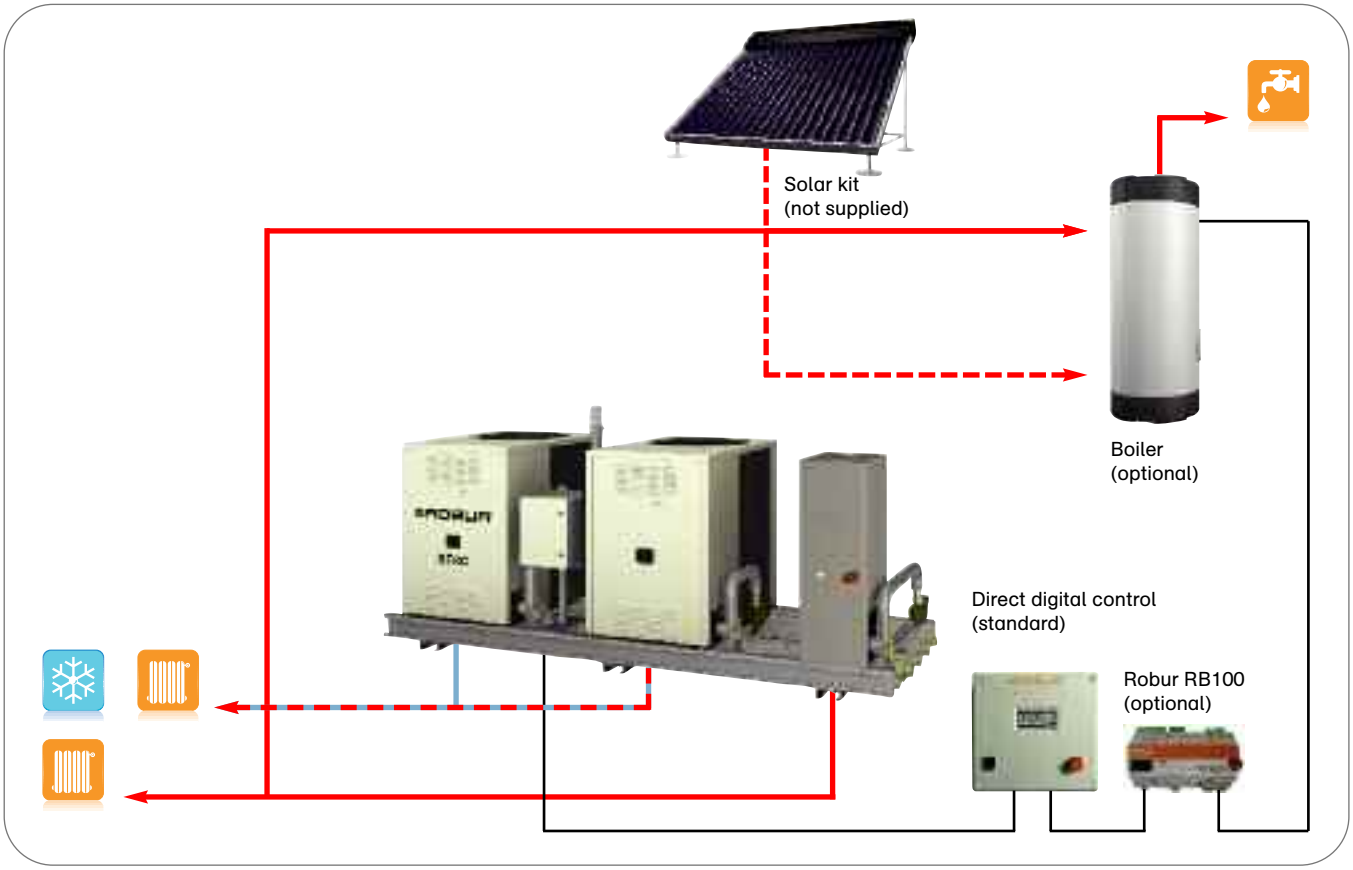
Example of composition for heating and cooling, 4 pipes version, with standard circulation pumps (S) on heating and cooling circuits and high-head pumps (M) on recovery circuit. Different compositions are possible, in order to make heating-cooling assemblies matching the different heating-cooling needs of each installation.

