



Hydrothermal Systems
COMPARATO®

C

24 · 2025 Catalogue
Reliable by nature.

Excellence **MADE IN ITALY**

SINCE 1968

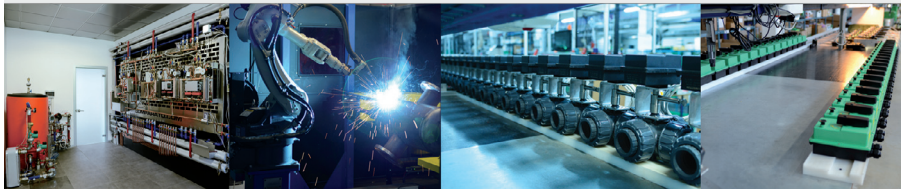
COMPARATO



ON REQUEST



FACTORY



A modern layout designed to **maximise results in productivity, quality and logistics**, highly engineered to optimise internal flows, with well-defined and specialised areas according to the processes performed, and with the possibility for future major expansions of the production area.

A strongly implemented R&D department, with design in digital prototyping and 3D prototype printing with FDM technology directly in plastic. **Laboratories equipped with state-of-the-art testing and research systems.** We created environments that **encourage the exchange of ideas**, a necessary condition for **development, the growth of internal know-how** and the **creation of new products precursory of future needs.**

A new state-of-the-art site designed to join production and offices in a single industrial hub and ensure immediate communication; a new **logistics centre strategically located**, to store and ship finished products.

New test and inspection rooms (for individual products and prototypes); new painting plant; plasma cutting; new robotic welding island and automatic actuator assembling lines.

New pipe cutter and new packing line.

MISSION

Flow management and temperature control through **RELIABLE** and **LONG-LASTING** hydrothermal systems: we provide solutions according to the Customer's needs that stand out on the market for **TECHNOLOGY** and **INNOVATION**.

VISION

Simplification and improvement of everyday life in terms of **EFFICIENCY**, **ENERGY SAVING** and **SUSTAINABILITY**, a source of inspiration for new generations, a model of **MADE IN ITALY EXCELLENCE** and **QUALITY**.

OUR VALUES

Our work joins **PASSION** and **TECHNOLOGY**.

- Customer Orientation
- Research & Innovation
- Integrity and Transparency
- Sense of belonging
- Team working
- Sense of urgency and punctuality in delivery
- Effective and efficient results
- Focus on people
- Safety in the workplace
- Respect for the environment

OUR STATEMENT

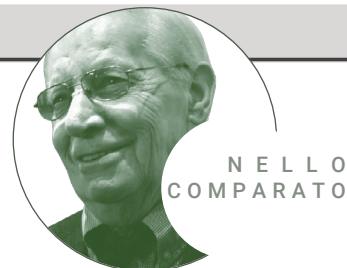
"Reliable by nature." was born out of the desire to express **COMPARATO's** DNA and encapsulates a more than fifty-year-long history through which the company has always pursued product quality, in order to offer its partners the best solutions. This sentence also reflects the respect and care for the Nature that surrounds us, values that are now too neglected by a world in constant motion. This is why the image chosen by **COMPARATO** is reminiscent of **Mother Nature**: an elegant and refined woman, diving into today's world, where the search for domestic comfort needs to keep pace with **ECOSUSTAINABILITY** and **ENERGY SAVING**.



Affidabili per natura.

"Reliable by nature." is a concept born under the sign of innovation: **Mother Nature presents COMPARATO's products as the fruit sprouted from the tree of technology.**

ORIGINS and HISTORY



NELLO
COMPARATO

1968

Nello Comparato founded Comparato Nello s.a.s. as the natural evolution of an accredited craft business, taking advantage of the recognition of an important industrial patent relating to "**DIASOL**".

1971

The success of "DIASOL" opens up space for **Motorised Zone Valves**, under the brand name DIT - HYDROTHERMAL DEVICES

1975

The company strengthened its industrial footprint by moving to Carcare. The production is integrated with "**CONTER ZONE BOXES**", which allow to split consumptions thanks to 'hour meters'.

1980

When Nello's sons **Roberto** and **Paolo** finally joined the company, they set up a management with a great team spirit, which principles are still those of the founder: **enthusiasm, determination and respect**.

1990

The staff growth gives the company a new shape and production expands into a **new factory**. Meanwhile, relations with **foreign markets** are being strengthened.

1998

Building on the experience gained thanks to the zone boxes, **COMPARATO** becomes one of the first companies to introduce "**Hydraulic Interface Units for direct metering**" to the market.

2009

Relations with foreign markets are intensified by using **leading importers**.

2011

Headquarter and Production are united in a single industrial cluster with very high development potential, designed to maximise results in productivity, quality and logistics. That's how **Ferrania plant** was born. The new logistics gave rise to important strategic investments in the production departments: the **automatic assembly lines** for actuators and the **automatic welding islands** for power plant components.

2016

COMPARATO decided to direct its investments in **product engineering**, by shifting the focus to their "**smart**" **core**, intelligent solutions that match the new home automation trends to maximise domestic comfort.

2018

The entry of **Thomas**, Nello's nephew, allows the principles of experience and tradition to blend with **dynamism** and **innovation**, all united by the value of passion.

2022

Thanks to significant investments in innovation and technology, **COMPARATO** moved the management of motorised valves to the **CLOUD**, allowing the entry of its products in **IoT**.

TODAY

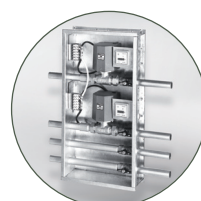
Today COMPARATO is facing new challenges with the same energy that has characterized it since its inception through solutions that anticipate market trends, utilizing new multi-media communication channels, and investing in the energy and digital transition with the goals of an industry strongly oriented towards automation and new production technologies to improve working conditions, create new business models, increase plant productivity, and improve product quality.



DIASOL



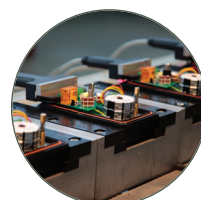
DIAMANT



CONTER



HEAD-
QUARTER



ASSEMBLY
LINES



SMART PRO
RANGE

HVAC MOTORISED BALL VALVES p. 9



SINTESI
p. 10



SINTESI SMART
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CLIMA PDC
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SINTESI REGULATING
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IP67 PRO
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DC
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CLIMA / CRONO
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BRASS
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IP67 PRO
Range
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BRASS
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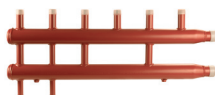


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DIADEF MAGNETIC
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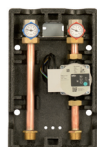


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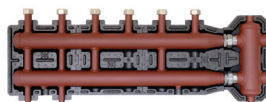
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**PUMP UNITS
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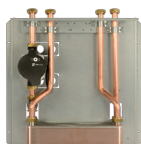
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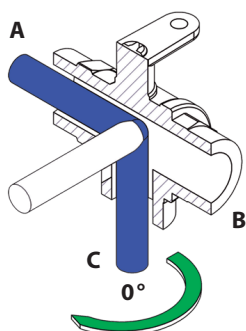
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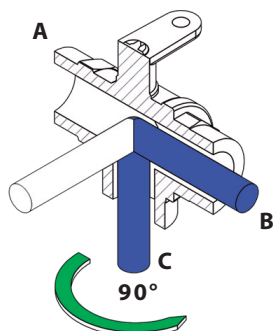
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VERTICAL 3-WAY ball valve 3-HALL BALL: MIXER / DIVERTER

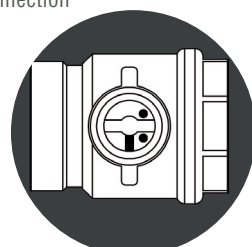
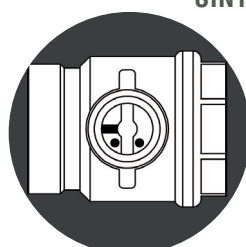
0° POSITION



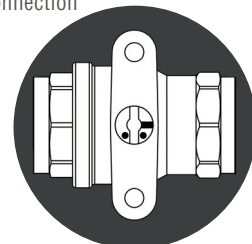
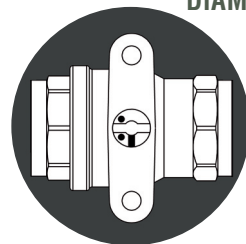
90° POSITION



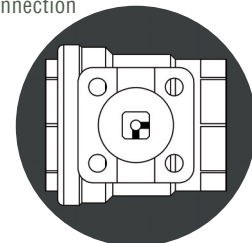
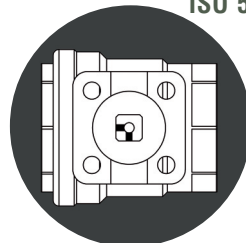
SINTESI connection



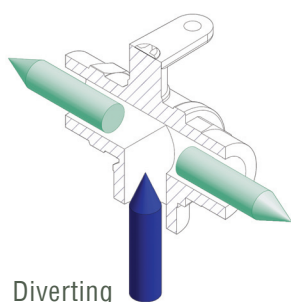
DIAMANT connection



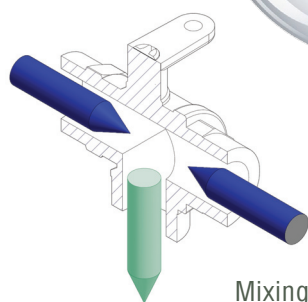
ISO 5211 connection



APPLICATION



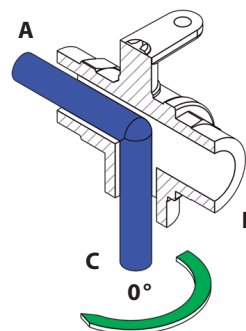
Diverting



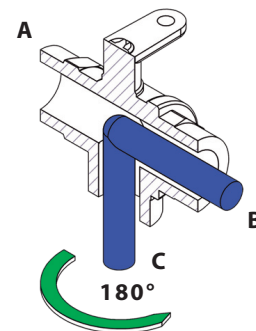
Mixing

VERTICAL 3-WAY ball valve 2-HALL BALL: DIVERTER

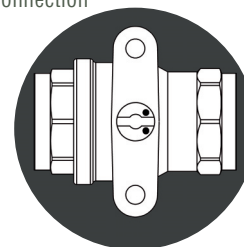
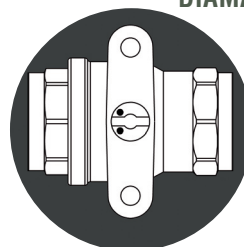
0° POSITION



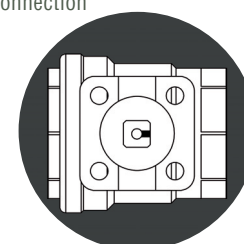
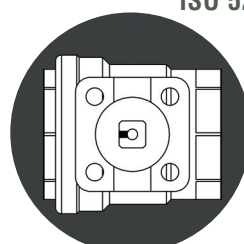
180° POSITION



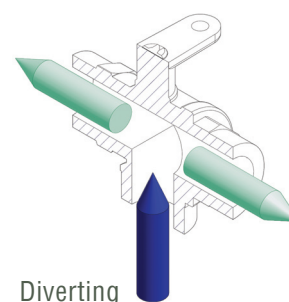
DIAMANT connection



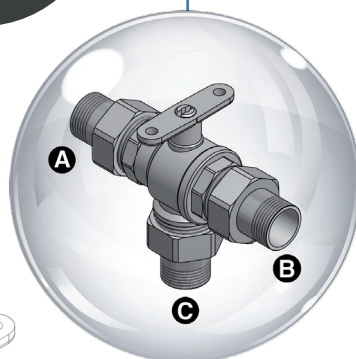
ISO 5211 connection



APPLICATION



Diverting



HORINZONTAL 3-WAY ball valve
"T"-PORT: DIVERTER

BALL POSITIONING

POSITION
T1 - T4



B

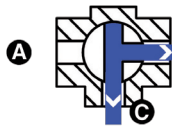


B

POSITION
T4 - T3



B

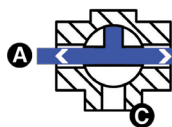


B

POSITION
T3 - T2



B



B

POSITION
T2 - T1



B



B



HORINZONTAL 3-WAY ball valve
"L"-PORT: DIVERTER

BALL POSITIONING

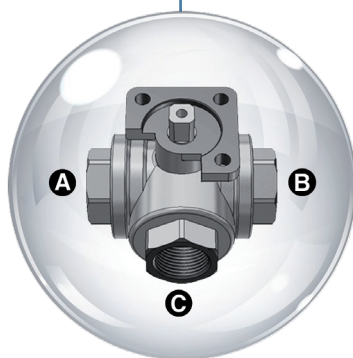


B



B

POSITION
L1 - L2



Technical Information on Motorised Valves

You can find all technical information related to Motorised Valves, to Actuators and to ball valves on technical data sheets. These are available in both printed and electronic versions (you can download them from our website www.comparato.com).

Operating time [sec] time that is necessary to the actuator for the nominal rotation. The nominal rotation, both clock and anti-clockwise, can take place on 90° and 180° angles, according to actuator type.

Torque [Nm] torque for which the actuator can be used for continuous service.

DN [mm] nominal passage diameter of the valve.

PN [bar] valve nominal pressure. It corresponds to the maximum pressure value the valve can bear in the heaviest hydraulic functioning.

Δp_{max} maximum differential pressure among valve ways in closing condition.

Kvs coefficient water rate, expressed in m³/h (from 10°C to 25°C with mass density equal to 1.000 kg/m³) that passes through two ways of the valve in complete opening with pressure drop 100 kPa (1 bar) Δp .

$$Kvs = \frac{Q}{\sqrt{\Delta p}}$$

where:
Q is the rate in m³/h
 Δp is the pressure drop in bar.

IP class protection the first figure indicates protection index against intrusion of solid objects and dusts while the second figure indicates the protection index against intrusion of liquid.

| Level | Solid bodies | Liquids |
|-------|---|--|
| IP44 | Protected against solid bodies with dimensions superior to 1 mm | Protected against splashes of water from any direction |
| IP54 | Complete protection against dust | Protected against splashes of water from any direction |
| IP65 | Totally protected against dust | Protected against water jets from any direction |
| IP67 | Totally protected against dust | Protected against temporary immersion |
| IP68 | Totally protected against dust | Protected against continuous immersion |

2-POINT electrical connection the actuator needs an electrical fixed supply on two wire for closing and a further electrical supply on the third wire for opening. The control device must be a "switch" one. The operation is ON/OFF (fully open / fully closed). The actuator does not absorb electrical supply at the end.

3-POINT electrical connection the actuator needs an electrical supply on first and second wire for closing and an electrical supply on first and third wire for opening. The control device can be both "modulating" (regulation and mixing) or "ON-OFF" (interception and diverting). The actuator does not absorb electrical supply at the end.

"ALL IN ONE" patented system that allows you, thanks to a selector (Sintesi) or a Jumper, to set actuator electrical control from 2- to 3- point according to plant needs.

Diamix L / Compamix L besides all the functions of standard version Diamix L or Compamix L, mixing / thermo-regulating valve has a specific software which allows the actuator to make autonomously all processes of thermal disinfection in plants with recirculation ring and, in this way, the danger of presence and **proliferation of legionella bacteria is noticeably reduced**. The multiple variables connected to the realization of plants where this equipment can be installed are so numerous that it is impossible to totally exclude the risk.

DIMMIX to assist in selecting **Diamix L / Compamix L** motorised mixing valves used in domestic hot water mixing systems, **the DIMMIX software is available for free on the website. It allows for the sizing of mixing/temperature control valves.**

Certificates all certificates for each family of actuators are available on our web site www.comparato.com

- CE 2006/42/EC Machinery Directive;
- CE 2014/35/UE Low voltage Directive;
- CE 2014/30/UE electro magnetic compatibility Directive.

HVAC MOTORISED BALL VALVES

| | | |
|---|--|----|
|  | Actuators SINTESI | 10 |
|  | Actuators SINTESI SMART | 12 |
|  | Actuators SINTESI DC | 14 |
|  | Ball valves SINTESI | 16 |
|  | Regulation valves SINTESI | 18 |
|  | 6-way valves SINTESI | 20 |
|  | Actuators DIAMANT 2000 | 24 |
|  | Ball valves DIAMANT 2000 | 25 |
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|  | Motorised diverting valves CLIMA PDC | 32 |
|  | REGULATION CONTROL UNITS | 34 |



ALL IN ONE: 2-POINT • 3-POINT

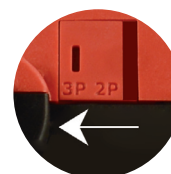
- **TORQUE:** 8 Nm (15 sec version: 5 Nm)
- **CLASS PROTECTION:** IP54
- **ONE EXTRA MICRO-SWITCH FREE ON OPENING INCLUDED**
- **110V ON REQUEST**



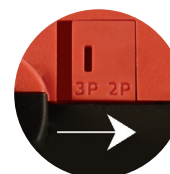
Suitable for
Control Units
see p. 34



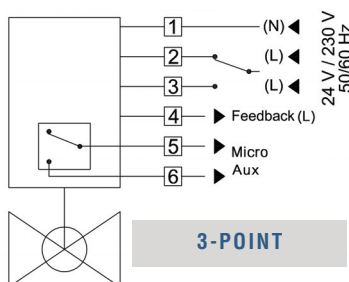
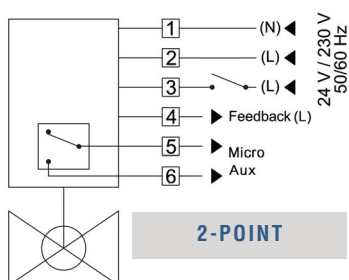
ALL IN ONE



select **3P**
for **3-POINT**



select **2P**
for **2-POINT**

Operating times **35 sec • 90°**

| CODE | FOR BALL VALVE | | POWER SUPPLY | |
|---------|-----------------------|-----|---------------|--|
| SY2221B | 2- or 3-WAY • BY-PASS | 90° | 230V 50/60 Hz | |
| SY2421B | 2- or 3-WAY • BY-PASS | 90° | 24V 50/60 Hz | |

Operating times **15 sec • 90°**

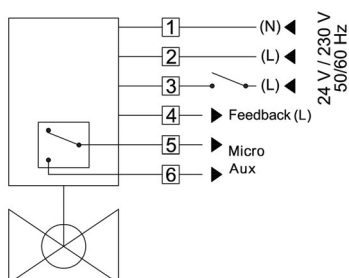
| CODE | FOR BALL VALVE | | POWER SUPPLY | |
|----------|-----------------------|-----|---------------|--|
| SY2221BA | 2- or 3-WAY • BY-PASS | 90° | 230V 50/60 Hz | |
| SY2421BA | 2- or 3-WAY • BY-PASS | 90° | 24V 50/60 Hz | |

2-POINT ON / OFF

- **TORQUE:** 8 Nm (15 sec version: 5 Nm)
- **CLASS PROTECTION:** IP54
- **ONE EXTRA MICRO-SWITCH FREE ON OPENING INCLUDED**
- **110V ON REQUEST**

