





COMPACT MULTIZONE DISTRIBUTION BOX MODULES HYDRAULIC POWER UNIT FOR CIRCULATION AND BIOMASS SEPARATION



FOR ANY TYPE AND HOUSING NEED, TIEMME HAS THE RIGHT SOLUTION FOR YOU!

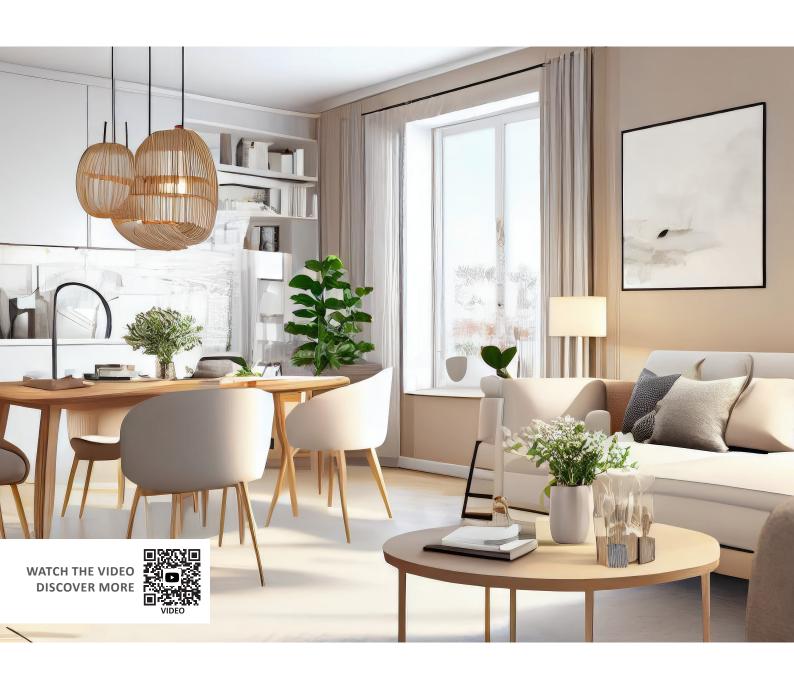
The needs of modern living comfort impose the need to manage the hydrothermosanitary system intelligently and, at the same time, reduce operating costs, make maintenance simple and provide continuity of operation. All in line with current laws. For these reasons, it is requested the possibility of being able to separate the environments into several thermal zones, to be able to manage various delivery temperatures both during the heating and cooling phases and, if necessary, to generate the necessary domestic hot water.

The solution to all these needs is represented by the **COMPACT MULTIZONE DISTRIBUTION BOX MODULES**

STRENGTHS:

- Integrated hydraulic separator;
- Management of up to 3 heating and cooling zones;
- Management of direct and mixed zones (thermostatic - electronic);
- Generator power management up to 34 kW;
- · Maximum integration in existing plants;

- Reduction of spaces;
- Maximum efficiency
- Lower installation costs;
- 100% comfort;
- ERP ready.



Rising fossil energy costs and increasing environmental awareness are constantly increasing the demand for renewable energy, most often coupled with gas generators used as an integration.

Biomass heating is a good alternative to flanking heating with fossil fuel, but it is necessary to intelligently manage the communication of the two generators, in order to obtain maximum efficiency combined with energy savings and plant safety.

For this reason Tiemme presents the new **HYDRAULIC POWER UNIT FOR CIRCULATION AND BIOMASS SEPARATION** which represent the most effective/efficient solution to interface the two generators to a single plant.

STRENGTHS:

- Maximum integration in existing plants;
- Reduction of spaces;
- Maximum efficiency
- Lower installation costs;
- 100% comfort;
- ERP ready;
- Compliant with ISPESL Circular 18/09/2006.

KEY FEATURES:

- Possibility to combine different generators in the same heating circuit (e.g. gas and biomass generator)
- Priority management;
- Circulation of water;
- Hydraulic separation of circuits;
- Applications up to 34 kW;
- Management of anti-condensation function (art. 5585A / 5585AC);
- Additional functions.



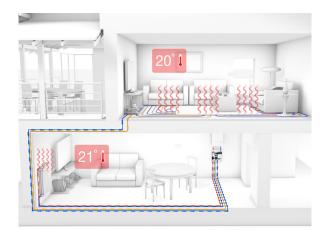
COMPACT MULTIZONE DISTRIBUTION BOX MODULES

Tiemme multizone distribution modules are able to ensure the right flow rate of carrier fluid and an adequate prevalence in all heating/ cooling systems that require an additional performance compared to the boiler circulating pump.