The RTRC assembly consists of one or more reversibile gas absorption heat pumps, one or more gas absorbtion chillers and one or more condensing boilers.

Gas absorption assembly for heating, cooling and DHW production throughout the year
RTRC Series

Advantages

- Ensures efficiency levels up to 150% guaranteeing up to 40% reduction in annual heating costs compared to the best condensing boilers.
- Reduces electricity requirements by up to 86% compared to traditional electrical systems, thanks to the prevalent use of gas.
- Enables the most efficient heating and cooling performances, matching the variable seasonal loads by means of the plant interface for heating curve management when supported by heating controller.
- Easy integration with solar and traditional or condensing boiler for DHW production throughout the year.
- Available in the 4 or 6 pipes version.



Model	Units	Heating capacity kW	Cooling capacity kW
RTRC118-240 CC	n.1 AR + n.1 ACF + n.1 AY00-120	71.9	34.6

Example of composition for heating and cooling with independent circulation pumps per each module. Different compositions are possible, in order to make heating-cooling assemblies matching the different heating-cooling needs of each installation.

The RTCR assembly consists of one or more reversibile gas absorption heat pumps and one or more gas absorbtion chillers.

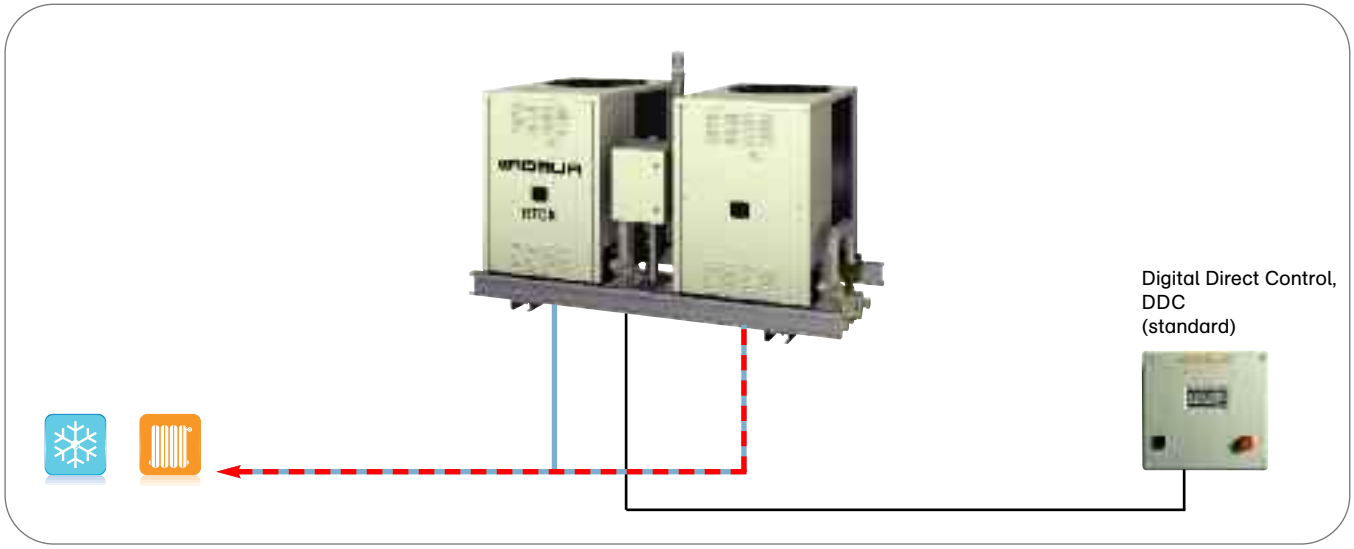
Gas absorption assembly for heating and cooling
RTCR Series

Advantages

- Ensures efficiency levels up to 150% guaranteeing up to 40% reduction in annual heating costs compared to the best condensing boilers.
- Reduces electricity requirements by up to 86% compared to traditional electrical systems, thanks to the prevalent use of gas.
- Enables the most efficient heating and cooling performances, matching the variable seasonal loads by means of the plant interface for heating curve management when supported by heating controller.
- Available in the 4 or 6 pipes version.