Operating times **45 sec • 90°**

| CODE | FOR BALL VALVE | | POWER SUPPLY | |
|---------|-----------------------|-----|---------------|--|
| SR2221U | 2- or 3-WAY • BY-PASS | 90° | 230V 50/60 Hz | |
| SR2421U | 2- or 3-WAY • BY-PASS | 90° | 24V 50/60 Hz | |

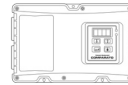
Operating times **15 sec • 90°**

| CODE | FOR BALL VALVE | | POWER SUPPLY | |
|----------|-----------------------|-----|---------------|--|
| SR2221BA | 2- or 3-WAY • BY-PASS | 90° | 230V 50/60 Hz | |
| SR2421BA | 2- or 3-WAY • BY-PASS | 90° | 24V 50/60 Hz | |

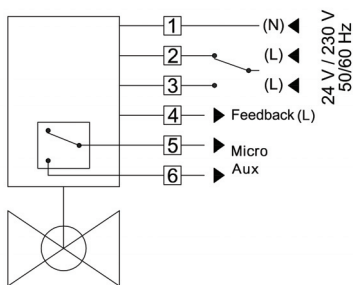


3-POINT MODULANTING

- **TORQUE:** 8 Nm (15 sec version: 5 Nm)
- **CLASS PROTECTION:** IP54
- **ONE EXTRA MICRO-SWITCH FREE ON OPENING INCLUDED**
- **110V ON REQUEST**



Suitable for
Control Units
see p. 34

Operating times **35 sec • 90°**

| CODE | FOR BALL VALVE | | POWER SUPPLY | |
|---------|-----------------------|-----|---------------|--|
| SS2221B | 2- or 3-WAY • BY-PASS | 90° | 230V 50/60 Hz | |
| SS2421B | 2- or 3-WAY • BY-PASS | 90° | 24V 50/60 Hz | |

Operating times **15 sec • 90°**

| CODE | FOR BALL VALVE | | POWER SUPPLY | |
|----------|-----------------------|-----|---------------|--|
| SS2221BA | 2- or 3-WAY • BY-PASS | 90° | 230V 50/60 Hz | |
| SS2421BA | 2- or 3-WAY • BY-PASS | 90° | 24V 50/60 Hz | |

Operating times **120 sec • 90°**

| CODE | FOR BALL VALVE | | POWER SUPPLY | |
|-----------|-----------------------|-----|---------------|--|
| SS2221BC2 | 2- or 3-WAY • BY-PASS | 90° | 230V 50/60 Hz | |
| SS2421BC2 | 2- or 3-WAY • BY-PASS | 90° | 24V 50/60 Hz | |

DETAIL OF SINTESI FAST PUSH CONNECTION

NO TOOL NEEDED, NO NEED TO REMOVE THE SPRING CLIP

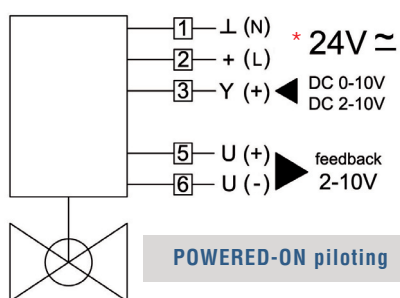


SINTESI SMART



PROPORTIONAL CONTROL

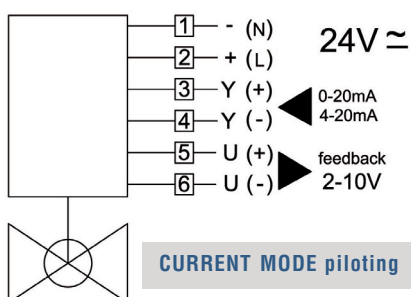
- TORQUE: 8 Nm
- CLASS PROTECTION: IP54
- POSITION FEEDBACK : $2 \div 10V$



* DC or AC power supply with single half-wave

| CODE | | POWER SUPPLY | CONTROL | OPERATING TIMES | |
|------------|-----|--------------|---------|-----------------|--|
| SM4010F030 | 90° | 24V AC / DC | 0÷10V | 30 sec | |
| SM4010F060 | 90° | 24V AC / DC | 0÷10V | 60 sec | |
| SM4010F120 | 90° | 24V AC / DC | 0÷10V | 120 sec | |
| SM4210F030 | 90° | 24V AC / DC | 2÷10V | 30 sec | |
| SM4210F060 | 90° | 24V AC / DC | 2÷10V | 60 sec | |
| SM4210F120 | 90° | 24V AC / DC | 2÷10V | 120 sec | |

For the 230V 50/60 Hz and double half-wave version, please contact our Technical Office.



| CODE | | POWER SUPPLY | CONTROL | OPERATING TIMES | |
|------------|-----|--------------|---------|-----------------|--|
| SM4020T030 | 90° | 24V AC / DC | 0÷20mA | 30 sec | |
| SM4020T060 | 90° | 24V AC / DC | 0÷20mA | 60 sec | |
| SM4020T120 | 90° | 24V AC / DC | 0÷20mA | 120 sec | |
| SM4420T030 | 90° | 24V AC / DC | 4÷20mA | 30 sec | |
| SM4420T060 | 90° | 24V AC / DC | 4÷20mA | 60 sec | |
| SM4420T120 | 90° | 24V AC / DC | 4÷20mA | 120 sec | |

SINTESI SMART accessories • Current mode piloting



DESCRIPTION

For 100...240V 50/60 Hz power supply replace 4 with 2 in the code

e.g.: SM4420T030 becomes SM2420T030

For a 12V DC replace 4 with 5 in the code

e.g.: SM4420T060 becomes SM5420T060

NOT AVAILABLE FOR THE 30-SECOND VERSION

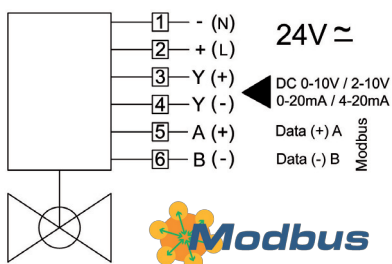
SINTESI SMART MODBUS



i

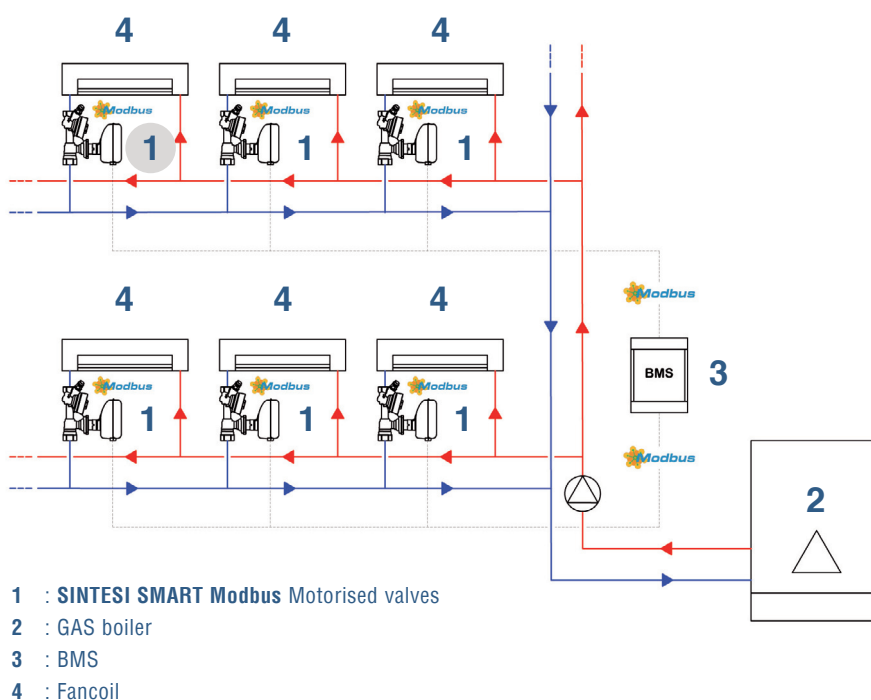
MODBUS COMMUNICATION

- TORQUE: 8 Nm
- CLASS PROTECTION: IP54
- PROGRAMABLE OPERATING TIMES WITH MODBUS (30 to 120s)
- POSITION FEEDBACK: Modbus



| CODE | | POWER SUPPLY | COMMUNICATION PROTOCOL |
|----------|-----|--------------|------------------------|
| SMMODBUS | 90° | 24V AC / DC | Modbus - RTU |

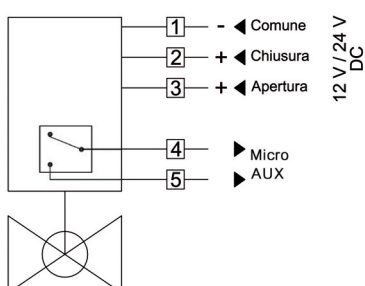
EXAMPLE OF USE: FANCOIL HEATING





DIRECT CURRENT: 2-POINT • 3-POINT ON / OFF - FAST

- TORQUE: 8 Nm (3 sec version: 5 Nm)
- CLASS PROTECTION: IP54

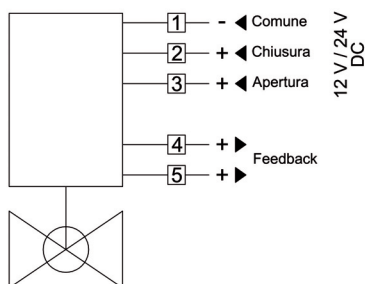


1 EXTRA MICRO-SWITCH free on opening

| CODE | | POWER SUPPLY | OPERATING TIMES |
|-----------|-----|--------------|-----------------|
| SY2421DCT | 90° | 24V DC | 3 sec |
| SY2421DCC | 90° | 24V DC | 5 sec |
| SY2521DCT | 90° | 12V DC | 3 sec |
| SY2521DCC | 90° | 12V DC | 5 sec |

DIRECT CURRENT: 2-POINT • 3-POINT ON / OFF

- TORQUE: 8 Nm
- CLASS PROTECTION: IP54



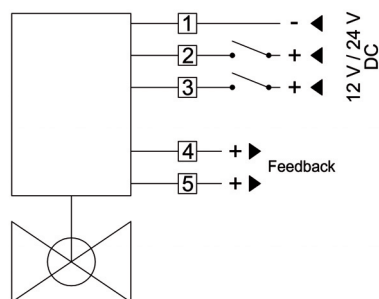
VOLTAGE FEEDBACK with open and closed valve

| CODE | | POWER SUPPLY | OPERATING TIMES |
|-----------|-----|--------------|-----------------|
| SDC42T030 | 90° | 24V DC | 30 sec |
| SDC42T060 | 90° | 24V DC | 60 sec |
| SDC42T120 | 90° | 24V DC | 120 sec |
| SDC52T060 | 90° | 12V DC | 60 sec |
| SDC52T120 | 90° | 12V DC | 120 sec |



DIRECT CURRENT: 3 POSITION

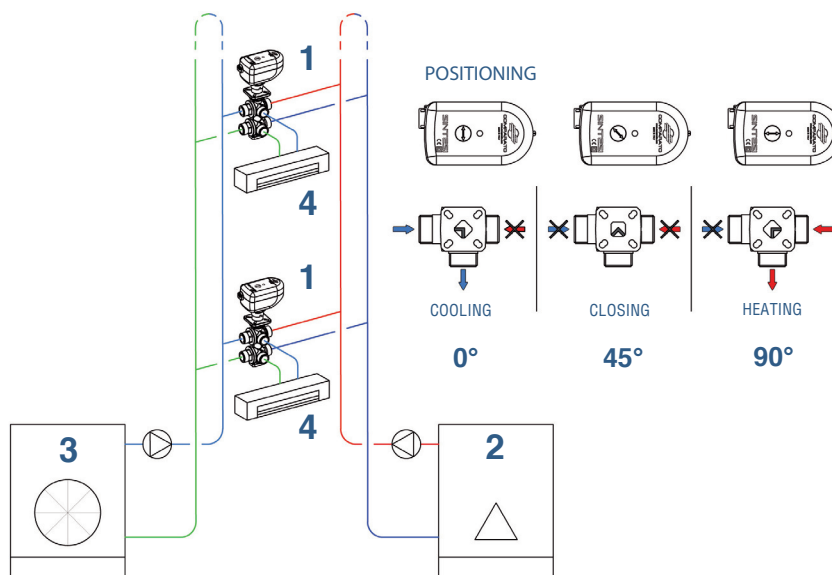
- TORQUE: 8 Nm
- CLASS PROTECTION: IP54



VOLTAGE FEEDBACK with open and closed valve

| CODE | | POWER SUPPLY | OPERATING TIMES | |
|-----------|--------------|--------------|-----------------|--|
| SDC43T030 | 0°- 45°- 90° | 24V DC | 30 sec | |
| SDC43T060 | 0°- 45°- 90° | 24V DC | 60 sec | |
| SDC43T120 | 0°- 45°- 90° | 24V DC | 120 sec | |
| SDC53T060 | 0°- 45°- 90° | 12V DC | 60 sec | |
| SDC53T120 | 0°- 45°- 90° | 12V DC | 120 sec | |

EXAMPLE OF USE: 4-PIPE SYSTEM



- 1 : SINTESI DC 6-WAY Motorised valve
 2 : GAS boiler
 3 : Chiller
 4 : Fancoil

**2-WAY MM, full bore**

| CODE | CONNECTION | | DN | PN | Kv _s | |
|--------|------------|-----|----|----|-----------------|--|
| SC2A2A | 1/2" | 90° | 15 | 16 | 16,3 | |
| SC2B2A | 3/4" | 90° | 20 | 16 | 29,5 | |
| SC2C2A | 1" | 90° | 25 | 16 | 43 | |



INSULATION AVAILABLE P.21

2-WAY MF, full bore

| CODE | CONNECTION | | DN | PN | Kv _s | |
|---------|------------|-----|----|----|-----------------|--|
| SC2A2A9 | 1/2" | 90° | 15 | 16 | 16,3 | |
| SC2B2A9 | 3/4" | 90° | 20 | 16 | 29,5 | |
| SC2C2A9 | 1" | 90° | 25 | 16 | 43 | |

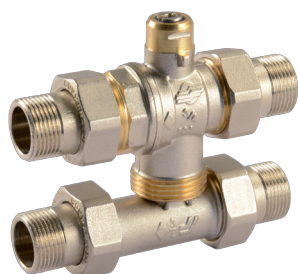
90° ROTATION 3-HOLE BALL • 3-WAY MMM MIXING / DIVERTING, full bore

| CODE | CONNECTION | | DN | PN | Kv _s | |
|--------|------------|-----|----|----|-----------------|--|
| SC3A3A | 1/2" | 90° | 15 | 16 | 6 | |
| SC3B3A | 3/4" | 90° | 20 | 16 | 11,5 | |
| SC3C3A | 1" | 90° | 25 | 16 | 18,3 | |



INSULATION AVAILABLE P.21

Ball positioning p.6

BY-PASS, full bore

| CODE | CONNECTION | | DN | PN | Kv _s | |
|--------|------------|-----|----|----|-----------------|--|
| SC4A4A | 1/2" | 90° | 15 | 16 | 16,3 / 0,8 | |
| SC4B4A | 3/4" | 90° | 20 | 16 | 29,5 / 1,9 | |
| SC4C4A | 1" | 90° | 25 | 16 | 43 / 2,9 | |

TELESCOPIC BY-PASS: FLOW-RETURN SPAN 1/2" AND 3/4" 50÷60 mm • 1" 55÷60 mm
ON REQUEST: BALL VALVE AVAILABLE WITHOUT BY-PASS TEE

2-WAY MF square, full bore

| CODE | CONNECTION | | DN | PN | Kv _s | |
|----------|------------|-----|----|----|-----------------|--|
| SC2B2A9L | 3/4" | 90° | 20 | 16 | 11,5 | |

**2-WAY MM EQUAL PERCENTAGE**, full bore

technical focus p. 18

REGULATING DISC

| CODE | CONNECTION | | DN | PN | Kv _s | |
|----------|------------|-----|----|----|-----------------|--|
| SC2A2AK2 | 1/2" | 90° | 20 | 16 | 2,5 | |
| SC2A2AK4 | 1/2" | 90° | 20 | 16 | 4 | |

ON REQUEST Kv_s 1,0 / 1,6 / 6,3

INSULATION AVAILABLE P.21

"T"-PORT • 3-WAY MMM MIXING, full bore**MIXING**

| CODE | CONNECTION | | DN | PN | Kv _s | |
|--------|------------|-----|----|----|-----------------|--|
| SC3B3L | 3/4" | 90° | 20 | 16 | 11,0 | |

2-WAY MM, full bore**SOLAR THERMAL PLANTS**

| CODE | CONNECTION | | DN | PN | Kv _s | |
|-----------|------------|-----|----|----|-----------------|--|
| SC2A2ASD1 | 1/2" | 90° | 15 | 16 | 16,3 | |
| SC2B2ASD1 | 3/4" | 90° | 20 | 16 | 29,5 | |
| SC2C2ASD1 | 1" | 90° | 25 | 16 | 43 | |

Suitable for TEMPERATURE up to 160°C • Carbografite and silicone sealings

90° ROTATION 3-HOLE BALL • 3-WAY MMM MIXING / DIVERTING, full bore**SOLAR THERMAL PLANTS**

| CODE | CONNECTION | | DN | PN | Kv _s | |
|-----------|------------|-----|----|----|-----------------|--|
| SC3A3ASD1 | 1/2" | 90° | 15 | 16 | 6 | |
| SC3B3ASD1 | 3/4" | 90° | 20 | 16 | 11,5 | |
| SC3C3ASD1 | 1" | 90° | 25 | 16 | 18,3 | |

Suitable for TEMPERATURE up to 160°C • Carbografite and silicone sealings
Ball positioning p.6



2-WAY FF EQUAL PERCENTAGE • Regulating



REGULATING DISC

| CODE + Kv _s | CONNECTION | DN | PN | Δp max | |
|------------------------|------------|----|----|---------|--|
| SC2ARKV _ | 1/2" | 15 | 16 | 3,4 bar | |
| SC2BRKV _ | 3/4" | 20 | 16 | 3,4 bar | |
| SC2CRKV _ | 1" | 25 | 16 | 3,4 bar | |
| SC2DRKV _ | 1"1/4 | 32 | 16 | 3,4 bar | |
| SC2ERKV _ | 1"1/2 | 40 | 16 | 3,4 bar | |
| SC2FRKV _ | 2" | 50 | 16 | 3,4 bar | |

