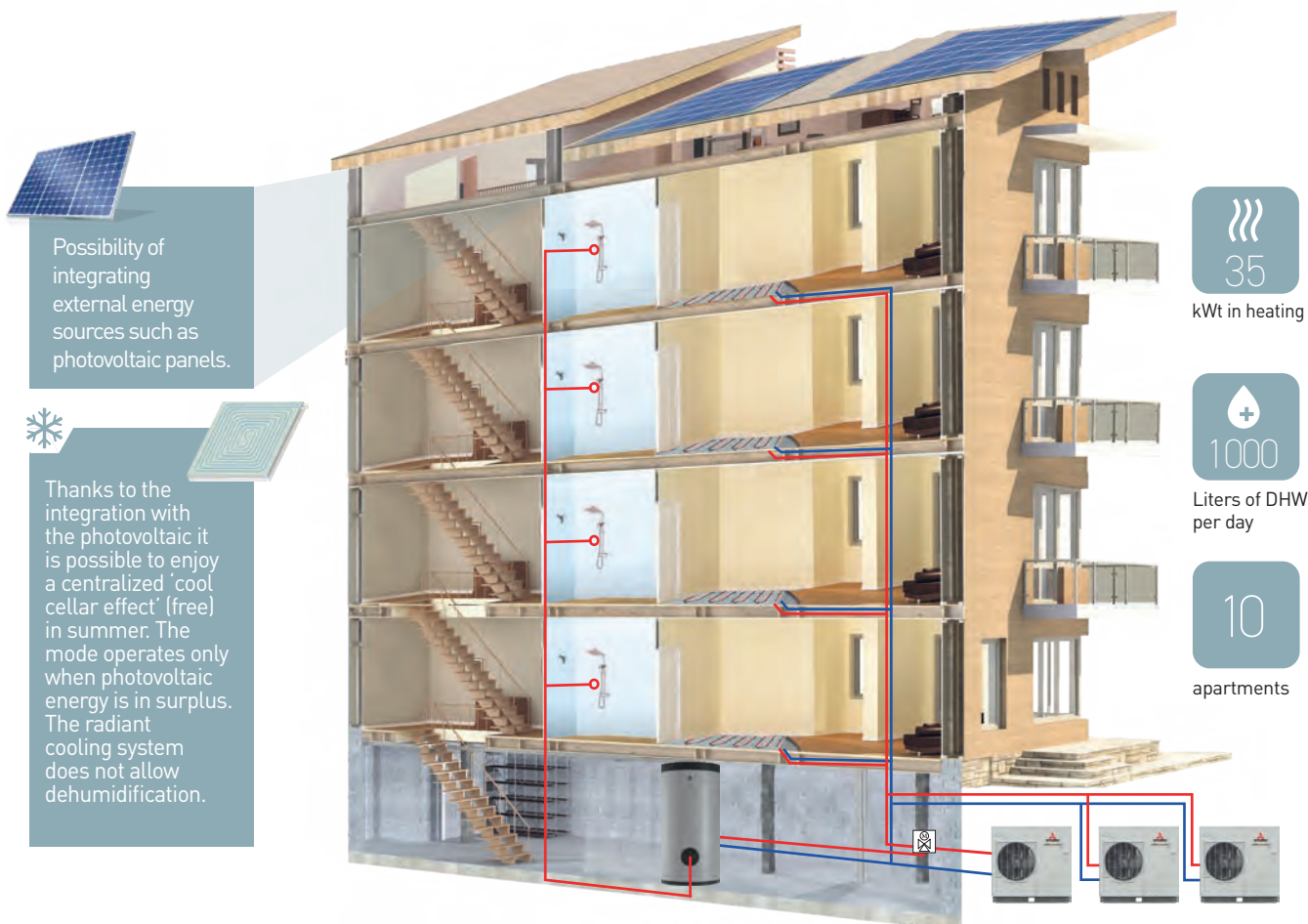


# CENTRALIZED HEATING & DHW, WITH COOLING EFFECT, VIA HYDROLUTION MONOBLOC FLEXIBLE MODULAR HEATING



floor heating



DHW combined with heating



centralized cool effect

## DESCRIPTION OF THE SYSTEM

HYDROLUTION in Monobloc Flexible modular combination up to 128 kW allows you to reach the building's heating energy needs and produce DHW at the same time.

