



# Theta+

## Thermo-control for heating system and cascade manager

- Climatic thermo-unit control for heating systems, active management of heating generators cascade and direct control of one stage, two stage and modulating burners.

- Every single unit control THETA+ can manage a heating system with:
  - 2 Low temperature mixed zones
  - 1 High temperature direct zone
  - 1 Hot domestic water tank
  - Thermal solar system or biomass generator or multy-energy puffer, via two variable output
  - Cascade of heating generators up to 8 units.

- The unit control THETA+ is supplied complete as standard with:

- Connection terminal block
- 1 External probe
- 1 Immersion probe (2 meters)
- 1 Immersion probe (5 meters)
- 2 Contact probes (4 meters)

- The thermoregulation system, in addition to the unit control THETA+, is accompanied with other accessories to complete the heating system control:

### - Room unit RS-L

- Manages temperature of dedicated zone
- It can manage from remote system setting
- Two-wire bus

### - Room sensor RFF

- Manages room temperature
- Two-wire bus

### - Installation wall kit WG 500

- On/Off switch
- Totally wired
- 6,3 A safety fuse

### - Kit cascade management ZM KM-OT

- Install one kit ZM KM-OT in each boiler of the cascade
- Up to 8 boiler in cascade

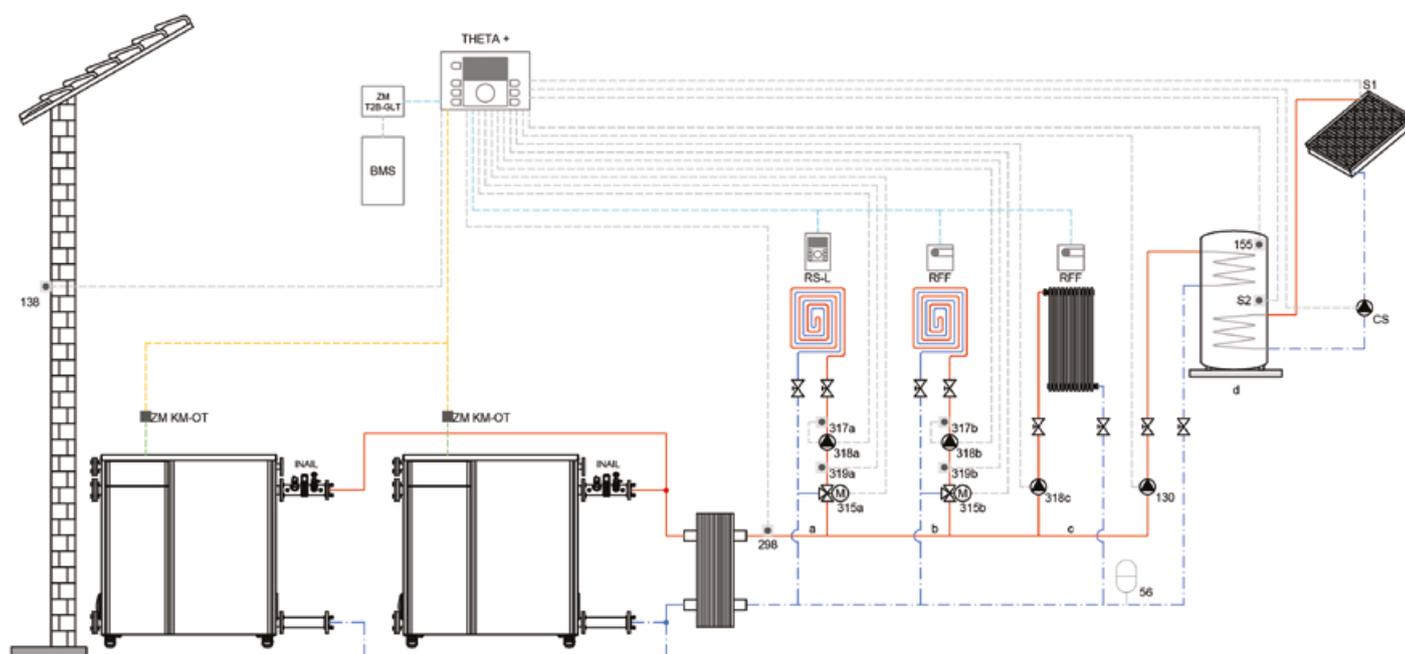
- For the heating system with more three zones, is possible to make a cascade of THETA+ unit control (max 5 units). THETA+ system can manages directly a one-stage, two stage or modulating burner.

## THETA+ system components

Code	Description
 013060X0	<b>THETA+ Set</b> Central unit control for the thermoregulation of the heating system and cascade manager. Supplied as standard complete of: - Connection terminal block - 1 External probe - 1 Immersion probe (2 meters) - 1 Immersion probe (5 meters) - 2 Contact probes (4 meters)
 013061X0	<b>THETA+ RS-L</b> Room unit per temperature control and parameters setting, from remote, of the heating system
 013062X0	<b>THETA RFF</b> Room sensor
 013064X0	<b>WG 500</b> Kit for wall installation
 013063X0	<b>THETA ZM KM-OT</b> Kit for boiler cascade management via Opentherm
 013065X0	<b>TF A20-50-03</b> Immersion probe (DHW tank) 5 meters
 013066X0	<b>VF 204 B</b> Contact probe (Mixed zone) 4 meters
 043007X0	<b>PT 1000</b> Immersion probe (Solar thermal) 2,5 meters
 013068X0	<b>AF 200</b> External probe

## THETA+ system application example of diagram

- The first ring was designed with a cascade of two MACH controlled by a central unit THETA+ via Open Therm (1 ZM KM-OT for each boiler of cascade). The central unit can manage up to 8 boilers in cascade. For installation with more of 8 boilers will have to install two or more THETA+ (max 5).
- The second ring consist in three heating circuits (two mixed at low temperature and one direct at high temperature), a storage with double exchanger for the DHW and a thermal solar system.
- The central unit THETA+ in combination with room units/sensors can manage each component of the heating system included the thermal solar system. In case of heating system with several zones and systems is possible manage all with a cascade of THETA+ (max 5), up to 10 mixed zones and 5 direct zones.
- The heating zone can be managed by three remote room unit (RS-L) or by three room sensors (RFF) or a mix of the two.



**THETA+** Central unit control for the thermoregulation and cascade manager **ZM KM-OT** Accessories for the cascade management via Open-Therm **RS-L** Remote room unit **RFF** Room sensor **ZM T2B-GLT** Interface for Building Management System (**BMS**) BMS Building Management System **S1** Flow probe for solar system (PT 1000) **S2** Temperature probe for DHW tank (supplied as standard with THETA+) **155** Temperature probe for DHW tank (supplied as standard with THETA+) **130** DHW circulator **CS** Solar system circulator **a** Low temperature mixed zone **b** Low temperature mixed zone **c** High temperature direct zone **d** DHW circuit with tank, double exchanger type **315 a/b** Motorized mixing valve **318 a/b/c** Heating system circulator **317 a/b** Safety thermostat **319 a/b** Flow probe for mixed zone (supplied as standard with THETA+) **298** Probe for flow heating system collector (supplied as standard with THETA+) \*--- Modbus: ZM KM-OT \*--- Modbus: RS-L/RFF/ZM T2B-GLT \*--- OpenTherm