PLEASE ADD THE LETTER CORRESPONDING TO THE DESIRED KV_s
AT THE END OF THE CODE

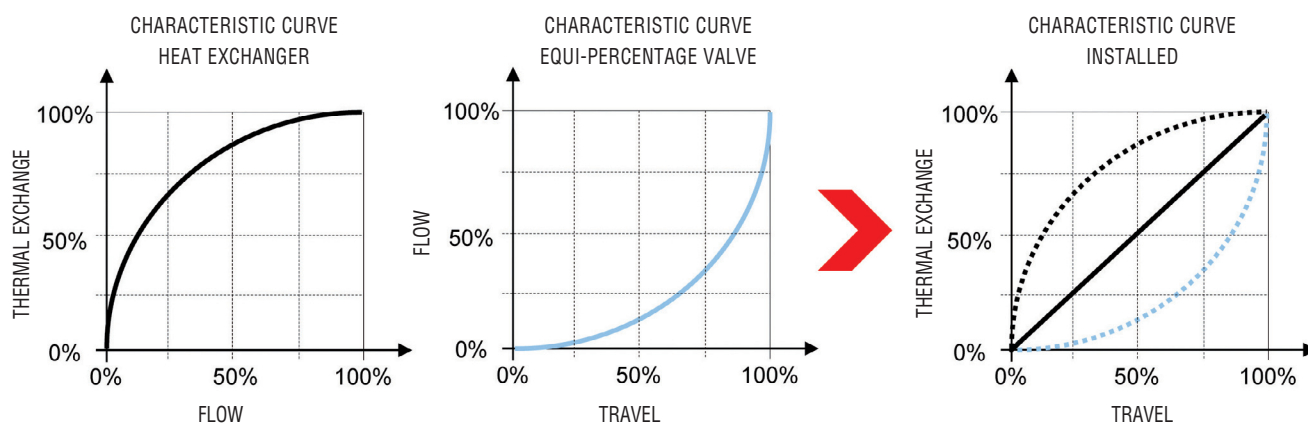
CODE EXAMPLE: SC2ARKV**A**

FOR THE BALL VALVE WITH NO REGULATION DISC CONTACT OUR OFFICES

AVAILABLE KV_s

| | 0,25 | 0,4 | 0,63 | 1 | 1,6 | 2,5 | 4 | 6,3 | 8,6 | 10 | 16 | 25 | 40 |
|-------|------|-----|------|---|-----|-----|---|-----|-----|----|----|----|----|
| DN 15 | A | B | C | D | E | F | G | H | | | | | |
| DN 20 | | | | | | | G | H | I | J | | | |
| DN 25 | | | | | | | | H | | J | K | | |
| DN 32 | | | | | | | | | | J | K | L | |
| DN 40 | | | | | | | | | | | K | L | |
| DN 50 | | | | | | | | | | | | L | M |

EQUAL-PERCENTAGE CURVE TECHNICAL FOCUS





3-WAY FFF EQUAL PERCENTAGE • Regulating



REGULATING DISC

| CODICE + Kv _s | CONNECTION | DN | PN | Δp max | |
|--------------------------|------------|----|----|---------|--|
| SFERA "T" | | | | | |
| SC3ARKV _ | 1/2" | 15 | 16 | 3,4 bar | |
| SC3BRKV _ | 3/4" | 20 | 16 | 3,4 bar | |
| SC3CRKV _ | 1" | 25 | 16 | 3,4 bar | |
| SC3DRKV _ | 1"1/4 | 32 | 16 | 3,4 bar | |
| SC3ERKV _ | 1"1/2 | 40 | 16 | 3,4 bar | |
| SC3FRKV _ | 2" | 50 | 16 | 3,4 bar | |

PLEASE ADD THE LETTER CORRESPONDING TO THE DESIRED Kv_s AT THE END OF THE CODE

CODE EXAMPLE: SC3ARKV**A**

FOR THE BALL VALVE WITH NO REGULATION DISC CONTACT OUR OFFICES

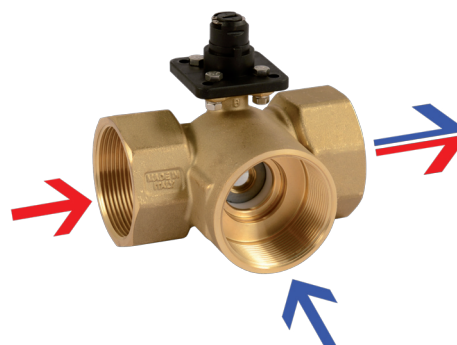


| | | AVAILABLE KV _S | | | | | | | | | | | |
|----|----|---------------------------|-----|------|---|-----|-----|---|-----|----|----|----|----|
| | | 0,25 | 0,4 | 0,63 | 1 | 1,6 | 2,5 | 4 | 6,3 | 10 | 16 | 25 | 40 |
| DN | 15 | A | B | C | D | E | F | G | H | | | | |
| | 20 | | | | | | | G | H | J | | | |
| | 25 | | | | | | | | H | J | K | | |
| | 32 | | | | | | | | | J | K | L | |
| | 40 | | | | | | | | | | K | L | |
| | 50 | | | | | | | | | | | | L |

EQUAL-PERCENTAGE CURVE TECHNICAL FOCUS

In general, the heat exchange is described with a typically non-linear relationship between flow and exchanged heat. **COMPARATO ball valves**, with their equi-percentage characteristic obtained thanks to special regulating discs, allow to compensate the non-linearity and to obtain a characteristic curve installed, as shown here. It's easy to see that the stability of the adjustment is positively affected by the action of the constant-gain actuator.

OPERATION





6-WAY • 4-pipe system



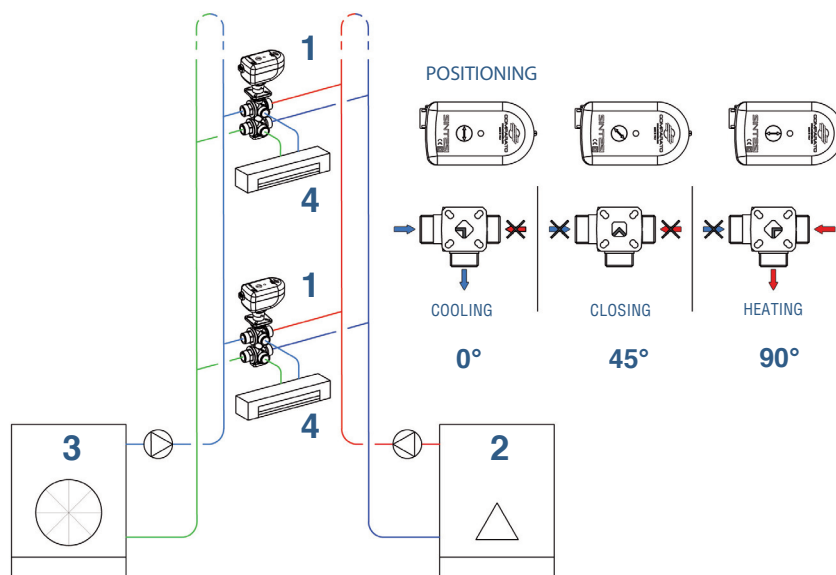
| CODE | CONNECTION | DN | PN | Kv _s | |
|---------|------------|----|----|-----------------|--|
| SC6A15F | 1/2" F | 15 | 16 | 1,25 * | |
| SC6B15M | 3/4" M | 15 | 16 | 1,25 * | |
| SC6B20F | 3/4" F | 20 | 16 | 2,8 * | |
| SC6B20M | 3/4" M | 20 | 16 | 2,8 * | |

* KV max with no disc installed



Disc kit for Kv selection INCLUDED

EXAMPLE OF USE: 4-PIPE SYSTEM



- 1 : SINTESI DC 6-WAY Motorised valve
- 2 : GAS boiler
- 3 : Chiller
- 4 : Fancoil



Insulation 2-WAY • for ball valve p. 16



| CODE | CONNECTION | DN | |
|----------|------------|----|--|
| CBSC2A2A | 1/2" | 15 | |
| CBSC2B2A | 3/4" | 20 | |
| CBSC2C2A | 1" | 25 | |

Insulation 3-WAY • for ball valve p. 16



| CODE | CONNECTION | DN | |
|----------|------------|----|--|
| CBSC3A3A | 1/2" | 15 | |
| CBSC3B3A | 3/4" | 20 | |
| CBSC3C3A | 1" | 25 | |

Accessories

CONNECTION KIT
ISO 5211

| CODE | DESCRIPTION | |
|---------------|---|--|
| AIST01 | Connection kit for ISO 5211 ball valve F03 - 9 and F05 - 11 • h 17 mm | |

SPACER



| CODE | DESCRIPTION | |
|---------------|----------------------|--|
| DISN04 | THERMAL BREAK spacer | |

SINTESI ALL IN ONE



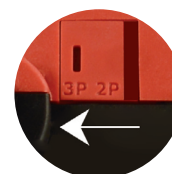
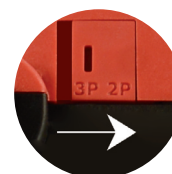
i

ALL IN ONE: 2-POINT • 3-POINT

- **OPERATING TIMES:** 35 sec 90°
- **CLASS PROTECTION:** IP54
- **POWER SUPPLY:** 230V • 50/60 Hz
- **WITH 1 EXTRA MICRO-SWITCH FREE ON OPENING**
- **BALL VALVES WITH CAPS AND TANGS**
- **INSULATION AVAILABLE P.21**



ALL IN ONE

select 3P
for 3-POINTselect 2P
for 2-POINT

2-WAY MM, full bore

| CODE | CONNECTION | DN | PN | Kv _s | |
|------------|------------|----|----|-----------------|--|
| SY2221A2AB | 1/2" | 15 | 16 | 16,3 | |
| SY2221B2AB | 3/4" | 20 | 16 | 29,5 | |
| SY2221C2AB | 1" | 25 | 16 | 43 | |



2-WAY MF, full bore

| CODE | CONNECTION | DN | PN | Kv _s | |
|-------------|------------|----|----|-----------------|--|
| SY2221A2A9B | 1/2" | 15 | 16 | 16,3 | |
| SY2221B2A9B | 3/4" | 20 | 16 | 29,5 | |
| SY2221C2A9B | 1" | 25 | 16 | 43 | |



3-WAY MMM DIVERTING, full bore

| CODE | CONNECTION | DN | PN | Kv _s | |
|------------|------------|----|----|-----------------|--|
| SY2221A3AB | 1/2" | 15 | 16 | 6 | |
| SY2221B3AB | 3/4" | 20 | 16 | 11,5 | |
| SY2221C3AB | 1" | 25 | 16 | 18,3 | |

Ball positioning p.6

SINTESI ALL IN ONE



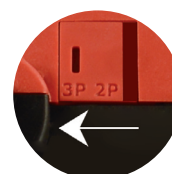
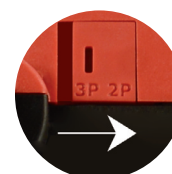
i

ALL IN ONE: 2-POINT • 3-POINT

- **OPERATING TIMES:** 35 sec 90°
- **CLASS PROTECTION:** IP54
- **POWER SUPPLY:** 230V • 50/60 Hz
- **WITH 1 EXTRA MICRO-SWITCH FREE ON OPENING**
- **BALL VALVES WITH CAPS AND TANGS**



ALL IN ONE

select 3P
for 3-POINTselect 2P
for 2-POINT

BY-PASS, full bore

| CODE | CONNECTION | DN | PN | Kv _s | |
|------------|------------|----|----|-----------------|--|
| SY2221A4AB | 1/2" | 15 | 16 | 16,3 / 0,8 | |
| SY2221B4AB | 3/4" | 20 | 16 | 29,5 / 1,9 | |
| SY2221C4AB | 1" | 25 | 16 | 43 / 2,9 | |



2-WAY MF square, full bore

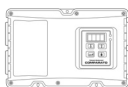
| CODE | CONNECTION | DN | PN | Kv _s | |
|--------------|------------|----|----|-----------------|--|
| SY2221B2A9BL | 3/4" | 20 | 16 | 11,5 | |

Diamant 2000 • COMPARATO connection



ALL IN ONE: 2-POINT • 3-POINT

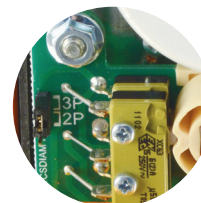
- **TORQUE:** 11 Nm
- **OPERATING TIMES:** 35 SEC 90°
- **CLASS PROTECTION:** IP65



Suitable for
Control Units
see p. 34



ALL IN ONE JUMPER
for selecting 2-POINT or 3-POINT



| CODE | FOR BALL VALVE | | POWER SUPPLY | |
|-------|-----------------------|------|---------------|--|
| DY222 | 2- or 3-WAY • BY-PASS | 90° | 230V 50/60 Hz | |
| DY212 | 2- or 3-WAY • BY-PASS | 90° | 110V 50/60 Hz | |
| DY242 | 2- or 3-WAY • BY-PASS | 90° | 24V 50/60 Hz | |
| DY322 | 3 WAY | 180° | 230V 50/60 Hz | |
| DY312 | 3 WAY | 180° | 110V 50/60 Hz | |
| DY342 | 3 WAY | 180° | 24V 50/60 Hz | |

Accessories

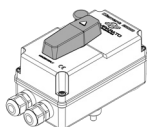
Add the numbers and/or letters listed in the “ID” column corresponding to the selected accessories at the end of the base model code. Code example: DY2221

EXTRA
MICRO-SWITCH



| ID | DESCRIPTION | |
|----|--|--|
| 1 | 1 extra micro switch in opening position | |
| 2 | 2 extra micro switches in opening and closing position | |

MANUAL OVERRIDE



| ID | DESCRIPTION | |
|----|-----------------------------|--|
| A | Manual override | |
| | 35-second version available | |

OPERATING TIMES



| ID | DESCRIPTION | |
|----|---|--|
| Q | 4 second version for 90° - 5 Nm - 50 Hz | |
| D | 12 second version for 90° - 11 Nm - 50 Hz | |
| C8 | 106 second version for 90° - 11 Nm - 50/60 Hz | |
| 32 | 320 second version for 90° - 11 Nm - 50/60 Hz | |

Manual emergency opening not available.

4 and 12 second versions, 60 Hz available on request.

Diamant 2000 • COMPARATO connection

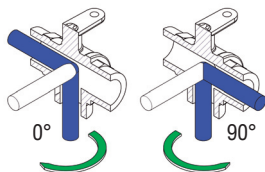


2-WAY MM, full bore



| CODE | CONNECTION | | DN | PN | Kv _s | |
|--------|------------|-----|----|----|-----------------|--|
| DC2A2A | 1/2" | 90° | 15 | 16 | 16,3 | |
| DC2B2A | 3/4" | 90° | 20 | 16 | 29,5 | |
| DC2C2A | 1" | 90° | 25 | 16 | 43 | |

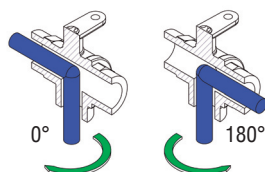
90° ROTATION 3-HOLE BALL • 3-WAY MMM MIXING / DIVERTING, full bore



| CODE | CONNECTION | | DN | PN | Kv _s | |
|--------|------------|-----|----|----|-----------------|--|
| DC3B3A | 3/4" | 90° | 20 | 16 | 11,5 | |
| DC3C3A | 1" | 90° | 25 | 16 | 18,3 | |

3-hole version to be combined with the **90°** version actuator

180° ROTATION 2-HOLE BALL • 3-WAY MMM DIVERTING, full bore



| CODE | CONNECTION | | DN | PN | Kv _s | |
|--------|------------|------|----|----|-----------------|--|
| DC3B2A | 3/4" | 180° | 20 | 16 | 11,5 | |
| DC3C2A | 1" | 180° | 25 | 16 | 18,3 | |

2-hole version to be combined with the **180°** version actuator

BY-PASS, full bore



| CODE | CONNECTION | | DN | PN | Kv _s | |
|------------------------------|------------|-----|----|----|-----------------|--|
| STRAIGHT UNION tangs | | | | | | |
| DC4B4A | 3/4" | 90° | 20 | 16 | 29,5 / 1,9 | |
| DC4C4AST | 1" * | 90° | 25 | 16 | 43 / 2,9 | |
| ECCENTRIC UNION tangs | | | | | | |
| DC4B4A2 | 3/4" | 90° | 20 | 16 | 29,5 / 1,9 | |

* without by-pass tee

STRAIGHT tangs: flow-return span 60mm

ECCENTRIC tangs: flow-return span 55÷70mm

On request: ball valve 3/4" available without by-pass tee

Diamant 2000 • COMPARATO connection



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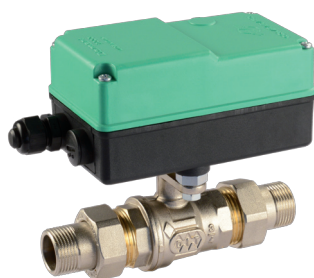
ALL IN ONE: 2-POINT • 3-POINT

- **OPERATING TIMES:** 35 sec 90°
- **CLASS PROTECTION:** IP65
- **POWER SUPPLY:** 230V • 50/60 Hz

- **BALL VALVES WITH CAPS AND TANGS**



Suitable for
Control Units
see p. 34



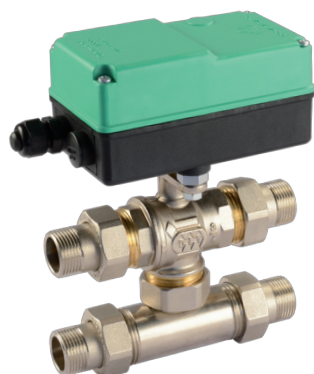
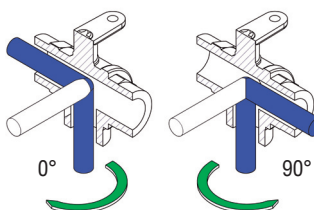
2-WAY MM

| CODE | CONNECTION | DN | PN | K _v _s | |
|----------|------------|----|----|-----------------------------|--|
| DY222A2A | 1/2" | 15 | 16 | 16,3 | |
| DY222B2A | 3/4" | 20 | 16 | 29,5 | |
| DY222C2A | 1" | 25 | 16 | 43 | |



3-WAY MMM DIVERTING / MIXING

| CODE | CONNECTION | DN | PN | K _v _s | |
|------------------------|------------|----|----|-----------------------------|--|
| 3-HOLE 90° BALL | | | | | |
| DY222B3A | 3/4" | 20 | 16 | 11,5 | |
| DY222C3A | 1" | 25 | 16 | 18,3 | |



BY-PASS

| CODE | CONNECTION | DN | PN | K _v _s | |
|------------------------------|------------|----|----|-----------------------------|--|
| STRAIGHT UNION tangs | | | | | |
| DY222B4A | 3/4" | 20 | 16 | 29,5 / 1,9 | |
| DY222C4A | 1" * | 25 | 16 | 43 / 2,9 | |
| ECCENTRIC UNION tangs | | | | | |
| DY222B4A2 | 3/4" | 20 | 16 | 43 / 2,9 | |

* without by-pass tee

STRAIGHT tangs: flow-return span 60mm

ECCENTRIC tangs: flow-return span 55÷70mm

On request: ball valve 3/4" available without by-pass tee

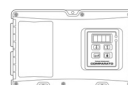
Not suitable for control units

Diamant 2000 ISO • ISO 5211 connection



ALL IN ONE: 2-POINT • 3-POINT

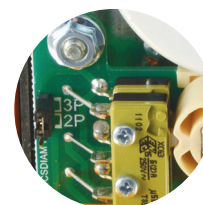
- **TORQUE:** 11 Nm
- **OPERATING TIMES:** 35 SEC 90°
- **CLASS PROTECTION:** IP65
- **TO BE COUPLE TO ISO 5211**
F03 - F05 BALL VALVES □ 9 - □ 11



Suitable for
Control Units
see p. 34



ALL IN ONE JUMPER
for selecting 2-POINT or 3-POINT



| CODE | FOR BALL VALVE | | POWER SUPPLY |
|--------|-----------------------|------|---------------|
| DY222G | 2- or 3-WAY • BY-PASS | 90° | 230V 50/60 Hz |
| DY212G | 2- or 3-WAY • BY-PASS | 90° | 110V 50/60 Hz |
| DY242G | 2- or 3-WAY • BY-PASS | 90° | 24V 50/60 Hz |
| DY322G | 3 WAY | 180° | 230V 50/60 Hz |
| DY312G | 3 WAY | 180° | 110V 50/60 Hz |
| DY342G | 3 WAY | 180° | 24V 50/60 Hz |

Accessories

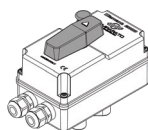
Add the numbers and/or letters listed in the “ID” column corresponding to the selected accessories at the end of the base model code. Code example: DY222G1

EXTRA
MICRO-SWITCH



| ID | DESCRIPTION |
|----|--|
| 1 | 1 extra micro switch in opening position |
| 2 | 2 extra micro switches in opening and closing position |

MANUAL OVERRIDE



| ID | DESCRIPTION |
|----|-----------------|
| A | Manual override |

35-second version available

OPERATING TIMES



| ID | DESCRIPTION |
|----|---|
| Q | 4 second version for 90° - 5 Nm - 50 Hz |
| D | 12 second version for 90° - 11 Nm - 50 Hz |
| C8 | 106 second version for 90° - 11 Nm - 50/60 Hz |
| 32 | 320 second version for 90° - 11 Nm - 50/60 Hz |

Manual emergency opening not available.