Assuming you have a newly built condominium consisting of 10 apartments (70 m<sup>2</sup> each), the estimated heating requirement is approximately 35 kWt.

This request is satisfied by means of 2 HYDROLUTIONs of 10 kW and one HYDROLUTION of 14 kW in combination which power a radiant floor system and produce the daily DHW requirement of the condominium which is around 1000 litres.

## CONTROL SYSTEM

To maximize the potential of HYDROLUTION Monobloc Flexible modular heating, **RC-HY40-W** was designed, a **single** control that allows you:

- to manage up to 8 systems in heating and DHW configuration;
- to manage up to 8 distribution systems at different temperatures (e.g. radiant panels and radiators) via the ECSM40/ECSM41 accessory kit;
- to guarantee efficiency in regulation, durability of the system and continuity of service;
- to account for and allocate energy consumption by connecting an energy meter kit to the RC-HY40-W control.



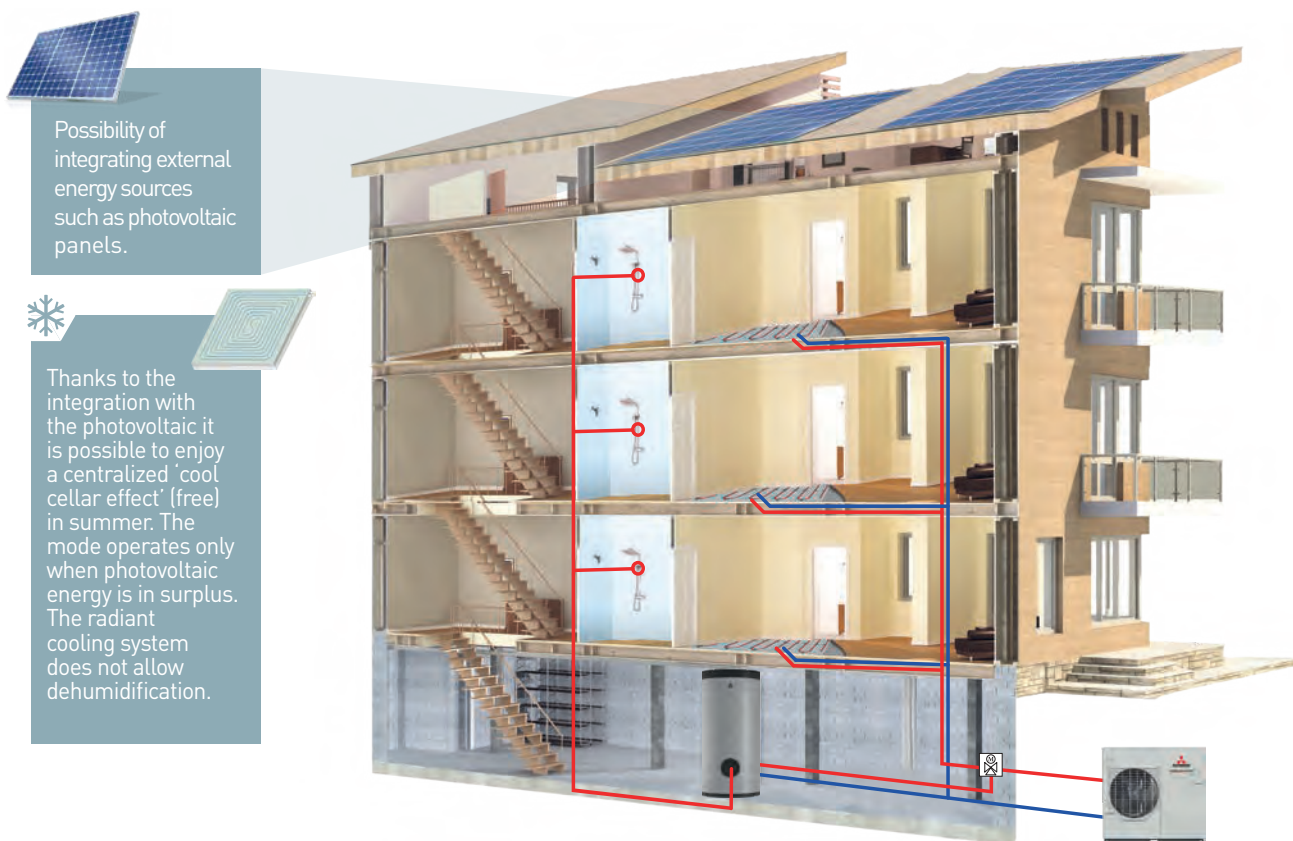
RC-HY40-W control unit



ECSM40/ECSM41 kit

Calculation according to UNI TS 11300-2

# CENTRALIZED HEATING & DHW, WITH FRESH EFFECT, THROUGH HYDROLUTION MONOBLOC FLEXIBLE



floor heating



DHW combined with heating



centralized cool effect

## DESCRIPTION OF THE SYSTEM

The application typology exemplified in the figure above describes a system inside a micro-condominium in which the heating consists of the HYDROLUTION system in Monobloc Flexible heating and DHW configuration, with domestic hot water production combined with the heating: the applicable DHW has a capacity ranging from 300 to 500 litres. HYDROLUTION produces hot water for heating up to a maximum temperature of 60° C.