Applications

- Ideal for use in which is required a balancing of heating and cooling power needs..



Model	Units	Heating capacity kW	Cooling capacity kW
RTCR118-120 CC	n. 1 AR + n. 1 ACF	37.5	34.6

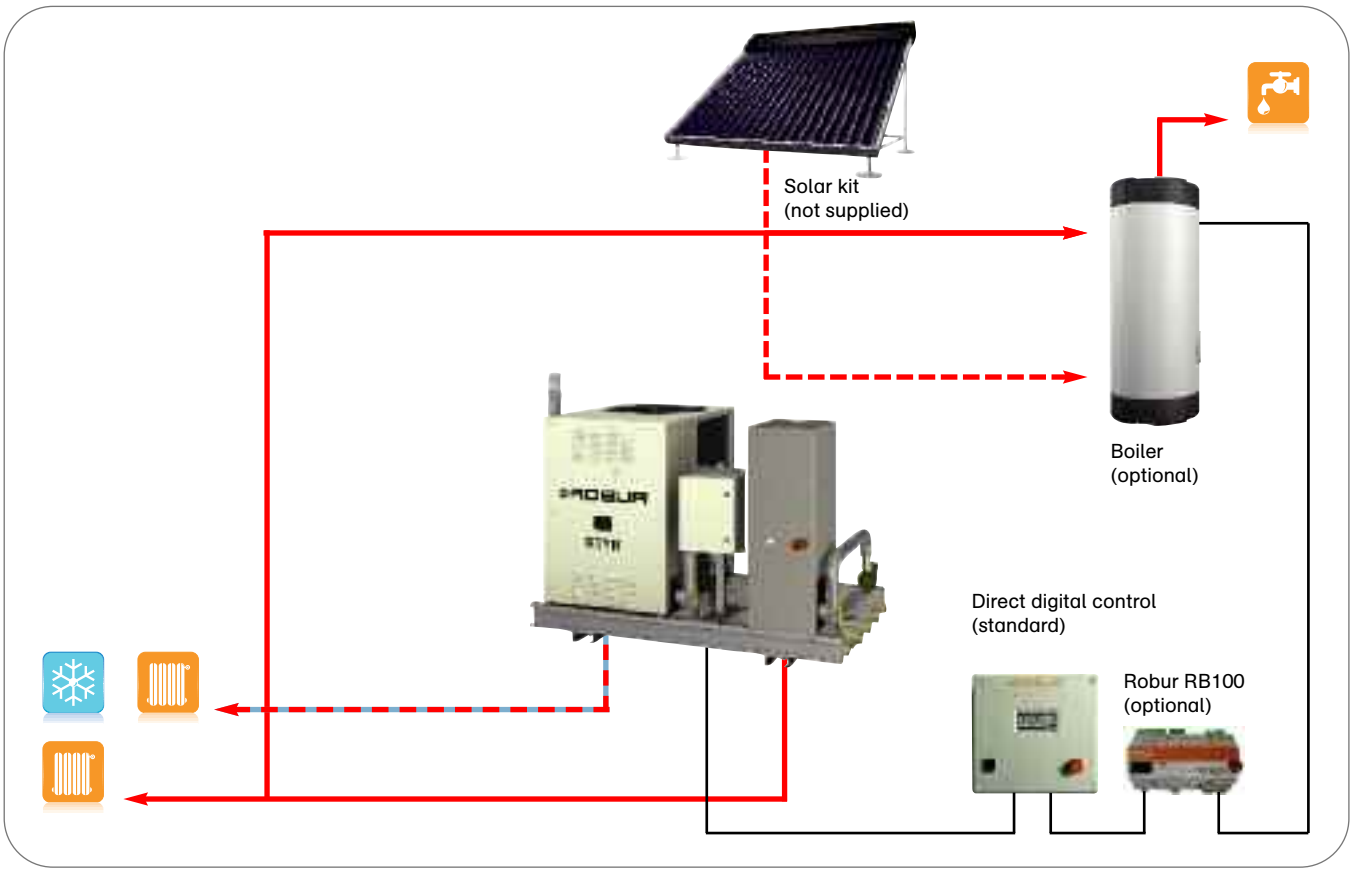
Example of composition for heating and cooling with independent circulation pumps per each module. Different compositions are possible, in order to make heating-cooling assemblies matching the different heating-cooling needs of each installation.