4 and 12 second versions, 60 Hz available on request.

Diamant 2000 ISO • ISO 5211 connection



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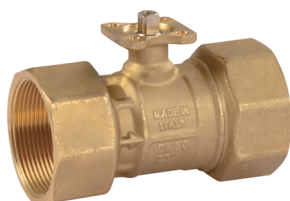
2-WAY FF, full bore



| CODE | CONNECTION | | DN | PN | Kv _s | |
|---------|------------|-----|----|----|-----------------|--|
| DC2S2P5 | 1/4" | 90° | - | 40 | 5,4 | |
| DC2R2P5 | 3/8" | 90° | 10 | 40 | 6 | |
| DC2A2P5 | 1/2" | 90° | 15 | 40 | 16,3 | |
| DC2B2P5 | 3/4" | 90° | 20 | 40 | 29,5 | |
| DC2C2P5 | 1" | 90° | 25 | 40 | 43 | |
| DC2D2P5 | 1"1/4 * | 90° | 32 | 40 | 89 | |

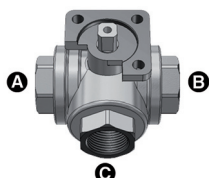
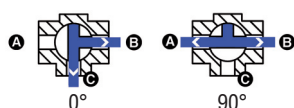
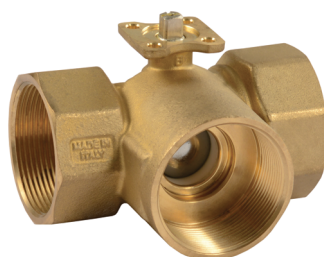
* maximum differential pressure 25 bar, for 40 bar please see Compact section
IT CANNOT BE MOTORISED WITH 4 SEC. ACTUATOR

2-WAY FF, reduced bore



| CODE | CONNECTION | | DN | PN | Kv _s | Δp max |
|---------|------------|-----|----|----|-----------------|---------|
| DC2A2R5 | 1/2" | 90° | 15 | 16 | 17 | 3,4 bar |
| DC2B2R5 | 3/4" | 90° | 20 | 16 | 10,5 | 3,4 bar |
| DC2C2R5 | 1" | 90° | 25 | 16 | 18,7 | 3,4 bar |
| DC2D2R5 | 1"1/4 | 90° | 32 | 16 | 27,9 | 3,4 bar |
| DC2E2R5 | 1"1/2 | 90° | 40 | 16 | 25 | 3,4 bar |
| DC2F2R5 | 2" | 90° | 50 | 16 | 42,5 | 3,4 bar |

3-WAY FFF, MIXING / DIVERTING, reduced bore



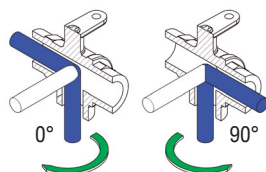
| CODE | CONNECTION | | DN | PN | Kv _s | Δp max |
|---------|------------|-----|----|----|-----------------|---------|
| DC3A3R5 | 1/2" | 90° | 15 | 16 | 6 | 3,4 bar |
| DC3B3R5 | 3/4" | 90° | 20 | 16 | 4,8 | 3,4 bar |
| DC3C3R5 | 1" | 90° | 25 | 16 | 8,6 | 3,4 bar |
| DC3D3R5 | 1"1/4 | 90° | 32 | 16 | 12,8 | 3,4 bar |
| DC3E3R5 | 1"1/2 | 90° | 40 | 16 | 11,5 | 3,4 bar |
| DC3F3R5 | 2" | 90° | 50 | 16 | 19,5 | 3,4 bar |

Diamant 2000 ISO • ISO 5211 connection



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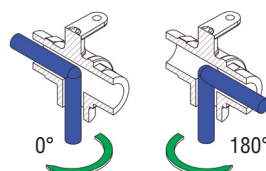
90° ROTATION 3-HOLE BALL • 3-WAY MMM MIXING / DIVERTING, full bore



| CODE | CONNECTION | | DN | PN | Kv _s | |
|---------|------------|-----|----|----|-----------------|--|
| DC3A3E5 | 1/2" | 90° | 15 | 25 | 6 | |
| DC3B3E5 | 3/4" | 90° | 20 | 16 | 11,5 | |
| DC3C3E5 | 1" * | 90° | 25 | 16 | 18,3 | |

* maximum differential pressure 10 bar, for 16 bar please see Compact section
IT CANNOT BE MOTORISED WITH 4 SEC. ACTUATOR

180° ROTATION 2-HOLE BALL • 3-WAY MMM DIVERTING, full bore



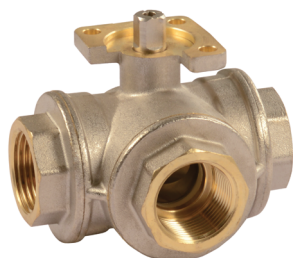
| CODE | CONNECTION | | DN | PN | Kv _s | |
|---------|------------|------|----|----|-----------------|--|
| DC3A2E5 | 1/2" | 180° | 15 | 25 | 6 | |
| DC3B2E5 | 3/4" | 180° | 20 | 16 | 11,5 | |
| DC3C2E5 | 1" * | 180° | 25 | 16 | 18,3 | |

* maximum differential pressure 10 bar, for 16 bar please see Compact section
IT CANNOT BE MOTORISED WITH 4 SEC. ACTUATOR

Diamant 2000 ISO • ISO 5211 connection



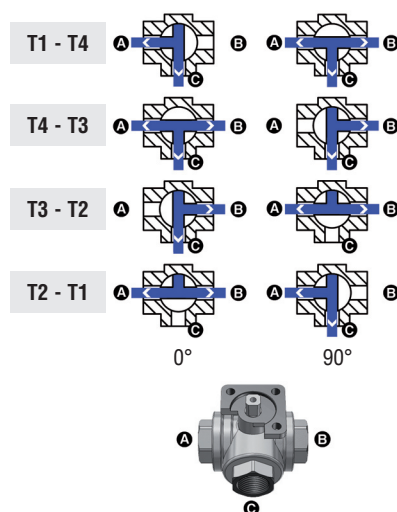
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"T"-PORT • 3-WAY FFF DIVERTING, full bore

| CODE | CONNECTION | | DN | PN | Kv _s | |
|---------|------------|-----|----|----|-----------------|--|
| DC3S6E5 | 1/4" | 90° | - | 30 | 2,8 | |
| DC3R6E5 | 3/8" | 90° | 10 | 30 | 3 | |
| DC3A6E5 | 1/2" | 90° | 15 | 30 | 3,9 | |
| DC3B6E5 | 3/4" * | 90° | 20 | 30 | 7,9 | |

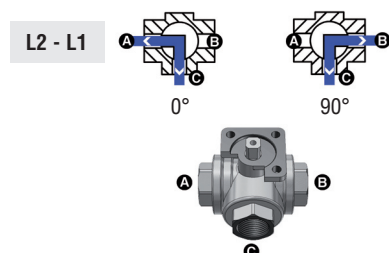
* maximum differential pressure 16 bar, for 30 bar please see Compact section
IT CANNOT BE MOTORISED WITH 4 SEC. ACTUATOR

BALL POSITIONING

**"L"-PORT • 3-WAY FFF DIVERTING**, full bore

| CODE | CONNECTION | | DN | PN | Kv _s | |
|---------|------------|-----|----|----|-----------------|--|
| DC3S5E5 | 1/4" | 90° | - | 30 | 2,8 | |
| DC3R5E5 | 3/8" | 90° | 10 | 30 | 3 | |
| DC3A5E5 | 1/2" | 90° | 15 | 30 | 3,9 | |
| DC3B5E5 | 3/4" * | 90° | 20 | 30 | 7,9 | |

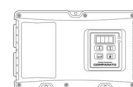
* maximum differential pressure 16 bar, for 30 bar please see Compact section
IT CANNOT BE MOTORISED WITH 4 SEC. ACTUATOR



Microdiam**2-POINT or 3-POINT actuator**

- **TORQUE:** 5 Nm
- **OPERATING TIMES:** 48 sec 90°
- **CLASS PROTECTION:** IP44

- **FOR MANIFOLDS**
with INTERAXIS 50mm



Suitable for
Control Units
see p. 34



| CODE | FOR BALL VALVE | | POWER SUPPLY |
|----------------|----------------|-----|---------------|
| 2-POINT | | | |
| MR222N | 2 WAY | 90° | 230V 50/60 Hz |
| MR242N | 2 WAY | 90° | 24V 50/60 Hz |
| 3-POINT | | | |
| MS222N | 2 WAY | 90° | 230V 50/60 Hz |
| MS242N | 2 WAY | 90° | 24V 50/60 Hz |

2-WAY ball valve MF, with cap and tang, full bore

| CODE | CONNECTION | DN | PN | Kv _s |
|---------|------------|----|----|-----------------|
| MC2A2DN | 1/2" | 15 | 16 | 16,3 |
| MC2B2DN | 3/4" | 20 | 16 | 29,5 |

2-POINT ON / OFF Motorised valve, 2-WAY MF, with cap and tang, full bore

- **OPERATING TIMES:** 48 sec 90°
- **CLASS PROTECTION:** IP44
- **POWER SUPPLY:** 230V • 50/60 Hz

- **FOR MANIFOLDS**
with INTERAXIS 50mm



Suitable for
Control Units
see p. 34



| CODE | CONNECTION | DN | PN | Kv _s |
|-----------|------------|----|----|-----------------|
| MR222A2DN | 1/2" | 15 | 16 | 16,3 |
| MR222B2DN | 3/4" | 20 | 16 | 29,5 |

Accessori

Add the numbers and/or letters listed in the **"ID"** column corresponding to the selected accessories at the end of the base model code. Code example: MR222A2DN**1**

EXTRA MICRO-SWITCH



| ID | DESCRIPTION |
|----|--|
| 1 | 1 extra micro switch in opening position |



3-WAY DIVERTING



- CLASS PROTECTION: IP67
- POWER SUPPLY: 230V 50/60 Hz
- 110V VERSION AVAILABLE ON REQUEST
- BUILT-IN ELECTRONICS

FUNCTIONS:

- Automatic switching between HP and boiler according to outdoor temperature
- Control of the diverting valve to the DHW heater
- Data storage of the working time of HP and boiler
- Modbus-RTU protocol for remote management
- Comparato PDCtool software for the communication between PC and Motorised valve



| CODE | CONNECTION | Kv _s | DN | PN | Δp max | |
|------------|------------|-----------------|----|----|--------|--|
| MMM | | | | | | |
| CLIMAPCDCB | 3/4" | 11,5 | 20 | 16 | 16 bar | |
| CLIMAPCDCC | 1" | 18,3 | 25 | 16 | 16 bar | |
| FFF | | | | | | |
| CLIMAPCDFA | 1/2" | 6 | 15 | 25 | 25 bar | |
| CLIMAPCDFB | 3/4" | 11,5 | 20 | 16 | 16 bar | |
| CLIMAPCDFC | 1" | 18,3 | 25 | 16 | 16 bar | |
| CLIMAPCCFD | 1"1/4 | 27,2 | 32 | 10 | 10 bar | |
| CLIMAPCCFE | 1"1/2 | 47,3 | 40 | 10 | 6 bar | |
| CLIMAPCCFF | 2" | 73 | 50 | 10 | 4 bar | |

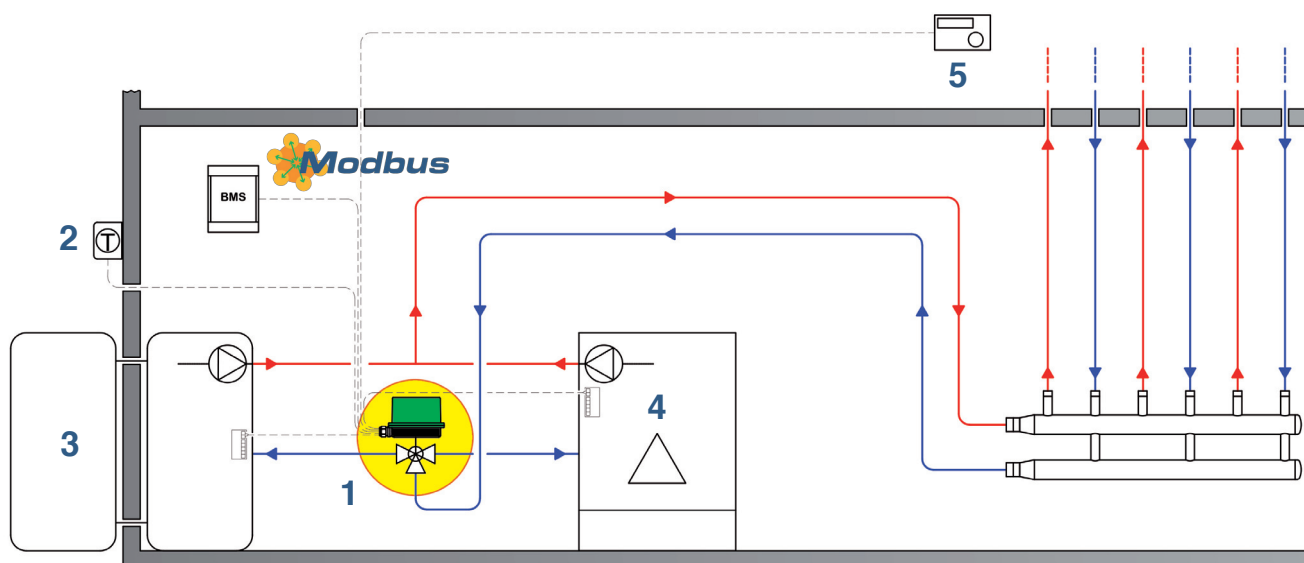
Accessori

Add the numbers and/or letters listed in the "ID" column corresponding to the selected accessories at the end of the base model code. Code example: CLIMAPCDCBK

| ID | DESCRIPTION | NOTES |
|----|---|---------------------------------|
| K | Brass immersion temperature probe | G 1/8" - pocket not included |
| 04 | 24V 50-60 Hz version | |
| D1 | Spacer for insulation | up to 1" starting from 1"1/4 |
| D2 | Spacer for insulation and manual override | up to 1" starting from 1"1/4 |

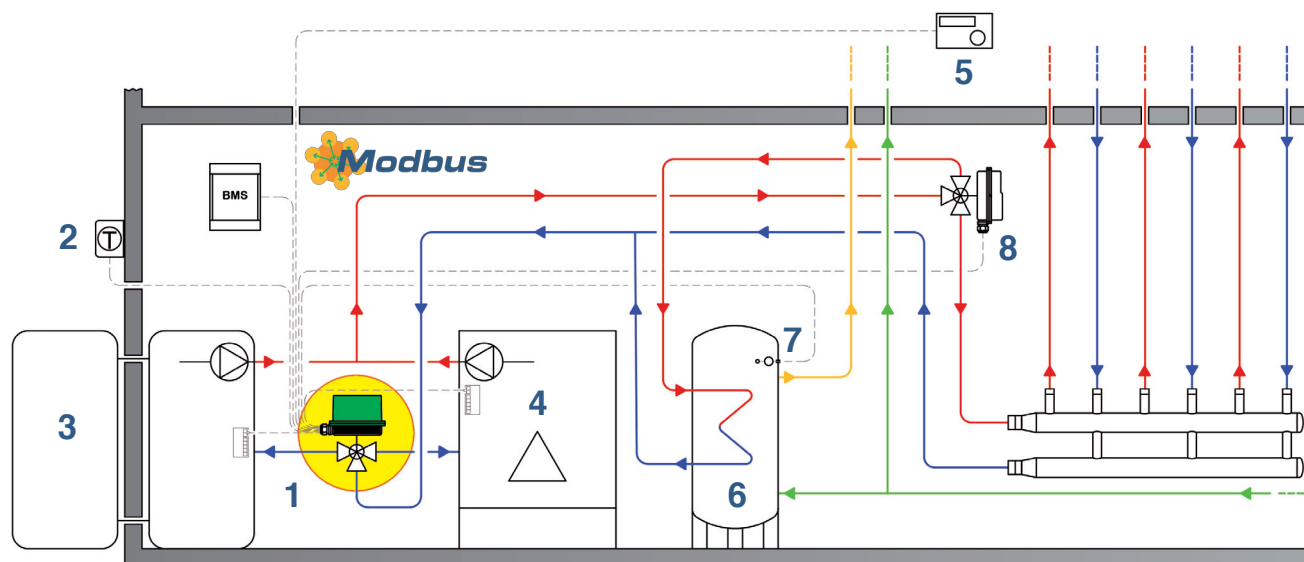
| CODE | DESCRIPTION |
|--------|------------------------|
| USBMOD | Modbus - USB interface |

EXAMPLE OF USE: HEAT PUMP / BOILER SWITCHING



- 1 : CLIMA PDC
- 2 : Outdoor temperature probe
- 3 : Heat pump
- 4 : Boiler
- 5 : Room thermostat

EXAMPLE OF USE: DIVERTING VALVE CONTROL FOR DHW BOILER



- 1 : CLIMA PDC
- 2 : Outdoor temperature probe
- 3 : Heat pump
- 4 : Boiler
- 5 : Room thermostat
- 6 : DHW heater
- 7 : DHW heater's temperature probe
- 8 : Diverting actuated valve

Regulation control units

high / medium temperature low temperature



PID electronic controlled temperature regulators for 3-POINT MODULATING motorised valves with Modbus-RTU remote management