In this example it is combined with low temperature radiant panels, which can also be used in summer to produce a 'cool cellar effect'. This centralized solution can always be combined with autonomous split systems.

## CONTROL SYSTEM

**RC-HY20/40-W** is the control system integrated into HYDROLUTION Monobloc Flexible heating and ACS and allows you:

- to guarantee efficiency in regulation by monitoring the DM parameter;
- to manage the delivery temperature to the system automatically through climate regulation of the system;
- to set on/off timer;
- to set 3 control levels (economy, normal, luxury) for DHW production;
- to manage the anti-legionella cycles and the activation of the DHW recirculation pump;
- to manage the integration of external energy sources. (only with RC-HY40-W)



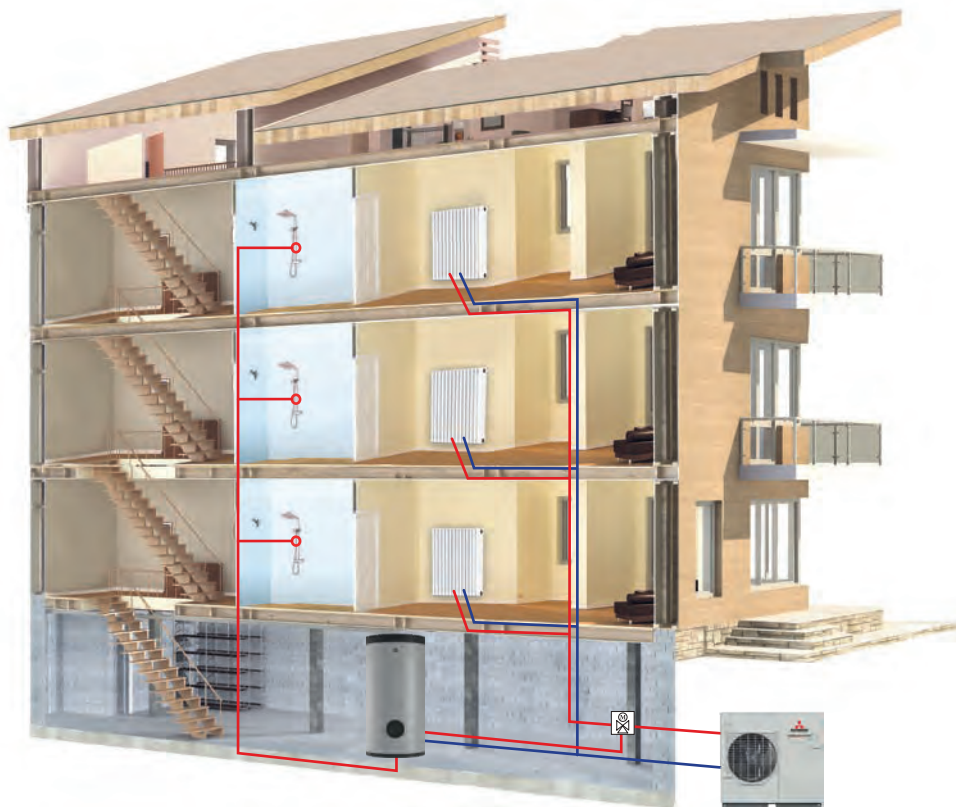
RC-HY20/40-W control unit

## CENTRALIZED HEATING & DHW, VIA HYDROLUTION MONOBLOC FLEXIBLE

### DESCRIPTION OF THE SYSTEM

The application typology exemplified in the adjacent figure describes a system inside a micro-condominium in which the central heating consists of the HYDROLUTION system in Monobloc Flexible heating and DHW configuration, with domestic hot water production combined with the heating: the The applicable DHW has a capacity ranging from 300 to 500 litres.