The RTYR assembly consists of one or more reversibile gas absorption heat pumps and one or more condensing boilers.

Gas absorption assembly for heating or cooling and DHW production
RTYR Series

Advantages

- Ensures efficiency levels up to 150% guaranteeing up to 40% reduction in annual heating costs compared to the best condensing boilers.
- Reduces electricity requirements by up to 86% compared to traditional electrical systems, thanks to the prevalent use of gas.
- Enables the most efficient heating and cooling performances, matching the variable seasonal loads by means of the plant interface for heating curve management when supported by heating controller.
- Easy integration with solar (not supplied) and traditional or condensing boiler for DHW production throughout the year.
- Available in the 4 or 6 pipes version.



Model	Units	Heating capacity kW	Cooling capacity kW
RTYR58-240 CC	n. 1 AR + n. 1 AY00-120	71.9	16.9

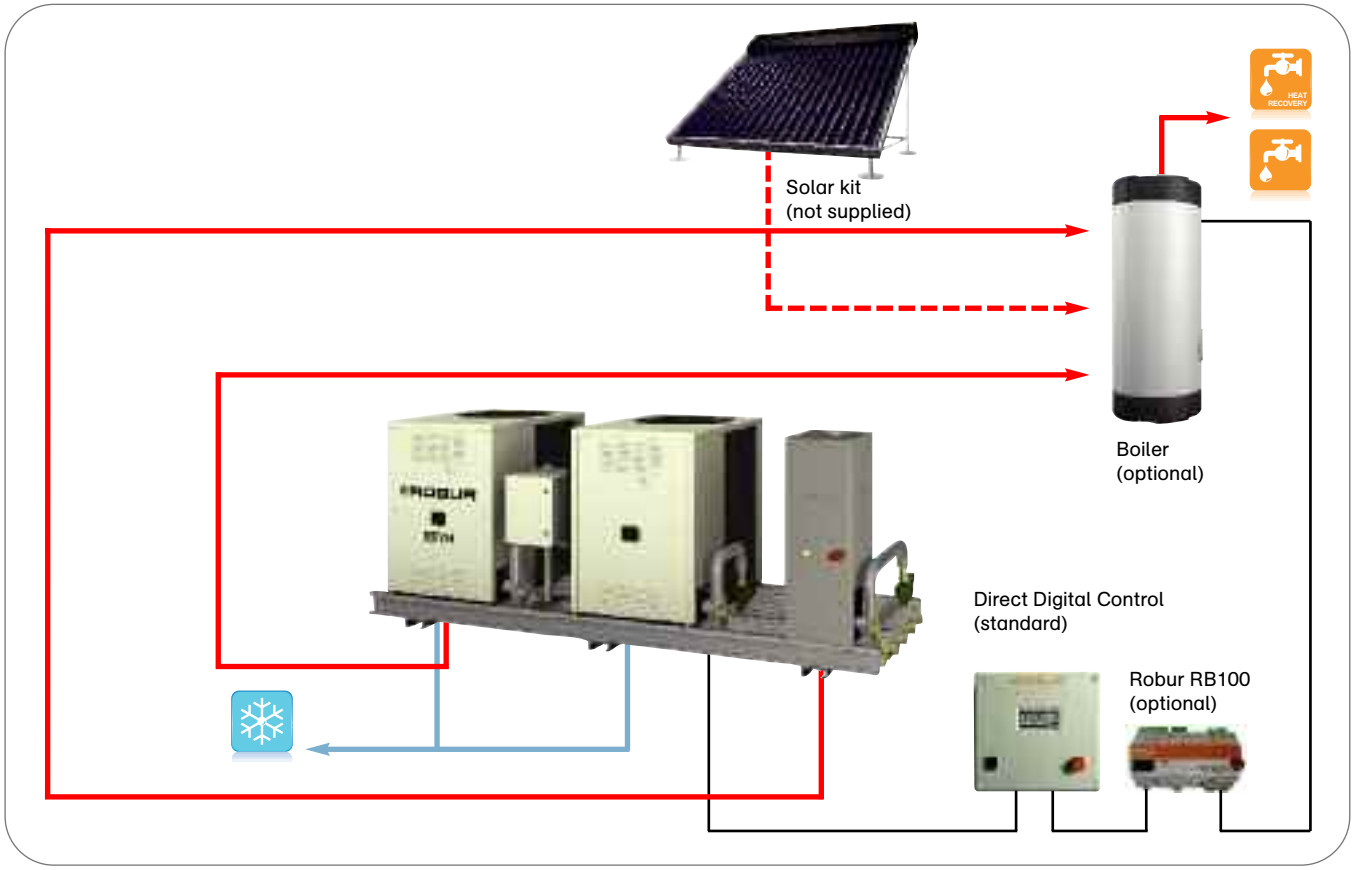
Example of composition for heating and cooling with independent circulation pumps per each module. Different compositions are possible, in order to make heating-cooling assemblies matching the different heating-cooling needs of each installation.