The compact dimensions allow the module to be installed in the vicinity of the 24 kW wall boilers.

With the mixed zone (fixed or motorized point) it is also possible to manage and modify the delivery temperature of the heating zones with respect to the generator delivery temperature.

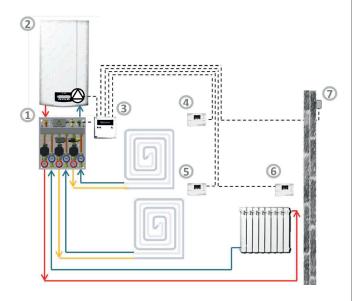
The hydraulic separator integrated in the module ensures the hydraulic disconnection of the generator from the heating zones making them hydraulically independent.



EXAMPLES OF INSTALLATIONS

3 zone heating system:

- 1 direct zone managed at high temperature for the supply of radiators;
- 2 mixed zones managed at low temperature for the supply of radiant systems.

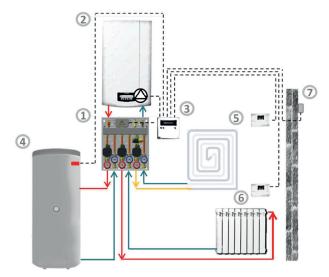


KEY:

- 1. Module Art. 5584 (with 1 direct circuit + 2 circuits with mixer and servomotor)
- 2. Gas generator with integrated circulating pump
- 3. Control unit
- 4. Low temperature heating circuit
- 5. Low temperature heating circuit
- 6. High temperature heating circuit
- 7. External probe for thermoregulation

3 zone heating system:

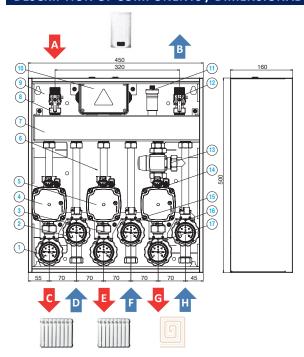
- 1 direct zone managed at high temperature for the supply of radiators;
- 1 direct area managed at high temperature for the supply of sanitary storage tank;
- 1 mixed area managed at low temperature for the supply of radiant systems.



KEY:

- 1. Module Art. 5583 (with 2 direct circuits + 1 circuit with fixed point mixer) $\,$
- 2. Gas generator with integrated circulating pump
- 3. Control unit
- 4. Sanitary storage tank integration circuit
- 5. Low temperature heating circuit
- 6. High temperature heating circuit
- 7. External probe for thermoregulation

DESCRIPTION OF COMPONENTS / DIMENSIONAL SPECIFICATIONS



KEY:

- A. Generator Delivery
- B. Generator Return
- C. Zone 1 Delivery
- D. Zone 1 Return
- E. Zone 2 Delivery
- F. Zone 2 Return
- **G**. Zone 3 Delivery
- H. Zone 3 Return

- 1. Zone 1 Delivery tap
- 2. Zone 1 Return tap
- 3. Zone 2 Delivery tap
- 4. Zone 1 circulating pump
- 5. Zone 2 circulating pump 6. -
- 7. Hydraulic separator
- 8. Generator delivery tap
- 9. Metal box
- 10. Electrical support box
- 11. Automatic air vent
- 12. Generator return tap
- 13. Zone 3 Mixing valve
- 14. Zone 3 circulating pump
- 15. Zone 2 Return tap
- 16. Zone 3 Delivery tap
- 17. Zone 3 Return tap

PRODUCT RANGE

ART. 5582ISOL



✓ Heating and cooling

Available versions:

- Cod: 316 0133 n° 2 direct zones
- Cod: 316 0166 n° 3 direct zones

ART. 5582



✓ Heating

Available versions:

• Cod: 316 0134 n° 3 direct zones

ART. 5583



✓ Heating

Available versions:

- Cod: 316 0135 n° 1 direct zone
 + n° 1 mixed fixed point zone
 (thermostatic)
- Cod: 316 0136 n° 2 direct zones
 + n° 1 mixed fixed point zone
- Cod: 316 0137 n° 1 direct zone + n° 2 mixed fixed point zones
- Cod: 316 0149 n° 2 mixed fixed point zones