HYDROLUTION produces hot water for heating up to a maximum temperature of 60° C. In this example it is combined with medium temperature heating elements (high efficiency radiators). It is possible to provide more than one external unit in modular combination with the RC-HY40-W control.



high efficiency radiators



DHW combined with heating

### CONTROL SYSTEM

**RC-HY20/40-W** is the control system that can be combined with HYDROLUTION Monobloc Flexible heating and ACS and allows you:

- to guarantee efficiency in regulation by monitoring the DM parameter;
- to manage the delivery temperature to the system automatically through climate regulation of the system;
- to set on/off timer;
- to set 3 control levels (economy, normal, luxury) for DHW production;
- to manage the anti-legionella cycles and the activation of the DHW recirculation pump;
- to manage the integration of external energy sources. (only with RC-HY40-W)



RC-HY20/40-W control unit

Calculation according to UNI TS 11300-2

# CENTRALIZED HEATING & DHW, VIA HYDROLUTION MONOBLOC FLEXIBLE AND INDEPENDENT COOLING WITH MONOSPLIT/ MULTISPLIT SYSTEMS

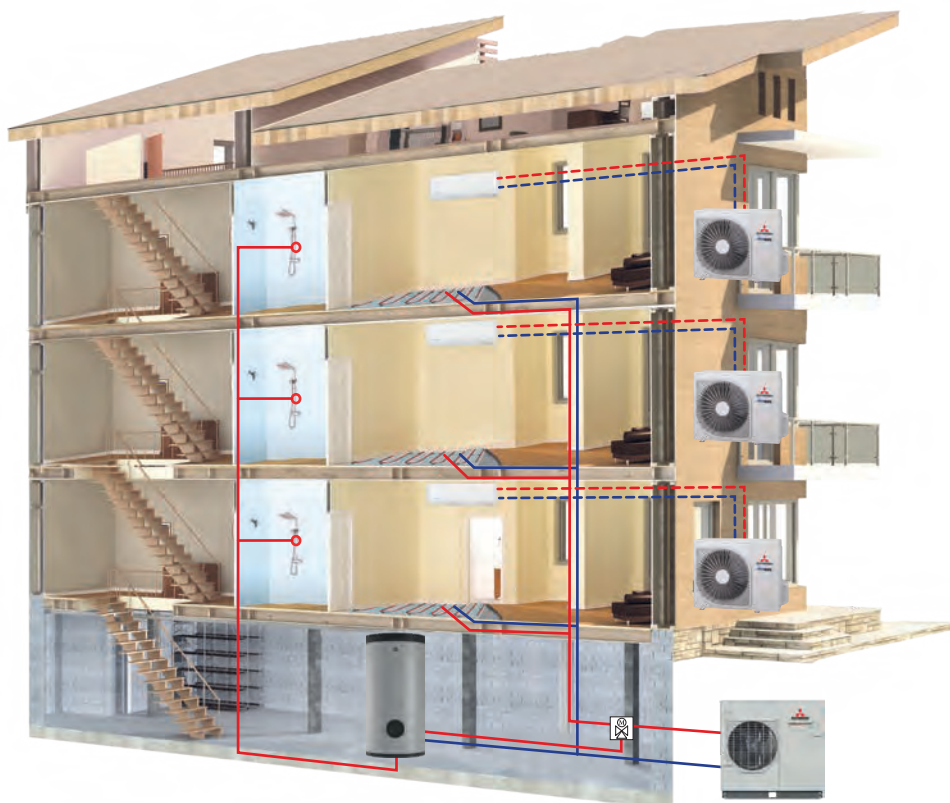
## DESCRIPTION OF THE SYSTEM

The application typology exemplified in the adjacent figure describes a system inside a micro-condominium in which the central heating consists of the HYDROLUTION system in Monobloc Flexible heating and DHW configuration, with domestic hot water production combined with the heating: the The applicable DHW has a capacity ranging from 300 to 500 litres.

HYDROLUTION produces hot water for heating up to a maximum temperature of 60° C.