The RTYH assembly consists of one or more gas absorption chillers, one or more gas absorption chillers with heat recovery and one or more condensing boilers.

Gas absorption assembly for cooling and DHW production in heat recovery mode
RTYH Series

Advantages

- Reduces electricity requirements by up to 86% compared to traditional electrical systems, thanks to the prevalent use of gas.
- Provide DHW for free during cooling season.
- Enables the most efficient cooling performances, matching with the variable seasonal loads by means of the plant interface for heating curve management when supported by heating controller.
- Easy integration with solar and traditional or condensing boiler for DHW production throughout the year.
- Available in the 4 or 6 pipes version.



Model	Units	Heating capacity kW	Cooling capacity kW
RTYH120-192/6 SM	1 ACF + 1 ACF HR + 1 AY00-120	55.4	35.6

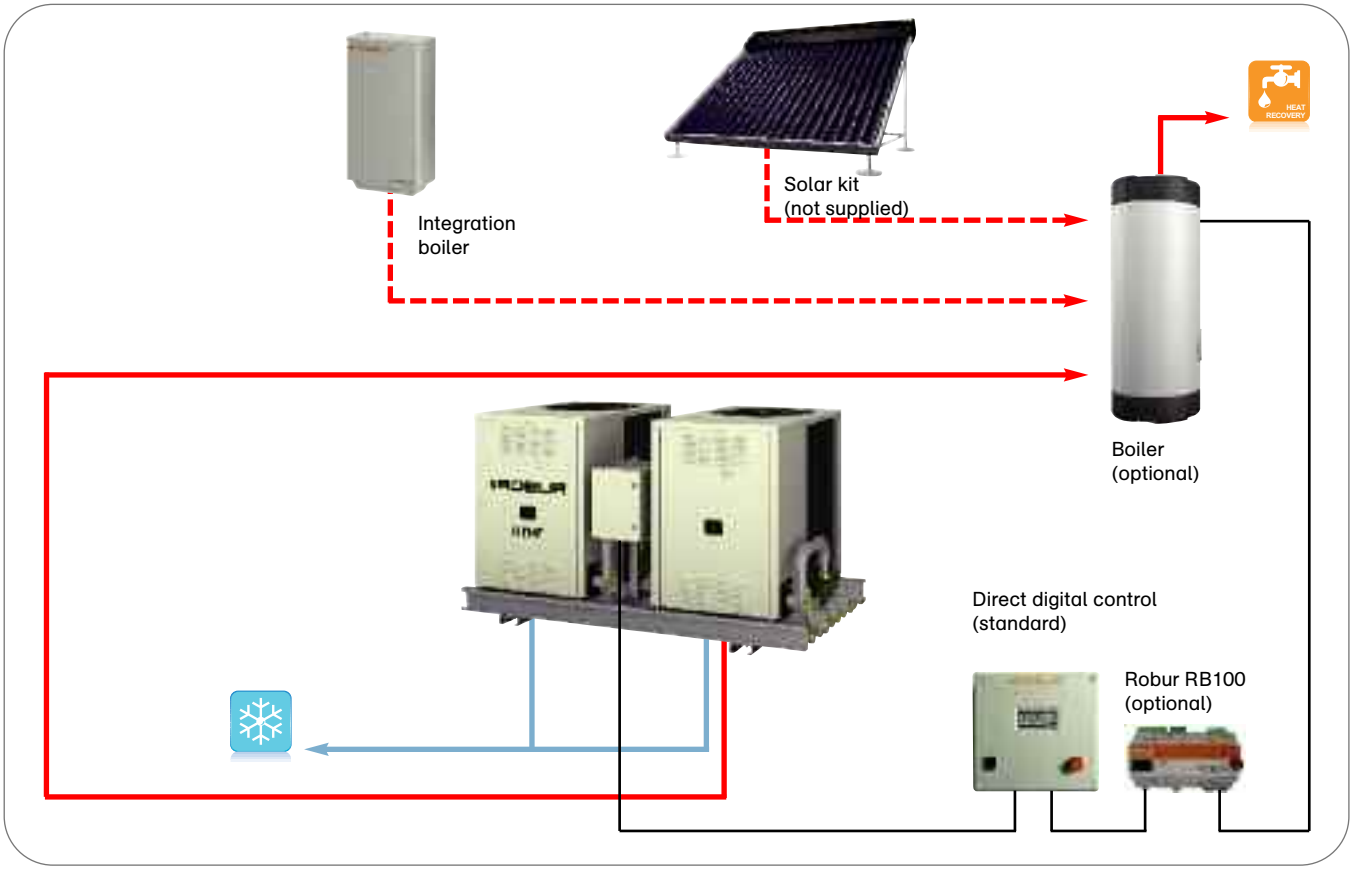
Example of composition for heating and cooling, 6 pipes version, with standard circulation pumps (S) on heating and cooling circuits and high-head pumps (M) on recovery circuit. Different compositions are possible, in order to make heating-cooling assemblies matching the different heating-cooling needs of each installation.