REGULATORS CAN BE MATCHED WITH ALL COMPARATO MOTORISED VALVES WITH MODULATING 3-POINT CONTROL AND 230V POWER SUPPLY - MARKED WITH THE FOLLOWING SYMBOLS:



Suitable for
Control Units
see p. 34



Temperature probe included

FUNCTIONS:

- Fixed-point temperature control
- Temperature control with weather compensation function for high/medium temperature systems
- Fixed-point temperature control with remote setpoint setting (0-10V)

CODE

CPSMB0

FUNCTIONS:

- Temperature control for RADIANT PANELS
- Fixed-point or weather compensation heating
- Fixed-point or dew point tracking cooling
- Summer / winter switching
- Control of the indoor dehumidification system

CODE

CPRMB0

Accessories

Add the numbers and/or letters listed in the "ID" column corresponding to the selected accessories at the end of the base model code. Code example: CPSMB0K

| ID | DESCRIPTION |
|----|--|
| K | Brass immersion temperature probe (G 1/8" - pocket not included) |

| CODE | DESCRIPTION |
|----------|---|
| RFSONDAE | External temperature probe for weather compensation |

FOR CODE CPRMB0

| CODE | DESCRIPTION |
|-----------|---|
| RFTRUEE10 | Temperature and humidity probe for anti-condensing function |

HVAC • INDUSTRIAL field

Motorised valves

| | | |
|---|---|----|
|  | Actuators IP67 PRO RANGE | 36 |
|  | Actuators IP68 PRO RANGE | 40 |
|  | Actuators DC RANGE | 44 |
|  | Actuators CLIMA RANGE CRONO RANGE | 50 |
|  | Actuators PILOT RANGE | 52 |
|  | Actuators SMART PRO RANGE | 58 |
|  | Ball valves BRASS | 66 |
|  | Ball valves AISI 316 | 70 |
|  | Ball valves PVC | 72 |
|  | Motorised valves CAST IRON | 79 |
|  | Motorised valves BUTTERFLY | 82 |
|  | SPACERS and ACCESSORIES | 84 |

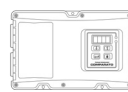
Diamant PRO • COMPARATO connection



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ALL IN ONE: 2-POINT • 3-POINT

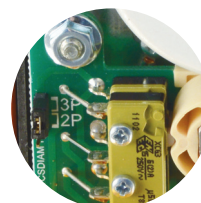
- **TORQUE:** 11 Nm
- **OPERATING TIMES:** 35 SEC 90°
- **CLASS PROTECTION:** IP67
- **2 EXTRA MICRO SWITCHES**



Suitable for
Control Units
see p. 34



ALL IN ONE JUMPER
for selecting 2-POINT or 3-POINT



| CODE | FOR BALL VALVE | | POWER SUPPLY |
|---------|----------------|------|---------------|
| DY222P2 | 2- or 3-WAY | 90° | 230V 50/60 Hz |
| DY212P2 | 2- or 3-WAY | 90° | 110V 50/60 Hz |
| DY242P2 | 2- or 3-WAY | 90° | 24V 50/60 Hz |
| DY322P2 | 3 WAY | 180° | 230V 50/60 Hz |
| DY312P2 | 3 WAY | 180° | 110V 50/60 Hz |
| DY342P2 | 3 WAY | 180° | 24V 50/60 Hz |

COMPARATO connection

ADSTD1

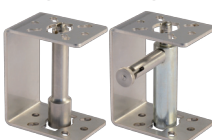
ADSTD2



COMPARATO connection

DIDM01

DIDM02



COMPARATO connection

ISO F03/F04/F05
connection

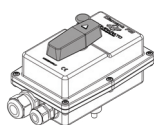
| CODE | DESCRIPTION |
|----------|---|
| ADSTD1 | COMPARATO • COMPARATO spacer |
| ADSTD2 * | COMPARATO • COMPARATO spacer with manual override |
| DIDM01 | COMPARATO • ISO 5211 spacer |
| DIDM02 * | COMPARATO • ISO 5211 spacer with opening lever |

* Not suitable for actuators with EMERGENCY MANUAL OVERRIDE

Accessories

Add the numbers and/or letters listed in the “ID” column corresponding to the selected accessories at the end of the base model code. Code example: DY222P2**A**

MANUAL OVERRIDE



| ID | DESCRIPTION |
|----------|---------------------------|
| A | Emergency manual override |

35-second version available

OPERATING TIMES



| ID | DESCRIPTION |
|-----------|---|
| Q | 4 second version for 90° - 5 Nm - 50 Hz |
| D | 12 second version for 90° - 11 Nm - 50 Hz |
| C8 | 106 second version for 90° - 11 Nm - 50/60 Hz |
| 32 | 320 second version for 90° - 11 Nm - 50/60 Hz |

Emergency manual override not available. 4 and 12 second versions, 60 Hz available on request.

ANTI-CONDENSATION
KIT



| ID | DESCRIPTION |
|----------|-------------------------------|
| R | Helps to prevent condensation |

Not suitable for 4 and 12 second versions.

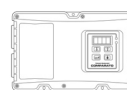
Diamant PRO ISO • ISO 5211 connection



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ALL IN ONE: 2-POINT • 3-POINT

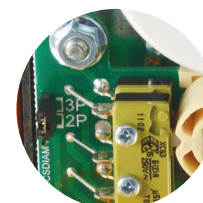
- **TORQUE:** 11 Nm
- **OPERATING TIMES:** 35 SEC 90°
- **CLASS PROTECTION:** IP67
- 2 EXTRA MICRO SWITCHES
- MANUAL OPENING
- ISO 5211 F03 - F05 □ 9 - □ 11



Suitable for
Control Units
see p. 34



ALL IN ONE JUMPER
for selecting 2-POINT or 3-POINT

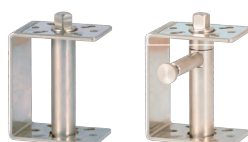


| CODE | FOR BALL VALVE | | POWER SUPPLY |
|----------|----------------|------|---------------|
| DY222F2A | 2- or 3-WAY | 90° | 230V 50/60 Hz |
| DY212F2A | 2- or 3-WAY | 90° | 110V 50/60 Hz |
| DY242F2A | 2- or 3-WAY | 90° | 24V 50/60 Hz |
| DY322F2A | 3 WAY | 180° | 230V 50/60 Hz |
| DY312F2A | 3 WAY | 180° | 110V 50/60 Hz |
| DY342F2A | 3 WAY | 180° | 24V 50/60 Hz |

ISO F03 / F05 connection

DIDM01ISO

DIDM02ISO



| CODICE | DESCRIZIONE |
|-------------|---|
| DIDM01ISO | ISO 5211 • ISO 5211 spacer |
| DIDM02ISO * | ISO 5211 • ISO 5211 spacer with opening lever |

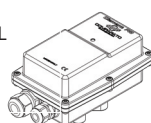
* Not suitable for actuators with EMERGENCY MANUAL OVERRIDE

ISO F03 / F04 / F05 connection

Accessories

Add the numbers and/or letters listed in the “ID” column corresponding to the selected accessories at the end of the base model code. Code example: DY222F2A**Q**

WITHOUT MANUAL
OVERRIDE



| ID | DESCRIPTION |
|-----------------|-----------------------------------|
| delete A | Without emergency manual override |

OPERATING TIMES



| ID | DESCRIPTION |
|-----------|---|
| Q | 4 second version for 90° - 5 Nm - 50 Hz |
| D | 12 second version for 90° - 11 Nm - 50 Hz |
| C8 | 106 second version for 90° - 11 Nm - 50/60 Hz |
| 32 | 320 second version for 90° - 11 Nm - 50/60 Hz |

Emergency manual override not available. 4 and 12 second versions, 60 Hz available on request.

ANTI-CONDENSATION
KIT



| ID | DESCRIPTION |
|----------|-------------------------------|
| R | Helps to prevent condensation |

Not suitable for 4 and 12 second versions.

Actuator

Compact PRO



ALL IN ONE: 2-POINT • 3-POINT

- **TORQUE:** 22 Nm
- **OPERATING TIMES:** 45 SEC 90°
- **CLASS PROTECTION:** IP67
- 2 EXTRA MICRO SWITCHES
- MANUAL OPENING
- ISO 5211 F03-F05 □9-□11



Suitable for
Control Units
see p. 34



ALL IN ONE JUMPER
for selecting 2-POINT or 3-POINT

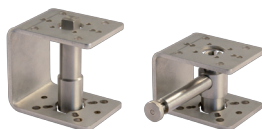


| CODE | FOR BALL VALVE | | POWER SUPPLY | |
|---------|----------------|------|---------------|--|
| CY2222P | 2- or 3-WAY | 90° | 230V 50/60 Hz | |
| CY2122P | 2- or 3-WAY | 90° | 110V 50/60 Hz | |
| CY2422P | 2- or 3-WAY | 90° | 24V 50/60 Hz | |
| CY3222P | 3 WAY | 180° | 230V 50/60 Hz | |
| CY3122P | 3 WAY | 180° | 110V 50/60 Hz | |
| CY3422P | 3 WAY | 180° | 24V 50/60 Hz | |

ISO F03 / F05 connection

DICOM35

DICO05ADC



| CODE | DESCRIPTION | |
|-------------|---|--|
| DICOM35 | ISO 5211 • ISO 5211 spacer | |
| DICO05ADC * | ISO 5211 • ISO 5211 spacer with opening lever | |

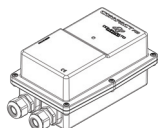
* Not suitable for actuators with EMERGENCY MANUAL OVERRIDE

ISO F03 / F04 / F05 connection

Accessories

Add the numbers and/or letters listed in the “ID” column corresponding to the selected accessories at the end of the base model code. Code example: CY2222PSA

WITHOUT MANUAL
OVERRIDE



| ID | DESCRIPTION | |
|----|-----------------------------------|--|
| SA | Without emergency manual override | |

OPERATING TIMES



| ID | DESCRIPTION | |
|----|---|--|
| 9 | 9 second version for 90° - 22 Nm - 50/60 Hz | |

Emergency manual override not available.

ANTI-CONDENSATION
KIT



| ID | DESCRIPTION | |
|----|-------------------------------|--|
| R | Helps to prevent condensation | |

Universal PRO



i

ALL IN ONE: 2-POINT • 3-POINT

- **TORQUE:** 40 Nm
- **OPERATING TIMES:** 55 sec 90°
- **CLASS PROTECTION:** IP67

- 2 EXTRA MICRO SWITCHES
- MANUAL OPENING
- ISO 5211 F05-F07 □11-□14



Suitable for
Control Units
see p. 34



ALL IN ONE JUMPER
for selecting 2-POINT or 3-POINT



| CODE | FOR BALL VALVE | | POWER SUPPLY | |
|---------|----------------|------|--------------|--|
| UY2222P | 2- or 3-WAY | 90° | 230V 50 Hz | |
| UY2122P | 2- or 3-WAY | 90° | 110V 50 Hz | |
| UY2422P | 2- or 3-WAY | 90° | 24V 50 Hz | |
| UY3222P | 3 WAY | 180° | 230V 50 Hz | |
| UY3122P | 3 WAY | 180° | 110V 50 Hz | |
| UY3422P | 3 WAY | 180° | 24V 50 Hz | |

versione 60 Hz a richiesta

ISO F05 / F07 connection

DICOM57

DICO07ADC



| CODE | DESCRIPTION |
|-------------|---|
| DICOM57 | ISO 5211 • ISO 5211 spacer |
| DICO07ADC * | ISO 5211 • ISO 5211 spacer with opening lever |

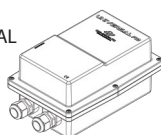
* Not suitable for actuators with EMERGENCY MANUAL OVERRIDE

ISO F03 / F04 / F05 / F07 connection

Accessories

Add the numbers and/or letters listed in the “ID” column corresponding to the selected accessories at the end of the base model code. Code example: UY2222PSA

WITHOUT MANUAL
OVERRIDE



| ID | DESCRIPTION |
|----|-----------------------------------|
| SA | Without emergency manual override |

OPERATING TIMES



| ID | DESCRIPTION |
|----|--|
| S | 14 second version for 90° - 40 Nm - 50/60 Hz |
| T | 32 second version for 90° - 40 Nm - 50/60 Hz |

ANTI-CONDENSATION
KIT



| ID | DESCRIPTION |
|----|-------------------------------|
| R | Helps to prevent condensation |

Diamant PRO IP68 • ISO 5211 connection

i

ALL IN ONE: 2 PUNTI • 3 PUNTI / WATERPROOF

- **TORQUE:** 11 Nm
- **OPERATING TIMES:** 35 SEC 90°
- **CLASS PROTECTION:** IP68
- 2 EXTRA MICRO SWITCHES
- 1,5m CAVO FROR
- ISO 5211 F03 - F05 □9 - □11

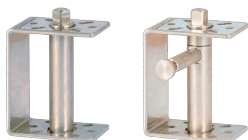


| CODE | FOR BALL VALVE | | POWER SUPPLY |
|---------|----------------|------|---------------|
| DH2222P | 2- or 3-WAY | 90° | 230V 50/60 Hz |
| DH2122P | 2- or 3-WAY | 90° | 110V 50/60 Hz |
| DH2422P | 2- or 3-WAY | 90° | 24V 50/60 Hz |
| DH3222P | 3 WAY | 180° | 230V 50/60 Hz |
| DH3122P | 3 WAY | 180° | 110V 50/60 Hz |
| DH3422P | 3 WAY | 180° | 24V 50/60 Hz |

ISO F03 / F05 connection

DIDM01ISO

DIDM02ISO

**ISO F03 / F04 / F05 connection**

| CODE | DESCRIPTION |
|-----------|---|
| DIDM01ISO | ISO 5211 • ISO 5211 spacer |
| DIDM02ISO | ISO 5211 • ISO 5211 spacer with opening lever |

Accessories

Add the numbers and/or letters listed in the “ID” column corresponding to the selected accessories at the end of the base model code. Code example: DH2222P**Q**

OPERATING TIMES



| ID | DESCRIPTION |
|-----------|---|
| Q | 4 second version for 90° - 5 Nm - 50 Hz |
| D | 12 second version for 90° - 11 Nm - 50 Hz |
| C8 | 106 second version for 90° - 11 Nm - 50/60 Hz |
| 32 | 320 second version for 90° - 11 Nm - 50/60 Hz |

4 and 12 second versions, 60 Hz available on request.

Actuator

Compact PRO IP68



i

ALL IN ONE: 2 PUNTI • 3 PUNTI / WATERPROOF

- **TORQUE:** 22 Nm
- **OPERATING TIMES:** 45 sec 90°
- **CLASS PROTECTION:** IP68
- 2 EXTRA MICRO SWITCHES
- 1,5m CAVO FROR
- ISO 5211 F03 - F05 □ 9 - □ 11



| CODE | FOR BALL VALVE | | POWER SUPPLY | |
|---------|----------------|------|---------------|--|
| CH2222P | 2- or 3-WAY | 90° | 230V 50/60 Hz | |
| CH2122P | 2- or 3-WAY | 90° | 110V 50/60 Hz | |
| CH2422P | 2- or 3-WAY | 90° | 24V 50/60 Hz | |
| CH3222P | 3 WAY | 180° | 230V 50/60 Hz | |
| CH3122P | 3 WAY | 180° | 110V 50/60 Hz | |
| CH3422P | 3 WAY | 180° | 24V 50/60 Hz | |

ISO F03 / F05 connection

DICOM35

DICO05ADC



| CODE | DESCRIPTION | |
|-----------|---|--|
| DICOM35 | ISO 5211 • ISO 5211 spacer | |
| DICO05ADC | ISO 5211 • ISO 5211 spacer with opening lever | |

ISO F03 / F04 / F05 connection

Universal PRO IP68



ALL IN ONE: 2-POINT • 3-POINT / WATERPROOF

- **TORQUE:** 40 Nm
- **OPERATING TIMES:** 55 SEC 90°
- **CLASS PROTECTION:** IP68
- 2 EXTRA MICRO SWITCHES
- 1,5m CAVO FROR
- ISO 5211 F05 - F07 □11 - □14



| CODE | FOR BALL VALVE | | POWER SUPPLY |
|---------|----------------|------|--------------|
| UH2222P | 2- or 3-WAY | 90° | 230V 50 Hz |
| UH2122P | 2- or 3-WAY | 90° | 110V 50 Hz |
| UH2422P | 2- or 3-WAY | 90° | 24V 50 Hz |
| UH3222P | 3 WAY | 180° | 230V 50 Hz |
| UH3122P | 3 WAY | 180° | 110V 50 Hz |
| UH3422P | 3 WAY | 180° | 24V 50 Hz |

ISO F05 / F07 connection

DICOM57

DICO07ADC

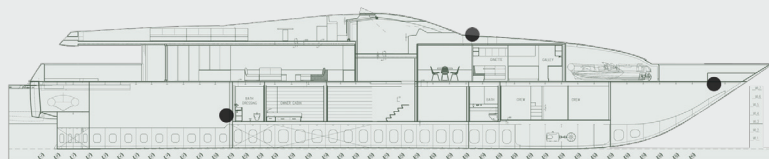


| CODE | DESCRIPTION |
|-----------|---|
| DICOM57 | ISO 5211 • ISO 5211 spacer |
| DICO07ADC | ISO 5211 • ISO 5211 spacer with opening lever |

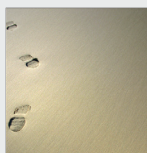
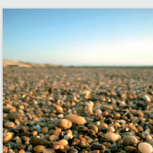
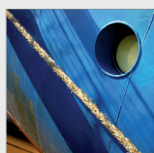
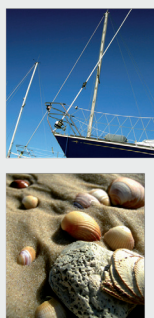
ISO F03 / F04 / F05 / F07 connection

NAUTICAL Sector

Motorised valves for: seacocks, decantation tanks, chains washing systems, motorised bilge pumping systems, waste water and grey water systems, deviation of onboard water, mixed DHW, automatic water storage in onboard tanks (ex. desalination systems), embark of safe drinking water, ballast pumping systems, oil systems, sludge systems, window washing systems, motorised manifolds for bilge pumping aspiration systems, general fluid regulation.