In this example it is combined with low temperature heating elements (radiant panels).

**The independent cooling system consists of a heat pump system (monosplit/multisplit systems) serving each apartment, with an external unit on the balcony.**



floor heating



DHW combined with heating



autonomous cooling

## CONTROL SYSTEM

**RC-HY20/40-W** is the control system that can be combined with HYDROLUTION Monobloc Flexible heating and ACS and allows you:

- to guarantee efficiency in regulation by monitoring the DM parameter;
- to manage the delivery temperature to the system automatically through climate regulation of the system;
- to set on/off timer;
- to set 3 control levels (economy, normal, luxury) for DHW production;
- to manage the anti-legionella cycles and the activation of the DHW recirculation pump;
- to manage the integration of external energy sources. (only with RC-HY40-W)



RC-HY20/40-W control unit

# CENTRALIZED HEATING & DHW, VIA HYDROLUTION MONOBLOC FLEXIBLE INDEPENDENT COOLING WITH SYSTEMS SINGLE/MULTISPLIT

## DESCRIPTION OF THE SYSTEM

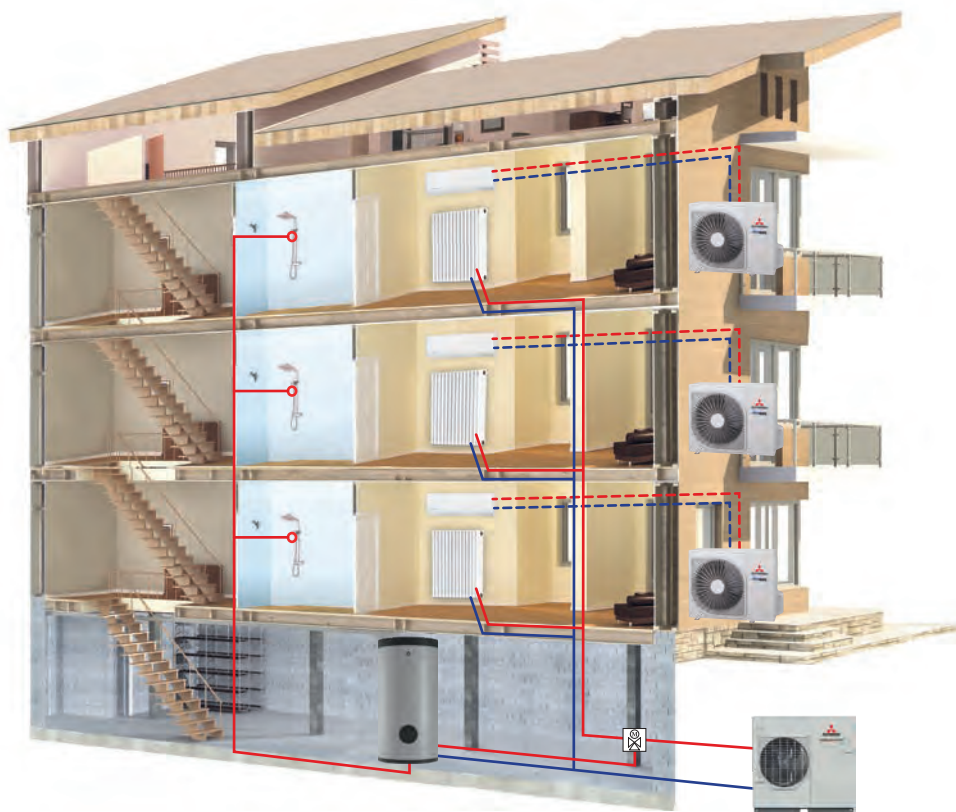
The application typology exemplified in the adjacent figure describes a system inside a micro-condominium in which the central heating consists of the HYDROLUTION system in Monobloc Flexible heating and DHW configuration, with domestic hot water production combined with the heating: the applicable DHW has a capacity ranging from 300 to 500 litres.

HYDROLUTION produces hot water for heating up to a maximum temperature of 60° C.

In this example it is combined with medium temperature heating elements (high efficiency radiators).

It is possible to provide more than one external unit in modular combination with the RC-HY40-W control.