The RTHF assembly consists of one or more gas absorption chillers and one or more gas absorption chillers with heat recovery.

Gas absorption cooling assembly for cooling and DHW production in heat recovery mode
RTHF Series

Advantages

- Reduces electricity requirements by up to 86% compared to traditional electrical systems, thanks to the prevalent use of gas.
- Provide DHW for free during cooling season.
- Enables the most efficient cooling performances, matching the variable seasonal loads by means of the plant interface for heating curve management when supported by heating controller.
- Easy integration with solar (not supplied) and traditional or condensing boiler for DHW production throughout the year.



Model	Units	Heating capacity (recovery) kW	Cooling capacity kW
RTHF120-72/4 HR SM	n. 1 ACF + n. 1 ACF HR	21.0	35.6

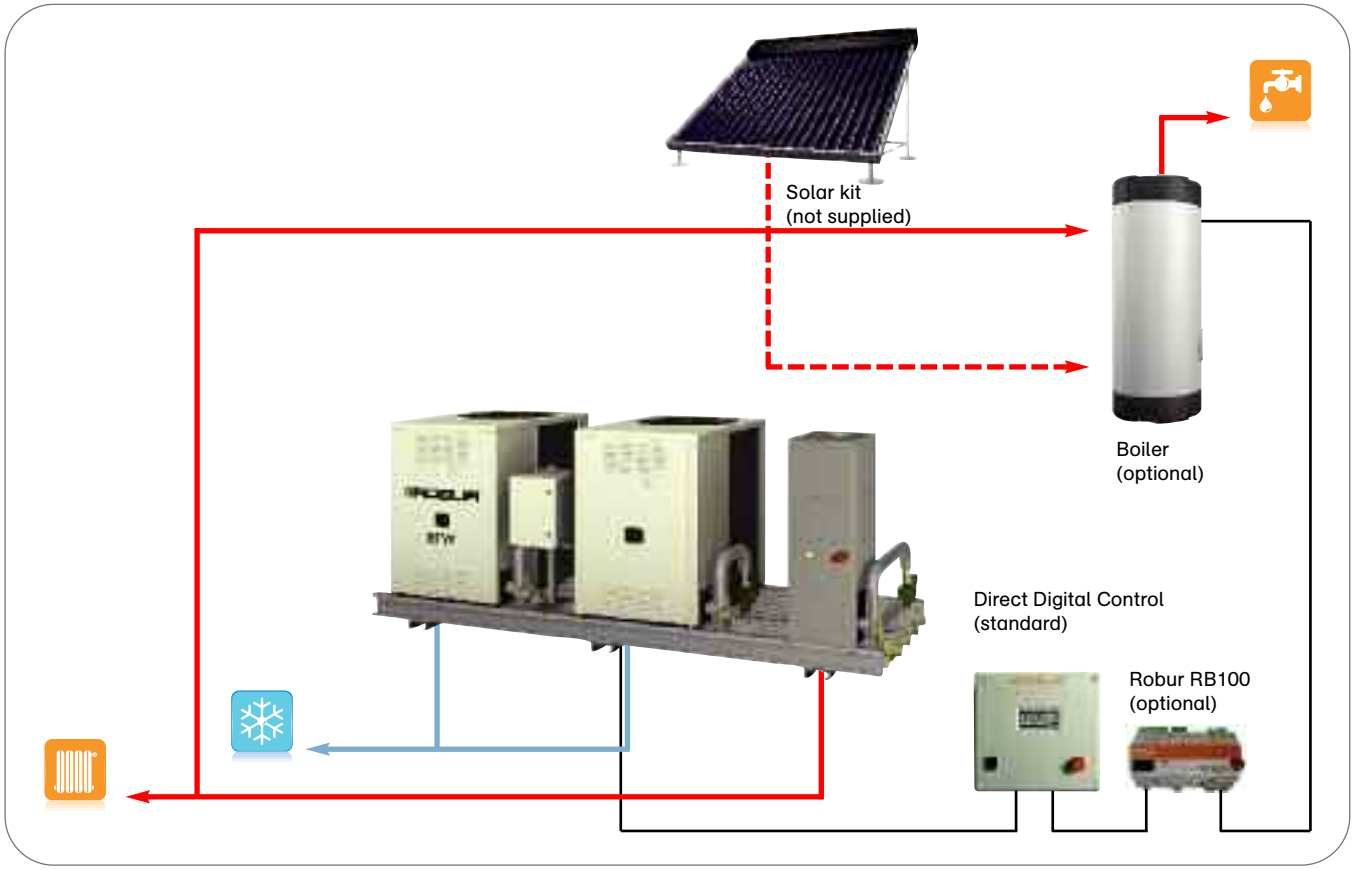
Example of composition for heating and cooling, 4 pipes version, with standard circulation pumps (S) on heating and cooling circuits and high-head pumps (M) on recovery circuit. Different compositions are possible, in order to make heating-cooling assemblies matching the different heating-cooling needs of each installation.

The RTYF assembly consists of one or more gas absorption chillers and one or more condensing boilers.

Gas absorption assembly for cooling, heating and DHW production throughout the year
RTYF Series

Advantages

- Reduces electricity requirements by up to 86% compared to traditional electrical systems, thanks to the prevalent use of gas.
- Enables the most efficient heating and cooling performances, matching the variable seasonal loads by means of the plant interface for heating curve management when supported by heating controller.
- Easy integration with solar (not supplied) and traditional or condensing boiler for DHW production throughout the year.
- Available in the 4 or 6 pipes version.



Model	Units	Heating capacity kW	Cooling capacity kW
RTYF120-120 CC	n. 2 ACF + n. 1 AY00-120	34.4	35.4