ART. 5584ISOL



✓ Heating and cooling

Available versions:

- Cod: 316 0138 n° 1 direct zone
 + n° 1 motorized mixed zone
- Cod: 316 0139 n° 2 Zone dirette
 + n° 1 motorized mixed zone

ART. 5584



✓ Heating

Available versions:

• Cod: 316 0140 n° 1 direct zone + n° 2 motorized mixed zone

HYDRAULIC POWER UNIT FOR CIRCULATION AND BIOMASS SEPARATION

The Tiemme biomass circulation and separation hydraulic power units can combine generators powered by different fuels, for example gas and biomass generators, on the same heating circuit.

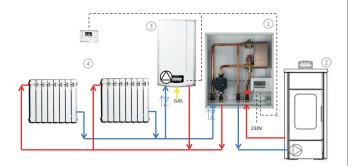
The Tiemme modules, in addition to the hydraulic management of the heating circuit, comply with the requirements of the ISPESL circular 18/09/2006 and provide hydraulic performance at the highest levels.

The presence of a heat exchanger interposed between the two generators constitutes a hydraulic interruption between the respective heat transfer fluids and therefore it is not considered necessary to proceed with the sum of the potentialities.



EXAMPLES OF INSTALLATIONS

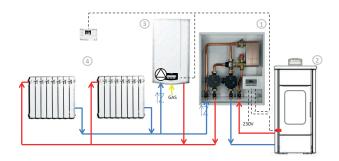
Heating system with two generators, of which one with solid fuel **equipped with circulating pump** and plant separator module.



KEY:

- 1. Module Art. 5585 / 5585A
- 2. Biomass generator with integrated circulating pump
- 3. Gas generator for integration
- 4. Heating circuit

Heating system with two generators, one of which is solid fuel **without circulating pump** and plant separator module.



KEY:

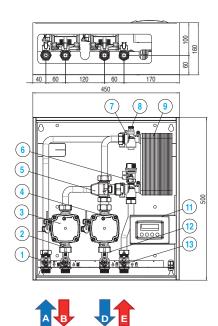
- 1. Module Art. 5585C / 5585AC
- 2. Biomass generator without circulating pump
- 3. Gas generator for integration
- 4. Heating circuit

TIEMME INFORMS

THERMAL SYSTEMS WITH ADDITIONAL GENERATOR - ISPESL CIRCULAR OF 18/09/2006:

The ISPESL circular of 18/09/2006, regarding thermal systems structured with two heat generators, one of which is powered with solid fuel and the other with different fuel, specifies: in the event that the primary heat transfer fluid of two generators enters the thermal accumulation without any dividing element, the sum of the potentials is considered and therefore, in the event of exceeding the value of 35 kW, the plant will not only fall within the obligation provided for by UNI 7129 but it will be necessary to refer to Ministerial Decree 08/11/19 with regard to fire prevention, taking into account the aforementioned regulatory updates. The presence of a heat exchanger interposed between the two generators constitutes hydraulic interruption between the respective heat transfer fluids and therefore it is considered that the sum of the potentialities should not be proceeded.

DESCRIPTION OF COMPONENTS / DIMENSIONAL SPECIFICATIONS



KEY:

- A. Return from Heating
- **B**. Heating delivery
- D. Return to generator
- **E**. Delivery from generator
- 1. Heating return/non-return tap
- 2. Heating delivery tap
- 3. Heating circulating pump
- 4. Generator circulating pump (present in the modules art. 5585C and 5585AC)
- 5. Thermostatic anti-condensation valve (present in the modules art. 5585A and 5585AC)
- 6. Heating safety valve
- 7. Heating air vent
- 8. Generator air vent
- 9. Plate heat exchanger
- 10. Generator delivery probe
- 11. Control unit
- 12. Generator return tap
- 13. Generator delivery tap

PRODUCT RANGE

ART. 5585



Available versions: • Cod: 316 0141

ART. 5585A



✓ Anti-condensation valve 60°C

Available versions: • Cod: 316 0142

ART. 5585C



✓ Primary circulating pump

Available versions:
• Cod: 316 0143

ART. 5585AC



✓ Anti-condensation valve 60°C ✓ Primary circulating pump

Available versions: • Cod: 316 0144





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