**The independent cooling system consists of a heat pump system (monosplit/multisplit systems) serving each apartment, with an external unit on the balcony.**



high efficiency radiators



DHW combined with heating



autonomous cooling

## CONTROL SYSTEM

**RC-HY20/40-W** is the control system that can be combined with HYDROLUTION Monobloc Flexible heating and ACS and allows you:

- to guarantee efficiency in regulation by monitoring the DM parameter;
- to manage the delivery temperature to the system automatically through climate regulation of the system;
- to set on/off timer;
- to set 3 control levels (economy, normal, luxury) for DHW production;
- to manage the anti-legionella cycles and the activation of the DHW recirculation pump;
- manage the integration of external energy sources. (only with RC-HY40-W)



RC-HY20/40-W control unit

This type of system is particularly suitable for major renovations with insulation, where results in terms of energy saving and summer comfort are desired without intervening with drastic and expensive system revisions.

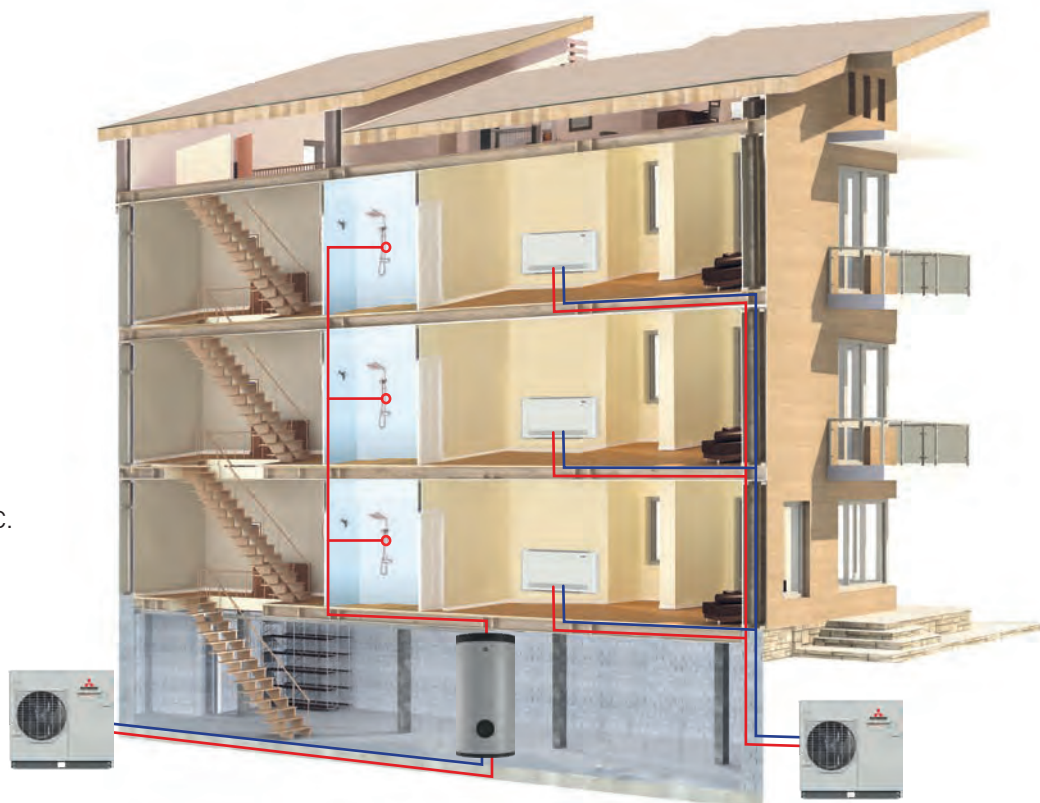
## CENTRALIZED HEATING, COOLING & DHW, VIA HYDROLUTION MONOBLOC FLEXIBLE

### DESCRIPTION OF THE SYSTEM

The application typology exemplified in the adjacent figure describes a system inside a newly built micro-condominium, in which the heating consists of the HYDROLUTION system in Monobloc Flexible heating configuration. DHW production is entrusted to HYDROLUTION in the Monobloc Flexible ACS configuration: the applicable DHW tank has a capacity ranging from 300 to 500 litres. HYDROLUTION produces hot water for heating up to a maximum temperature of 60° C.

In this example it is combined with warmcoils.