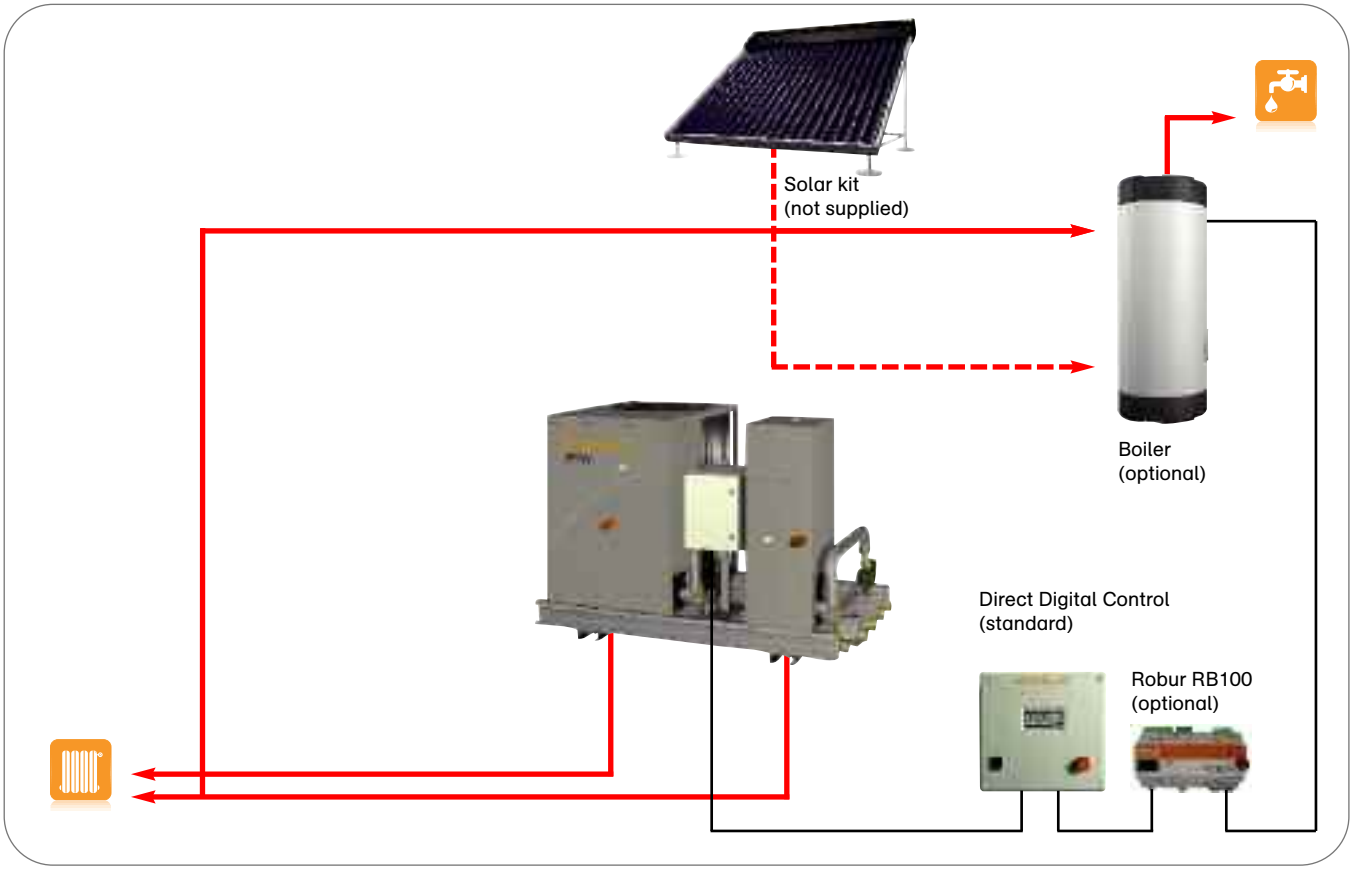
Example of composition for heating and cooling with independent circulation pumps per each module. Different compositions are possible, in order to make heating-cooling assemblies matching the different heating-cooling needs of each installation.

The RTAY assembly consists of one or more condensing gas absorption heat pumps and one or more condensing boilers.

Gas absorption assembly for heating and DHW production throughout the year
RTAY Series

Advantages

- Exceeds peak efficiencies of 165%, guaranteeing up to 40% reductions in annual heating costs and in CO_2 emissions compared to condensing boilers.
- Enables the most efficient heating and cooling performances, matching the variable seasonal loads by means of the plant interface for heating curve management when supported by heating controller.
- Increases the total efficiency of the heating system when it is combined or integrated with boilers with a lower energy performance.
- Easy integration with solar (not supplied) and traditional or condensing boiler for DHW production throughout the year.
- Available in the 4 or 6 pipes version.



Model	Units	Heating capacity kW	Cooling capacity kW
RTAY00-253 HT CC	n. 1 A HT + n. 1 AY00-120	72.7	-

Example of composition for heating modules with independent circulation pumps per each module. Different compositions are possible, in order to make heating-cooling assemblies matching the different heating-cooling needs of each installation.