● Motorised valve application



- 1 Seacocks detail
- 2 RISER: nautical exhaust system
- 3 Bilge pumping aspiration systems

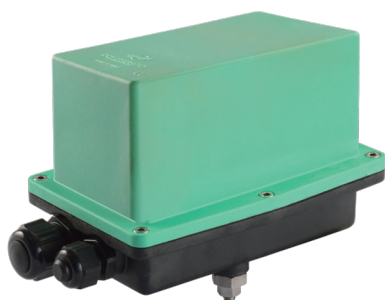
Diamant DC • COMPARATO connection



i

ALL IN ONE: 2-POINT • 3-POINT / DIRECT CURRENT

- **TORQUE:** 11 Nm
- **OPERATING TIMES:** 12 SEC 90°
- **CLASS PROTECTION:** IP67
- 2 EXTRA MICRO SWITCHES
- For DC versions with **MANUAL OVERRIDE** on the top, **PROPORTIONAL CONTROL** and **FAIL SAFE** see DIAMANT PILOT p. 52



| CODE | FOR BALL VALVE | | POWER SUPPLY |
|---------|----------------|------|--------------|
| DY252PC | 2- or 3-WAY | 90° | 12V DC |
| DY242PC | 2- or 3-WAY | 90° | 24V DC |
| DY352PC | 3 WAY | 180° | 12V DC |
| DY342PC | 3 WAY | 180° | 24V DC |



| CODE | DESCRIPTION |
|----------|---|
| ADSTD1 | COMPARATO • COMPARATO spacer |
| ADSTD2 * | COMPARATO • COMPARATO spacer with manual override |
| DIDM01 | COMPARATO • ISO 5211 spacer |
| DIDM02 * | COMPARATO • ISO 5211 spacer with opening lever |

Accessories

Add the numbers and/or letters listed in the “ID” column corresponding to the selected accessories at the end of the base model code. Code example: DY252PC1

OPERATING TIMES



| ID | DESCRIPTION |
|----|-----------------------------------|
| 1 | 1 second version for 90° - 5 Nm |
| T | 3 second version for 90° - 11 Nm |
| C | 5 ssecond version for 90° - 11 Nm |
| S | 8 second version for 90° - 11 Nm |
| 3 | 30 second version for 90° - 11 Nm |

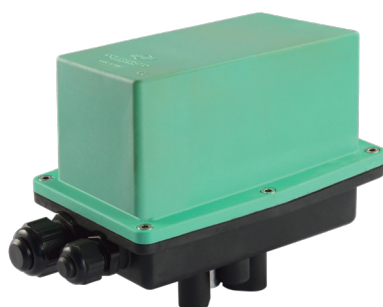
Diamant DC ISO • ISO 5211 connection




i

ALL IN ONE: 2-POINT • 3-POINT / DIRECT CURRENT

- **TORQUE:** 11 Nm
- **OPERATING TIMES:** 12 SEC 90°
- **CLASS PROTECTION:** IP67
- 2 EXTRA MICRO SWITCHES
- For DC versions with MANUAL OVERRIDE on the top, PROPORTIONAL CONTROL and FAIL SAFE see DIAMANT PILOT p. 52
- ISO 5211 F03 - F05 □9 - □11

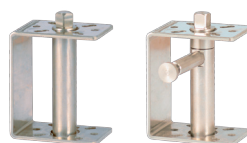


| CODE | FOR BALL VALVE |  | POWER SUPPLY |
|----------|----------------|---|--------------|
| DY252PCF | 2- or 3-WAY | 90° | 12V DC |
| DY242PCF | 2- or 3-WAY | 90° | 24V DC |
| DY352PCF | 3 WAY | 180° | 12V DC |
| DY342PCF | 3 WAY | 180° | 24V DC |

ISO F03 / F05 connection

DIDM01ISO

DIDM02ISO



| CODE | DESCRIPTION |
|-----------|---|
| DIDM01ISO | ISO 5211 • ISO 5211 spacer |
| DIDM02ISO | ISO 5211 • ISO 5211 spacer with opening lever |

ISO F03 / F04 / F05 connection

Accessories

Add the numbers and/or letters listed in the “ID” column corresponding to the selected accessories at the end of the base model code. Code example: DY252PCF1

OPERATING TIMES



| ID | DESCRIPTION |
|----|-----------------------------------|
| 1 | 1 second version for 90° - 5 Nm |
| T | 3 second version for 90° - 11 Nm |
| C | 5 second version for 90° - 11 Nm |
| S | 8 second version for 90° - 11 Nm |
| 3 | 30 second version for 90° - 11 Nm |

Actuator

Compact DC




i

ALL IN ONE: 2-POINT • 3-POINT / DIRECT CURRENT

- **TORQUE:** 22 Nm
- **OPERATING TIMES:** 30 sec 90°
- **CLASS PROTECTION:** IP67
- 2 EXTRA MICRO SWITCHES
- For DC versions with MANUAL OVERRIDE on the top, PROPORTIONAL CONTROL and FAIL SAFE see COMPACT PILOT p. 54
- ISO 5211 F03 - F05 □9 - □11

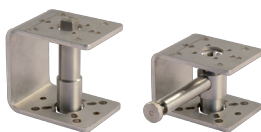


| CODE | FOR BALL VALVE |  | POWER SUPPLY |
|---------|----------------|---|--------------|
| CY252PC | 2- or 3-WAY | 90° | 12V DC |
| CY242PC | 2- or 3-WAY | 90° | 24V DC |
| CY352PC | 3 WAY | 180° | 12V DC |
| CY342PC | 3 WAY | 180° | 24V DC |

ISO F03 / F05 connection

DICOM35

DICO05ADC



| CODE | DESCRIPTION |
|-----------|---|
| DICOM35 | ISO 5211 • ISO 5211 spacer |
| DICO05ADC | ISO 5211 • ISO 5211 spacer with opening lever |

ISO F03 / F04 / F05 connection

Accessories

Add the numbers and/or letters listed in the “ID” column corresponding to the selected accessories at the end of the base model code. Code example: CY252PCD

OPERATING TIMES



| ID | DESCRIPTION |
|----|-----------------------------------|
| D | 10 second version for 90° - 22 Nm |

Universal DC



i

ALL IN ONE: 2-POINT • 3-POINT / DIRECT CURRENT

- **TORQUE:** 40 Nm
- **OPERATING TIMES:** 20 sec 90°
- **CLASS PROTECTION:** IP67
- 2 EXTRA MICRO SWITCHES
- For DC versions with **MANUAL OVERRIDE** on the top, **PROPORTIONAL CONTROL** and **FAIL SAFE** see **UNIVERSAL PILOT** p. 56
- ISO 5211 F05 - F07 □ 11 - □ 14



| CODE | FOR BALL VALVE | | POWER SUPPLY |
|---------|----------------|------|--------------|
| UY252PC | 2- or 3-WAY | 90° | 12V DC |
| UY242PC | 2- or 3-WAY | 90° | 24V DC |
| UY352PC | 3 WAY | 180° | 12V DC |
| UY342PC | 3 WAY | 180° | 24V DC |

ISO F05 / F07 connection

DICOM57

DICO07ADC



| CODE | DESCRIPTION |
|-----------|---|
| DICOM57 | ISO 5211 • ISO 5211 spacer |
| DICO07ADC | ISO 5211 • ISO 5211 spacer with opening lever |

ISO F03 / F04 / F05 / F07 connection

Accessories

Add the numbers and/or letters listed in the “ID” column corresponding to the selected accessories at the end of the base model code. Code example: UY252PC7

OPERATING TIMES



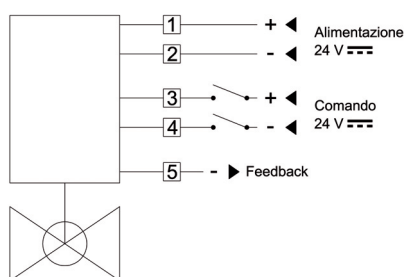
| ID | DESCRIPTION |
|----|-----------------------------------|
| 7 | 70 second version for 90° - 40 Nm |

**ON / OFF functioning • LIVESTOCK FARMS**

- **TORQUE:** 11 Nm
- **OPERATING TIMES:** 1,5 sec 90°
- **CLASS PROTECTION:** IP67
- **POWERED-ON FEEDBACK WITH OPEN VALVE**
- **ISO 5211 F03-F05** □ 9 - □ 11
- **THE ACTUATORS ARE SUPPLIED IN CLOSING POSITION**

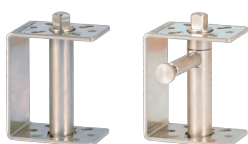


| CODE | FOR BALL VALVE | | POWER SUPPLY |
|---------|----------------|-----|--------------|
| DY242ZC | 2- or 3-WAY | 90° | 24V DC |

**ISO F03 / F05 connection**

DIDM01ISO

DIDM02ISO

**ISO F03 / F04 / F05 connection**

| CODE | DESCRIPTION |
|-----------|---|
| DIDM01ISO | ISO 5211 • ISO 5211 spacer |
| DIDM02ISO | ISO 5211 • ISO 5211 spacer with opening lever |

Accessories

POWER CABLE



| CODE | DESCRIPTION |
|-----------------|---|
| RFCAVZ00 | Cable with M12 female connector • 5 poles • 1,5m length |

BALL VALVE

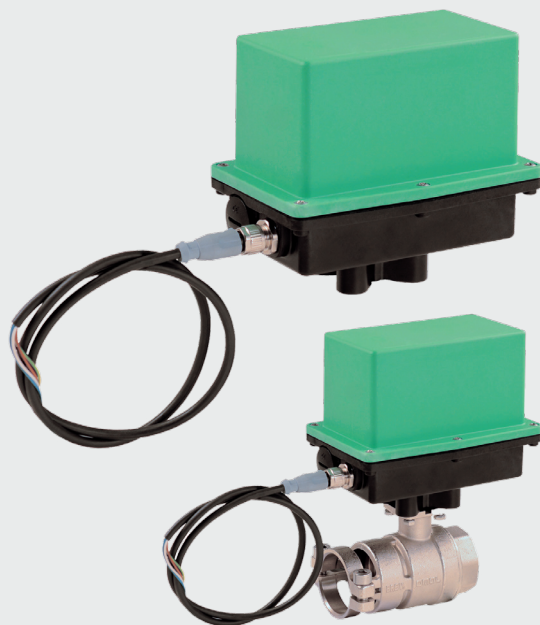


| CODE | DESCRIPTION |
|----------------|---|
| DC2D2Z5 | Brass ball valve DN32 with fast connection for LIVESTOCK FARMS |

LIVESTOCK farms

DIAMANT DC ZOOTECH

MOTORISED VALVE



- 24V DC power supply
- ON/OFF functioning ultra-fast - 1,5 sec.
- High starting torque - 14 Nm
- Specific electric control for power supply management systems
- Electrical connections via M12 connector or terminal block
- Integrated overload protection
- Position feedback via dry contacts or output phases for valve open and closed
- IP67 class protection
- External housing in technopolymer for aggressive environments
- Stainless steel external components
- Silicone seals
- ISO 5211 F03/F05 connection to the valve



Diamant CLIMA • Compact CLIMA



ELECTRONIC THERMOSTAT included

All applications in which the valve manoeuvring depends on **DETECTED TEMPERATURE**

- **OPERATING TIMES:**
DIAMANT CLIMA 35 SEC 90° - 11 Nm
COMPACT CLIMA 45 SEC 90° - 22 Nm
- **CLASS PROTECTION:** IP67
- **110V VERSION ON REQUEST**



| CODE | V | |
|---|------|------------|
| DIAMANT CLIMA • COMPARATO connection | | |
| CLIMA230D | 230V | 50 / 60 Hz |
| CLIMA24D | 24V | 50 / 60 Hz |

For SPACERS see p. 36



| CODE | V | |
|--|------|------------|
| DIAMANT CLIMA • ISO 5211 connection | | |
| CLIMA230DF | 230V | 50 / 60 Hz |
| CLIMA24DF | 24V | 50 / 60 Hz |

For SPACERS see p. 37



| CODE | V | |
|----------------------|------|------------|
| COMPACT CLIMA | | |
| CLIMA230C | 230V | 50 / 60 Hz |
| CLIMA24C | 24V | 50 / 60 Hz |

For SPACERS see p. 38

Accessories

Add the numbers and/or letters listed in the “ID” column corresponding to the selected accessories at the end of the base model code. Code example: CLIMA230D8

| ID | DESCRIPTION | NOTES |
|----------|-----------------------------------|------------------------------|
| 8 | Optional input / outlet cable | |
| K | Brass immersion temperature probe | G 1/8" - pocket not included |
| CODE | DESCRIPTION | |
| RFSONDAE | Brass immersion temperature probe | |

Diamant CRONO • Compact CRONO



PROGRAM CLOCK onboard

All applications in which the valve manoeuvring must be at **INTERVALS** or **SCHEDULED**

- **OPERATING TIMES:**
DIAMANT CRONO 35 SEC 90° - 11 Nm
COMPACT CRONO 45 SEC 90° - 22 Nm
- **CLASS PROTECTION:** IP67
- **110V VERSION ON REQUEST**



| CODE | V |
|--|-----------------|
| DIAMANT CRONO • COMPARATO connection • DAY version | |
| CRONO230DD | 230V 50 / 60 Hz |
| CRONO24DD | 24V 50 / 60 Hz |
| DIAMANT CRONO • COMPARATO connection • WEEK version | |
| CRONO230DW | 230V 50 / 60 Hz |
| CRONO24DW | 24V 50 / 60 Hz |

For SPACERS see p. 36



| CODE | V |
|---|-----------------|
| DIAMANT CRONO • ISO 5211 connection • DAY version | |
| CRONO230DDF | 230V 50 / 60 Hz |
| CRONO24DDF | 24V 50 / 60 Hz |
| DIAMANT CRONO • ISO 5211 connection • WEEK version | |
| CRONO230DWF | 230V 50 / 60 Hz |
| CRONO24DWF | 24V 50 / 60 Hz |

For SPACERS see p. 37



| CODE | V |
|-------------------------------------|-----------------|
| COMPACT CRONO • DAY version | |
| CRONO230CD | 230V 50 / 60 Hz |
| CRONO24CD | 24V 50 / 60 Hz |
| COMPACT CRONO • WEEK version | |
| CRONO230CW | 230V 50 / 60 Hz |
| CRONO24CW | 24V 50 / 60 Hz |

For SPACERS see p. 38

Diamant PILOT



i

TABLE for code configuration

- **TORQUE:** 11 Nm
- **CLASS PROTECTION:** IP67
- 2 EXTRA MICRO SWITCHES AND POSITIONING FEEDBACK 2-10V
- For version without manual opening please contact our Technical Department



| 0 DIAMANT PILOT | |
|--------------------------------------|------------------------------------|
| DP | Diamant PILOT |
| 1 CONTROL TYPE | |
| Y | 2 - 3 point ON-OFF |
| T | 3 positions 0° - 45° - 90° |
| S | 3 positions 0° - 90° - 180° |
| A | 0 - 20 mA |
| B | 4 - 20 mA |
| V | 0 - 10V |
| W | 2 - 10V |
| P | PWM1 |
| Q | PWM2 |
| 2 ROTATION ANGLE | |
| 2 * | 90° |
| 3 * | 180° |
| 3 POWER SUPPLY | |
| 2 | 100... 240V 50/60 Hz |
| 4 | 24V AC/DC |
| 5 ** | 12V DC |
| 4 CONNECTION TO THE BALL VALVE | |
| C | Comparato connection |
| F | ISO 5211 F03-F05 □9-□11 connection |
| 5 FAIL SAFE IN CASE OF POWER FAILURE | |
| A | opening position |
| C | closing position |
| I | intermediate position |
| 0 | not present |
| 6 EMERGENCY MANUAL OPENING | |
| A | present |
| 7 OPERATING TIME | |
| Q *** | 15 sec / 90° |
| T | 30 sec / 90° |
| S | 60 sec / 90° |
| C | 120 sec / 90° |
| 8 HEATING RESISTANCE | |
| R | present |
| 0 | not present |

* option n.2 is mandatory for the 3-position 0°-45°-90° control, option n.3 is mandatory for the 0°-90°-180° control

** not available with 15 sec operating time

*** not available with 12V DC power supply



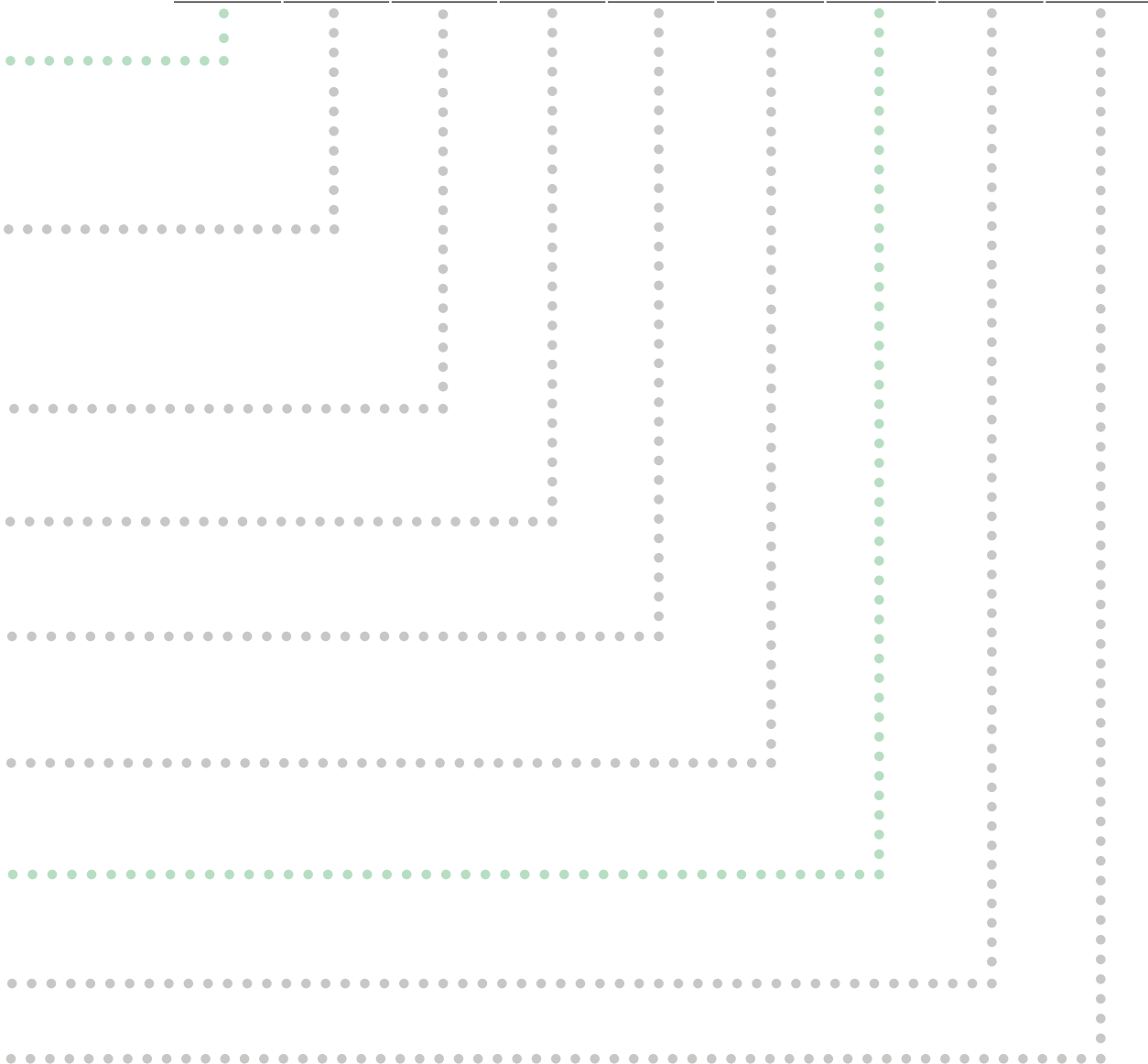
COMPARATO CONNECTION



ISO 5211 CONNECTION

CODE EXAMPLE

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|----|---|---|---|---|---|---|---|---|
| DP | W | 2 | 2 | F | C | A | S | R |