**In this configuration, the HYDROLUTION system, during the summer season, is able to effectively cool the environments.**



heating with warmcoil



DHW with dedicated Hydrolution



cooling with warmcoil

### CONTROL SYSTEM

**RC-HY20/40-W** is the control system that can be combined with HYDROLUTION Monobloc Flexible heating and ACS and allows you:

- to guarantee efficiency in regulation by monitoring the DM parameter;
- to manage the delivery temperature to the system automatically through climate regulation of the system;
- to set on/off timer;
- to set 3 control levels (economy, normal, luxury) for DHW production;
- to manage the anti-legionella cycles and the activation of the DHW recirculation pump;
- to manage the integration of external energy sources. (only with RC-HY40-W)



RC-HY20/40-W control unit

### WHAT IS WARMCOIL?

This is a particular fan coil with a radiant effect that works with very low air movement in winter and allows effective air conditioning in summer.



# INDEPENDENT HEATING & COOLING, VIA HYDROLUTION MONOBLOC FLEXIBLE AND DHW VIA HOT WATER

## DESCRIPTION OF THE SYSTEM

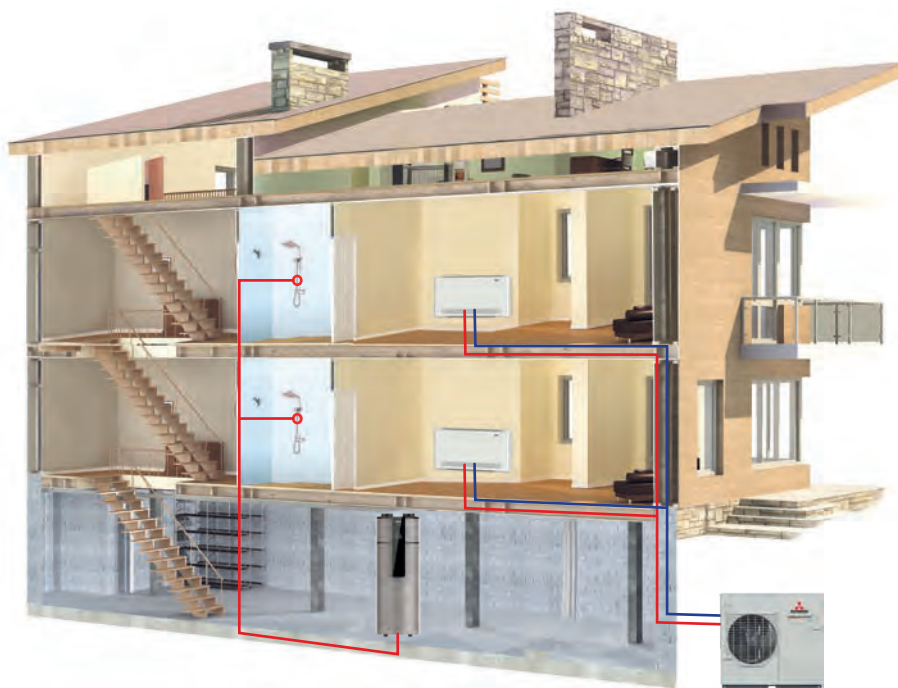
The application typology exemplified in the adjacent figure describes the system in a newly built independent house, in which the heating consists of the HYDROLUTION system in Monobloc Flexible heating configuration.

The production of domestic hot water is entrusted to the Hot Water system: the DHW tank has a capacity of over 200 litres.

HYDROLUTION produces hot water for heating up to a maximum temperature of 60° C. In this example it is combined with warmcoils.

**In this configuration, the HYDROLUTION system, during the summer season, is able to effectively cool the environments.**

Possibility of connecting the RMU40M remote control with built-in room sensor (only if present RC-HY40-W). It is possible to provide more than one external unit in modular combination with the RC-HY40-W control.



heating with warmcoil



DHW with Hot Water



cooling with warmcoil

## CONTROL SYSTEM

Within this type of system, **RC-HY20/40-W** is the control system that can be combined with HYDROLUTION Monobloc Flexible heating and ACS. Through the control panel it is possible to program the operation of HYDROLUTION in cooling/heating/Silent/DHW mode. Specifically, the control allows you:

- to create 3 daily heating operation programs;
- to create 2 time schedules for cooling operation;
- to create 2 time schedules for operation in 'Silent' mode;
- to manage the integration of external energy sources (only with RC-HY40-W).



RC-HY20/40-W control unit

## WHAT IS WARMCOIL?

This is a particular fan coil with a radiant effect that works with very low air movement in winter and allows effective air conditioning in summer.