COMPARATO connection

ADSTD1



COMPARATO connection

DIDM01



COMPARATO connection

ISO F03/F04/F05 connection

ISO F03 / F05 connection

DIDM01ISO



ISO F03 / F04 / F05 connection

| CODE | DESCRIPTION |
|--------|------------------------------|
| ADSTD1 | COMPARATO • COMPARATO spacer |
| DIDM01 | COMPARATO • ISO 5211 spacer |

| CODE | DESCRIPTION |
|-----------|----------------------------|
| DIDM01ISO | ISO 5211 • ISO 5211 spacer |

Compact PILOT



i

TABLE for code configuration

- **TORQUE:** 22 Nm
- **CLASS PROTECTION:** IP67
- ISO 5211 F03 - F05 □9 - □11
- 2 EXTRA MICRO SWITCHES AND POSITIONING FEEDBACK 2-10V
- For version without manual opening please contact our Technical Department



| 0 COMPACT PILOT | |
|--------------------------------------|------------------------------------|
| CP | Compact PILOT |
| 1 CONTROL TYPE | |
| Y | 2 - 3 point ON-OFF |
| T | 3 positions 0° - 45° - 90° |
| S | 3 positions 0° - 90° - 180° |
| A | 0 - 20 mA |
| B | 4 - 20 mA |
| V | 0 - 10V |
| W | 2 - 10V |
| P | PWM1 |
| Q | PWM2 |
| 2 ROTATION ANGLE | |
| 2 * | 90° |
| 3 * | 180° |
| 3 POWER SUPPLY | |
| 2 | 100... 240V 50/60 Hz |
| 4 | 24V AC/DC |
| 5 ** | 12V DC |
| 4 CONNECTION TO THE BALL VALVE | |
| F | ISO 5211 F03-F05 □9-□11 connection |
| 5 FAIL SAFE IN CASE OF POWER FAILURE | |
| A | opening position |
| C | closing position |
| I | intermediate position |
| 0 | not present |
| 6 EMERGENCY MANUAL OPENING | |
| A | present |
| 7 OPERATING TIME | |
| Q *** | 15 sec / 90° |
| T | 30 sec / 90° |
| S | 60 sec / 90° |
| C | 120 sec / 90° |
| 8 HEATING RESISTANCE | |
| R | present |
| 0 | not present |

* option n.2 is mandatory for the 3-position 0°-45°-90° control, option n.3 is mandatory for the 0°-90°-180° control

** not available with 15 sec operating time

*** not available with 12V DC power supply



ISO 5211 • ISO 5211 spacer

Universal PILOT



TABLE for code configuration

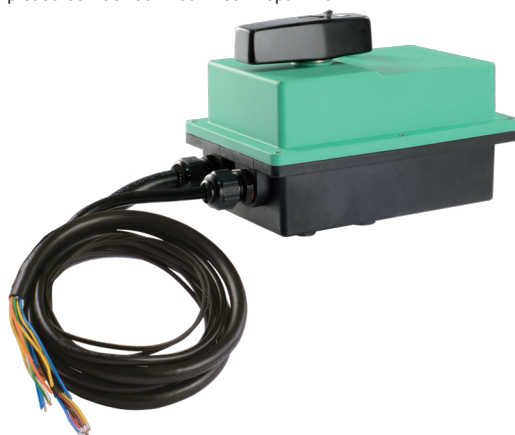
- **TORQUE:** 40 Nm
- **CLASS PROTECTION:** IP67
- ISO 5211 F05 - F07 □11 - □14
- 2 EXTRA MICRO SWITCHES AND POSITIONING FEEDBACK 2-10V
- For version without manual opening please contact our Technical Department



| 0 UNIVERSAL PILOT | |
|--------------------------------------|-------------------------------------|
| UP | Universal PILOT |
| 1 CONTROL TYPE | |
| Y | 2 - 3 point ON-OFF |
| T | 3 positions 0° - 45° - 90° |
| S | 3 positions 0° - 90° - 180° |
| A | 0 - 20 mA |
| B | 4 - 20 mA |
| V | 0 - 10V |
| W | 2 - 10V |
| P | PWM1 |
| Q | PWM2 |
| 2 ROTATION ANGLE | |
| 2 * | 90° |
| 3 * | 180° |
| 3 POWER SUPPLY | |
| 2 | 100... 240V 50/60 Hz |
| 4 | 24V AC/DC |
| 5 | 12V DC |
| 4 CONNECTION TO THE BALL VALVE | |
| F | ISO 5211 F05-F07 □11-□14 connection |
| 5 FAIL SAFE IN CASE OF POWER FAILURE | |
| A ** | opening position |
| C ** | closing position |
| I ** | intermediate position |
| 0 | not present |
| 6 EMERGENCY MANUAL OPENING | |
| A | present |
| 7 OPERATING TIME | |
| T | 30 sec / 90° |
| S | 60 sec / 90° |
| C | 120 sec / 90° |
| 8 HEATING RESISTANCE | |
| R | present |
| 0 | not present |

* option n.2 is mandatory for the 3-position 0°-45°-90° control, option n.3 is mandatory for the 0°-90°-180° control

** for Fail Safe with 180° rotation control, please contact our Technical Department



● ● ● ● ● ● ● ● ● ● ● ●

Diamant SMART PRO



i

TABLE for code configuration

- **TORQUE:** 11 Nm
- **CLASS PROTECTION:** IP67
- 2 EXTRA MICRO SWITCHES AND POSITIONING FEEDBACK 2-10V
- For version without manual opening please contact our Technical Department



| 0 DIAMANT SMART PRO | |
|--------------------------------------|---|
| DSP | Diamant SMART PRO |
| 1 ROTATION ANGLE | |
| 2 | 90° |
| 3 | 180° |
| 2 POWER SUPPLY | |
| 2 | 100... 240V 50/60 Hz |
| 4 | 12-24V AC/DC |
| 3 CONNECTION TO THE BALL VALVE | |
| C | Comparato connection |
| F | ISO 5211 F03-F05 <input type="checkbox"/> 9- <input type="checkbox"/> 11 connection |
| 4 COMMUNICATION TYPE | |
| M | Modbus |
| W | Wi-Fi |
| 5 FAIL SAFE IN CASE OF POWER FAILURE | |
| F | present |
| 0 | not present |
| 6 EMERGENCY MANUAL OPENING | |
| A | present |



FAIL SAFE FOCUS p. 64



Wi-Fi FOCUS p. 64



INTEGRATED WEB SERVER
NO APP NEEDED FOR THE CONNECTION

CODE EXAMPLE

| 0 | 1 | 2 | 3 | 4 | 5 | 6 |
|-----|---|---|---|---|---|---|
| DSP | 2 | 4 | F | M | F | A |



| CODE | DESCRIPTION |
|--------|------------------------------|
| ADSTD1 | COMPARATO • COMPARATO spacer |
| DIDM01 | COMPARATO • ISO 5211 spacer |



| CODE | DESCRIPTION |
|-----------|----------------------------|
| DIDM01ISO | ISO 5211 • ISO 5211 spacer |

Compact SMART PRO



i

TABLE for code configuration

- **TORQUE:** 22 Nm
- **CLASS PROTECTION:** IP67
- ISO 5211 F03 - F05 □9 - □11
- 2 EXTRA MICRO SWITCHES AND POSITIONING FEEDBACK 2-10V
- For version without manual opening please contact our Technical Department

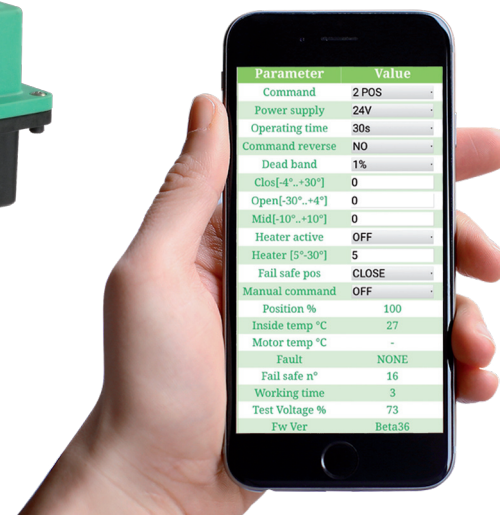


| 0 COMPACT SMART PRO | |
|--------------------------------------|------------------------------------|
| CSP | Compact SMART PRO |
| 1 ROTATION ANGLE | |
| 2 | 90° |
| 3 | 180° |
| 2 POWER SUPPLY | |
| 2 | 100... 240V 50/60 Hz |
| 4 | 12 - 24V AC/DC |
| 3 CONNECTION TO THE BALL VALVE | |
| F | ISO 5211 F03-F05 □9-□11 connection |
| 4 COMMUNICATION TYPE | |
| M | Modbus |
| W | Wi-Fi |
| 5 FAIL SAFE IN CASE OF POWER FAILURE | |
| F | present |
| 0 | not present |
| 6 EMERGENCY MANUAL OPENING | |
| A | present |

FAIL SAFE FOCUS p. 64



Wi-Fi FOCUS p. 64



INTEGRATED WEB SERVER
NO APP NEEDED FOR THE CONNECTION

DICOM35

Universal SMART PRO



i

TABLE for code configuration

- **COPPIA:** 40 Nm
- **GRADO DI PROTEZIONE:** IP67
- ISO 5211 F05 - F07 □11 - □14
- 2 EXTRA MICRO SWITCHES AND POSITIONING FEEDBACK 2-10V
- For version without manual opening please contact our Technical Department



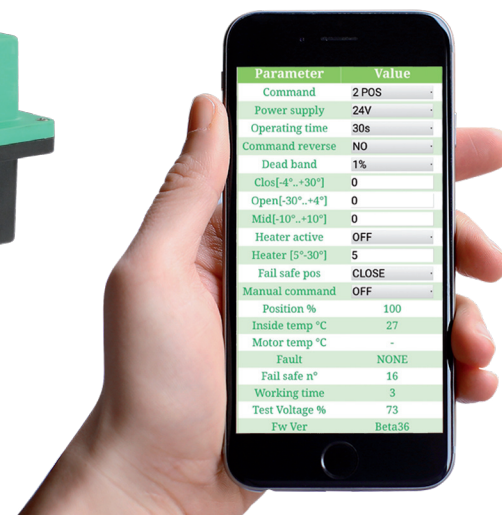
| 0 UNIVERSAL SMART PRO | |
|--------------------------------------|-------------------------------------|
| USP | Universal SMART PRO |
| 1 ROTATION ANGLE | |
| 2 | 90° |
| 3 | 180° |
| 2 POWER SUPPLY | |
| 2 | 100... 240V 50/60 Hz |
| 4 | 12 - 24V AC/DC |
| 3 CONNECTION TO THE BALL VALVE | |
| F | ISO 5211 F05-F07 □11-□14 connection |
| 4 COMMUNICATION TYPE | |
| M | Modbus |
| W | Wi-Fi |
| 5 FAIL SAFE IN CASE OF POWER FAILURE | |
| F * | present |
| 0 | not present |
| 6 EMERGENCY MANUAL OPENING | |
| A | present |

* for Fail Safe with 180° rotation control, please contact our Technical Department

FAIL SAFE FOCUS p. 64



Wi-Fi FOCUS p. 64



INTEGRATED WEB SERVER
NO APP NEEDED FOR THE CONNECTION

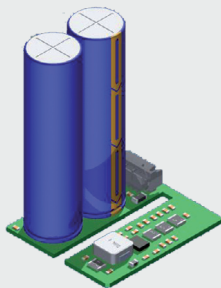
DICOM57



| CODE | DESCRIPTION |
|---------|----------------------------|
| DICOM57 | ISO 5211 • ISO 5211 spacer |

SMART PRO / PILOT

FAIL SAFE FOCUS



This system stores energy and then uses it to move the actuator in a “safe” position in case of power failure.



The supercapacitor technology ensures fast recharging times and reliability over time.



Thanks to a Wi-Fi or Modbus communication interface, you can select the safety position (open, closed, mid-position), check the charge status and display the number of times any power failure occurred.

SMART PRO

WI-FI FOCUS

INTEGRATED WEB SERVER
no APP needed for the connection

Functioning setup

Local control

Monitoring

Diagnostics



SMART PRO

COMPARATO CLOUD

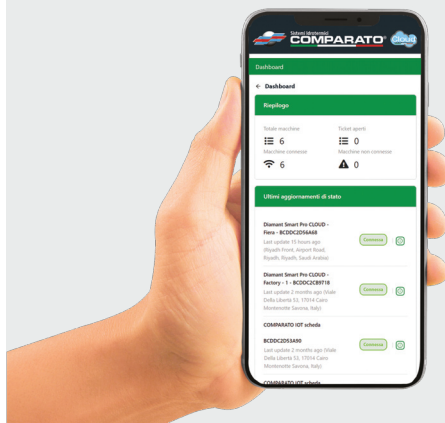
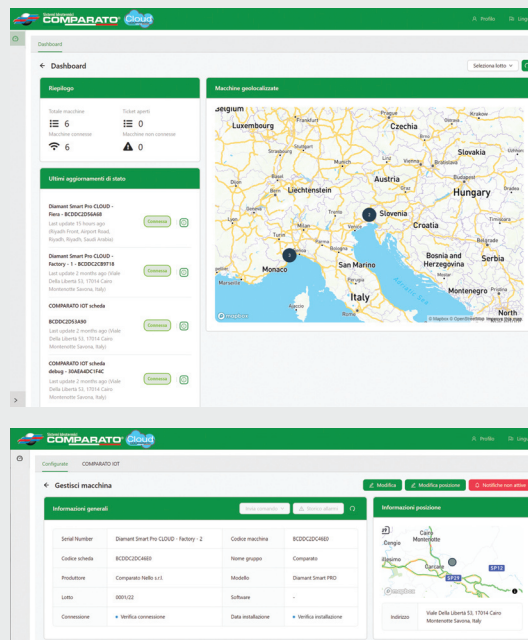
INNOVATIVE MANAGEMENT MADE IN COMPARATO

MULTIFUNCTIONAL SMART PRO ACTUATORS completely controlled thanks to **COMPARATO CLOUD**. The Wi-Fi gateway installed inside Smart PRO actuators allows the connection to any Wi-Fi or Ethernet network, creating a direct link between actuated valve and **COMPARATO CLOUD**.



DIAMANT SMART PRO CLOUD

COMPARATO CLOUD is a web platform designed for forwarding commands and for getting information from the connected actuated valves, and for processing data to make it available for the user, creating an advanced IoT infrastructure for remote management.



Diamant PRO • COMPARATO connection



i

2-WAY MM, full bore

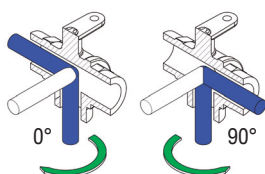


| CODE | CONNECTION | | DN | PN | Kv _s | |
|--------|------------|-----|----|----|-----------------|--|
| DC2A2A | 1/2" | 90° | 15 | 16 | 16,3 | |
| DC2B2A | 3/4" | 90° | 20 | 16 | 29,5 | |
| DC2C2A | 1" | 90° | 25 | 16 | 43 | |

90° ROTATION 3-HOLE BALL • 3-WAY MMM MIXING / DIVERTING, full bore



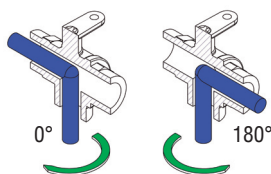
| CODE | CONNECTION | | DN | PN | Kv _s | |
|--------|------------|-----|----|----|-----------------|--|
| DC3B3A | 3/4" | 90° | 20 | 16 | 11,5 | |
| DC3C3A | 1" | 90° | 25 | 16 | 18,3 | |

3-hole version to be combined with the **90°** version actuator

180° ROTATION 2-HOLE BALL • 3-WAY MMM DIVERTING, full bore



| CODE | CONNECTION | | DN | PN | Kv _s | |
|--------|------------|------|----|----|-----------------|--|
| DC3B2A | 3/4" | 180° | 20 | 16 | 11,5 | |
| DC3C2A | 1" | 180° | 25 | 16 | 18,3 | |

2-hole version to be combined with the **180°** version actuator

P20 Range • ISO 5211 connection



i

2-WAY FF, full bore



| CODE | CONNECTION | | DN | PN | Kv _s | |
|------------------------------------|------------|-----|----|----|-----------------|--|
| DIAMANT series ISO 5211 connection | | | | | | |
| DC2S2P5 | 1/4" | 90° | - | 40 | 5,4 | |
| DC2R2P5 | 3/8" | 90° | 10 | 40 | 6 | |
| DC2A2P5 | 1/2" | 90° | 15 | 40 | 16,3 | |
| DC2B2P5 | 3/4" | 90° | 20 | 40 | 29,5 | |
| DC2C2P5 | 1" | 90° | 25 | 40 | 43 | |
| DC2D2P5 | 1"1/4 * | 90° | 32 | 40 | 89 | |

* maximum differential pressure 25 bar, for 40 bar please see Compact series
TO BE MOTORISED WITH 11 Nm ACTUATORS

| CODE | CONNECTION | | DN | PN | Kv _s | |
|----------------|------------|-----|----|----|-----------------|--|
| COMPACT series | | | | | | |
| DC2D2P5 | 1"1/4 | 90° | 32 | 40 | 89 | |
| UC2E2M5 | 1"1/2 | 90° | 40 | 40 | 230 | |
| UC2F2M5 | 2" ** | 90° | 50 | 40 | 265 | |

** maximum differential pressure 25 bar, for 40 bar please see Universal series

| CODE | CONNECTION | | DN | PN | Kv _s | |
|------------------|------------|-----|-----|----|-----------------|--|
| UNIVERSAL series | | | | | | |
| UC2F2M5 | 2" | 90° | 50 | 40 | 265 | |
| UC2G2M5 | 2"1/2 | 90° | 65 | 25 | 540 | |
| UC2H2M5 | 3" | 90° | 80 | 16 | 873 | |
| UC2I2M5 | 4" *** | 90° | 100 | 16 | 1.390 | |

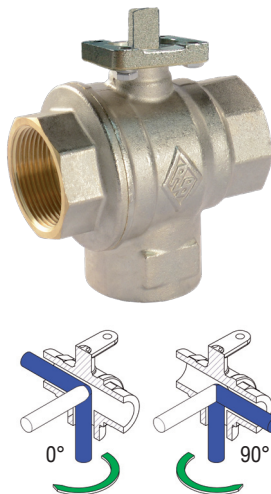
*** maximum differential pressure 6 bar

P20 Range • ISO 5211 connection



i

90° ROTATION 3-HOLE BALL • 3-WAY FFF MIXING / DIVERTING, full bore



| CODE | CONNECTION | | DN | PN | Kv _s | |
|---|------------|-----|----|----|-----------------|--|
| DIAMANT series ISO 5211 connection | | | | | | |
| DC3A3E5 | 1/2" | 90° | 15 | 25 | 6 | |
| DC3B3E5 | 3/4" | 90° | 20 | 16 | 11,5 | |
| DC3C3E5 | 1" * | 90° | 25 | 16 | 18,3 | |

* maximum differential pressure 25 bar, for 40 bar please see Compact series
TO BE MOTORISED WITH 11 Nm ACTUATORS

| CODE | CONNECTION | | DN | PN | Kv _s | |
|-----------------------|------------|-----|----|----|-----------------|--|
| COMPACT series | | | | | | |
| DC3C3E5 | 1" | 90° | 25 | 16 | 18,3 | |
| UC3D3E5 | 1"1/4 | 90° | 32 | 10 | 27,2 | |
| UC3E3E5 | 1"1/2 ** | 90° | 40 | 10 | 47,3 | |

** maximum differential pressure 6 bar, for 10 bar please see Universal series

| CODE | CONNECTION | | DN | PN | Kv _s | |
|-------------------------|------------|-----|----|----|-----------------|--|
| UNIVERSAL series | | | | | | |
| UC3E3E5 | 1"1/2 | 90° | 40 | 10 | 47,3 | |
| UC3F3E5 | 2" | 90° | 50 | 10 | 73 | |

180° ROTATION 2-HOLE BALL • 3-WAY FFF DIVERTING, full bore



| CODE | CONNECTION | | DN | PN | Kv _s | |
|---|------------|------|----|----|-----------------|--|
| DIAMANT series ISO 5211 connection | | | | | | |
| DC3A2E5 | 1/2" | 180° | 15 | 25 | 6 | |
| DC3B2E5 | 3/4" | 180° | 20 | 16 | 11,5 | |
| DC3C2E5 | 1" * | 180° | 25 | 16 | 18,3 | |

* maximum differential pressure 25 bar, for 40 bar please see Compact series
TO BE MOTORISED WITH 11 Nm ACTUATORS

| CODE | CONNECTION | | DN | PN | Kv _s | |
|-----------------------|------------|------|----|----|-----------------|--|
| COMPACT series | | | | | | |
| DC3C2E5 | 1" | 180° | 25 | 16 | 18,3 | |
| UC3D2E5 | 1"1/4 | 180° | 32 | 10 | 27,2 | |
| UC3E2E5 | 1"1/2 ** | 180° | 40 | 10 | 47,3 | |

** maximum differential pressure 6 bar, for 10 bar please see Universal series

| CODE | CONNECTION | | DN | PN | Kv _s | |
|-------------------------|------------|------|----|----|-----------------|--|
| UNIVERSAL series | | | | | | |
| UC3E2E5 | 1"1/2 | 180° | 40 | 10 | 47,3 | |
| UC3F2E5 | 2" | 180° | 50 | 10 | 73 | |

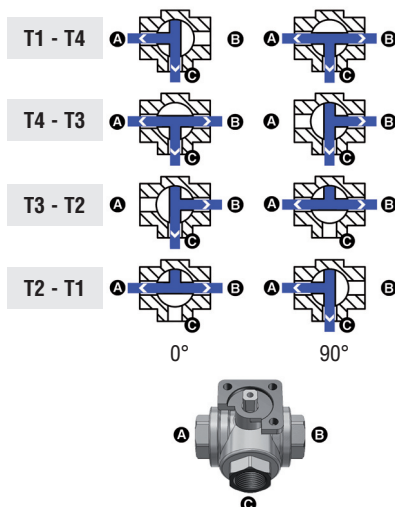
P20 Range • ISO 5211 connection



"T"-PORT • 3-WAY FFF DIVERTER, full bore



BALL POSITIONING



| CODE | CONNECTION | | DN | PN | Kv _s | |
|---|------------|-----|----|----|-----------------|--|
| DIAMANT series ISO 5211 connection | | | | | | |
| DC3S6E5 | 1/4" | 90° | - | 30 | 2,8 | |
| DC3R6E5 | 3/8" | 90° | 10 | 30 | 3 | |
| DC3A6E5 | 1/2" | 90° | 15 | 30 | 3,9 | |
| DC3B6E5 | 3/4" * | 90° | 20 | 30 | 7,9 | |

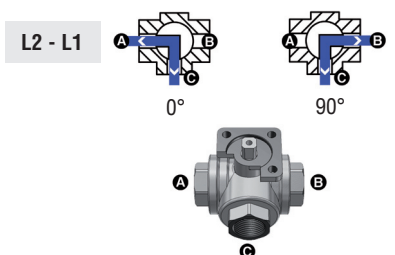
* maximum differential pressure 25 bar, for 40 bar please see Compact series
TO BE MOTORISED WITH 11 Nm ACTUATORS

| CODE | CONNECTION | | DN | PN | Kv _s | |
|-----------------------|------------|-----|----|----|-----------------|--|
| COMPACT series | | | | | | |
| DC3B6E5 | 3/4" | 90° | 20 | 30 | 7,9 | |
| UC3C6E5 | 1" | 90° | 25 | 16 | 13 | |
| UC3D6E5 | 1"1/4 ** | 90° | 32 | 10 | 20,7 | |

** maximum differential pressure 6 bar, for 10 bar please see Universal series

| CODE | CONNECTION | | DN | PN | Kv _s | |
|-------------------------|------------|-----|----|----|-----------------|--|
| UNIVERSAL series | | | | | | |
| UC3D6E5 | 1"1/4 | 90° | 32 | 10 | 20,7 | |
| UC3E6E5 | 1"1/2 | 90° | 40 | 10 | 38,7 | |
| UC3F6E5 | 2" | 90° | 50 | 10 | 54 | |

"L"-PORT • 3-WAY FFF DIVERTER, full bore



| CODE | CONNECTION | | DN | PN | Kv _s | |
|---|------------|-----|----|----|-----------------|--|
| DIAMANT series ISO 5211 connection | | | | | | |
| DC3S5E5 | 1/4" | 90° | - | 30 | 2,8 | |
| DC3R5E5 | 3/8" | 90° | 10 | 30 | 3 | |
| DC3A5E5 | 1/2" | 90° | 15 | 30 | 3,9 | |
| DC3B5E5 | 3/4" * | 90° | 20 | 30 | 7,9 | |

* maximum differential pressure 25 bar, for 40 bar please see Compact series
TO BE MOTORISED WITH 11 Nm ACTUATORS

| CODE | CONNECTION | | DN | PN | Kv _s | |
|-----------------------|------------|-----|----|----|-----------------|--|
| COMPACT series | | | | | | |
| DC3B5E5 | 3/4" | 90° | 20 | 30 | 7,9 | |
| UC3C5E5 | 1" | 90° | 25 | 16 | 13 | |
| UC3D5E5 | 1"1/4 ** | 90° | 32 | 10 | 20,7 | |

** maximum differential pressure 6 bar, for 10 bar please see Universal series

| CODE | CONNECTION | | DN | PN | Kv _s | |
|-------------------------|------------|-----|----|----|-----------------|--|
| UNIVERSAL series | | | | | | |
| UC3D5E5 | 1"1/4 | 90° | 32 | 10 | 20,7 | |
| UC3E5E5 | 1"1/2 | 90° | 40 | 10 | 38,7 | |
| UC3F5E5 | 2" | 90° | 50 | 10 | 54 | |

**2-WAY FF, full bore**

| CODE | CONNECTION | | DN | PN | Kv _s | |
|---|------------|-----|----|----|-----------------|--|
| DIAMANT series ISO 5211 connection | | | | | | |
| DC2A2B | 1/2" | 90° | 15 | 64 | 19,2 | |
| DC2B2B | 3/4" | 90° | 20 | 64 | 35 | |
| DC2C2B | 1" * | 90° | 25 | 64 | 64,5 | |

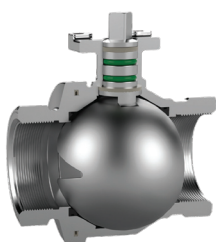
* maximum differential pressure 25 bar, for 64 bar please see Compact series
TO BE MOTORIZED WITH 11 Nm ACTUATORS

| CODE | CONNECTION | | DN | PN | Kv _s | |
|-----------------------|------------|-----|----|----|-----------------|--|
| COMPACT series | | | | | | |
| DC2C2B | 1" | 90° | 25 | 64 | 64,5 | |
| UC2D2B5 | 1"1/4 | 90° | 32 | 64 | 103,8 | |
| UC2E2B5 | 1"1/2 ** | 90° | 40 | 64 | 174 | |

** maximum differential pressure 40 bar, for 64 bar please see Universal series

| CODE | CONNECTION | | DN | PN | Kv _s | |
|-------------------------|------------|-----|----|----|-----------------|--|
| UNIVERSAL series | | | | | | |
| UC2E2B5 | 1"1/2 | 90° | 40 | 64 | 174 | |
| UC2F2B5 | 2" *** | 90° | 50 | 64 | 301,3 | |

*** maximum differential pressure 25 bar

FLOW CONTROL version, on request**V-BALL**

Valves with a 'V' port are suitable for liquids, gases, and steam

The V-BALL shape transforms a standard ON-OFF ball valve into a CONTROL valve.

FOR FURTHER INFORMATION PLEASE CONTACT OUR TECHNICAL DEPARTMENT

+39 019 510.371 • info@comparato.com

STEAM version, on request

AVAILABLE FOR SYSTEMS WITH STEAM TEMPERATURES UP TO 175°C

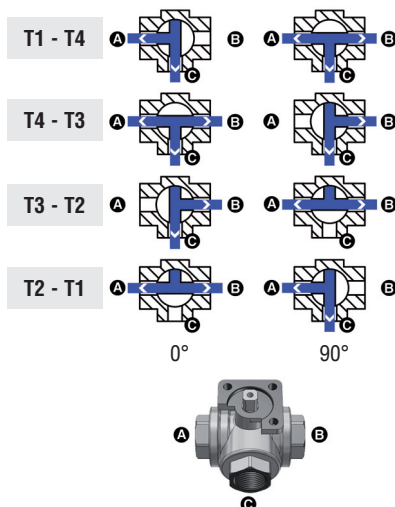
AND 9 bar MAXIMUM PRESSURE

FOR FURTHER INFORMATION PLEASE CONTACT OUR TECHNICAL DEPARTMENT

+39 019 510.371 • info@comparato.com

**"T"-PORT • 3-WAY FFF DIVERTER**, reduced bore

BALL POSITIONING



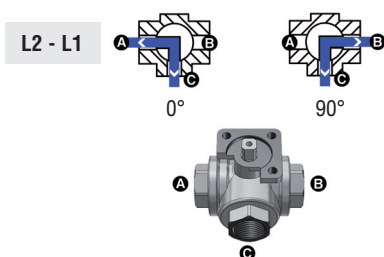
| CODE | CONNECTION | | DN | PN | Kv _s | |
|---|------------|-----|----|----|-----------------|--|
| DIAMANT series ISO 5211 connection | | | | | | |
| DC3S6B5 | 1/4" | 90° | - | 64 | 4 | |
| DC3R6B5 | 3/8" | 90° | 10 | 64 | 4 | |
| DC3A6B5 | 1/2" * | 90° | 15 | 64 | 5,2 | |

* maximum differential pressure 25 bar, for 64 bar please see Compact series
TO BE MOTORISED WITH 11 Nm ACTUATORS

| CODE | CONNECTION | | DN | PN | Kv _s | |
|-----------------------|------------|-----|----|----|-----------------|--|
| COMPACT series | | | | | | |
| DC3A6B5 | 1/2" | 90° | 15 | 64 | 5,2 | |
| UC3B6B5 | 3/4" | 90° | 20 | 64 | 8,4 | |
| UC3C6B5 | 1" ** | 90° | 25 | 64 | 12 | |

** maximum differential pressure 40 bar, for 64 bar please see Universal series

| CODE | CONNECTION | | DN | PN | Kv _s | |
|-------------------------|------------|-----|----|----|-----------------|--|
| UNIVERSAL series | | | | | | |
| UC3C6B5 | 1" | 90° | 25 | 64 | 12 | |
| UC3D6B5 | 1"1/4 | 90° | 32 | 64 | 19 | |

"L"-PORT • 3-WAY FFF DIVERTER, reduced bore

| CODE | CONNECTION | | DN | PN | Kv _s | |
|---|------------|-----|----|----|-----------------|--|
| DIAMANT series ISO 5211 connection | | | | | | |
| DC3S5B5 | 1/4" | 90° | - | 64 | 4 | |
| DC3R5B5 | 3/8" | 90° | 10 | 64 | 4 | |
| DC3A5B5 | 1/2" * | 90° | 15 | 64 | 5,2 | |

* maximum differential pressure 25 bar, for 64 bar please see Compact series
TO BE MOTORISED WITH 11 Nm ACTUATORS

| CODE | CONNECTION | | DN | PN | Kv _s | |
|-----------------------|------------|-----|----|----|-----------------|--|
| COMPACT series | | | | | | |
| DC3A5B5 | 1/2" | 90° | 15 | 64 | 5,2 | |
| UC3B5B5 | 3/4" | 90° | 20 | 64 | 8,4 | |
| UC3C5B5 | 1" ** | 90° | 25 | 64 | 12 | |

** maximum differential pressure 40 bar, for 64 bar please see Universal series

| CODE | CONNECTION | | DN | PN | Kv _s | |
|-------------------------|------------|-----|----|----|-----------------|--|
| UNIVERSAL series | | | | | | |
| UC3C5B5 | 1" | 90° | 25 | 64 | 12 | |
| UC3D5B5 | 1"1/4 | 90° | 32 | 64 | 19 | |



2-WAY with connection kit, full bore



| CODE | CONNECTION | | DN | PN | Kv _s | |
|--|---------------|-----|----|----|-----------------|--|
| DIAMANT series COMPARATO connection • FF THREADED connections | | | | | | |
| DC2R2C3D3 | 3/8" | 90° | 10 | 16 | 4,8 | |
| DC2A2C3D3 | 1/2" | 90° | 15 | 16 | 12 | |
| DC2B2C3D3 | 3/4" | 90° | 20 | 16 | 23 | |
| DC2C2C3D3 | 1" | 90° | 25 | 16 | 46 | |
| DC2D2C3D3 | 1"1/4 | 90° | 32 | 16 | 66 | |
| DC2E2C3D3 | 1"1/2" * | 90° | 40 | 16 | 105 | |
| DIAMANT series COMPARATO connection • TO BE GLUED connections | | | | | | |
| DC2R2C4D3 | 16 (3/8") | 90° | 10 | 16 | 4,8 | |
| DC2A2C4D3 | 20 (1/2") | 90° | 15 | 16 | 12 | |
| DC2B2C4D3 | 25 (3/4") | 90° | 20 | 16 | 23 | |
| DC2C2C4D3 | 32 (1") | 90° | 25 | 16 | 46 | |
| DC2D2C4D3 | 40 (1"1/4) | 90° | 32 | 16 | 66 | |
| DC2E2C4D3 | 50 (1"1/2") * | 90° | 40 | 16 | 105 | |

* maximum differential pressure 10 bar, for 16 bar please see Compact series
TO BE MOTORIZED WITH 11 Nm ACTUATORS

| CODE | CONNECTION | | DN | PN | Kv _s | |
|---|------------|-----|----|----|-----------------|--|
| COMPACT series • FF THREADED connections | | | | | | |
| UC2E2C3D3 | 1"1/2 | 90° | 40 | 16 | 105 | |
| UC2F2C3D3 | 2" ** | 90° | 50 | 16 | 204 | |
| COMPACT series • TO BE GLUED connections | | | | | | |
| UC2E2C4D3 | 50 (1"1/2) | 90° | 40 | 16 | 105 | |
| UC2F2C4D3 | 63 (2") ** | 90° | 50 | 16 | 204 | |

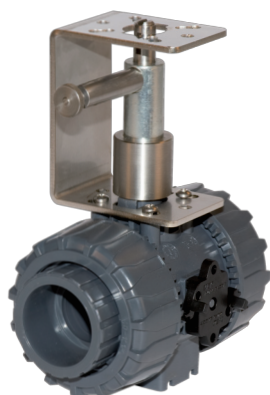
** maximum differential pressure 10 bar, for 16 bar please see Universal series

| CODE | CONNECTION | | DN | PN | Kv _s | |
|---|-------------|-----|----|----|-----------------|--|
| UNIVERSAL series • FF THREADED connections | | | | | | |
| UC2F2C3D3 | 2" | 90° | 50 | 16 | 204 | |
| UC2G2C3D3 | 2"1/2 | 90° | 65 | 16 | 315 | |
| UC2H2C3D3 | 3" *** | 90° | 80 | 16 | 426 | |
| UNIVERSAL series • TO BE GLUED connections | | | | | | |
| UC2F2C4D3 | 63 (2") | 90° | 50 | 16 | 204 | |
| UC2G2C4D3 | 75 (2"1/2) | 90° | 65 | 16 | 315 | |
| UC2H2C4D3 | 90 (3") *** | 90° | 80 | 16 | 426 | |

*** maximum differential pressure 10 bar



2-WAY with spacer and emergency manual override, full bore



| CODE | CONNECTION | | DN | PN | Kv _s | |
|--|---------------|-----|----|----|-----------------|--|
| DIAMANT series COMPARATO connection • FF THREADED | | | | | | |
| DC2R2C3D4 | 3/8" | 90° | 10 | 16 | 4,8 | |
| DC2A2C3D4 | 1/2" | 90° | 15 | 16 | 12 | |
| DC2B2C3D4 | 3/4" | 90° | 20 | 16 | 23 | |
| DC2C2C3D4 | 1" | 90° | 25 | 16 | 46 | |
| DC2D2C3D4 | 1"1/4 | 90° | 32 | 16 | 66 | |
| DC2E2C3D4 | 1"1/2" * | 90° | 40 | 16 | 105 | |
| DIAMANT series COMPARATO connection • TO BE GLUED | | | | | | |
| DC2R2C4D4 | 16 (3/8") | 90° | 10 | 16 | 4,8 | |
| DC2A2C4D4 | 20 (1/2") | 90° | 15 | 16 | 12 | |
| DC2B2C4D4 | 25 (3/4") | 90° | 20 | 16 | 23 | |
| DC2C2C4D4 | 32 (1") | 90° | 25 | 16 | 46 | |
| DC2D2C4D4 | 40 (1"1/4) | 90° | 32 | 16 | 66 | |
| DC2E2C4D4 | 50 (1"1/2") * | 90° | 40 | 16 | 105 | |

* maximum differential pressure 10 bar, for 16 bar please see Compact series
TO BE MOTORISED WITH 11 Nm ACTUATORS
IT CANNOT BE MOTORISED WITH ACTUATOR EQUIPPED WITH MANUAL OVERRIDE

| CODE | CONNECTION | | DN | PN | Kv _s | |
|-------------------------------------|------------|-----|----|----|-----------------|--|
| COMPACT series • FF THREADED | | | | | | |
| UC2E2C3D4 | 1"1/2 | 90° | 40 | 16 | 105 | |
| UC2F2C3D4 | 2" ** | 90° | 50 | 16 | 204 | |
| COMPACT series • TO BE GLUED | | | | | | |
| UC2E2C4D4 | 50 (1"1/2) | 90° | 40 | 16 | 105 | |
| UC2F2C4D4 | 63 (2") ** | 90° | 50 | 16 | 204 | |

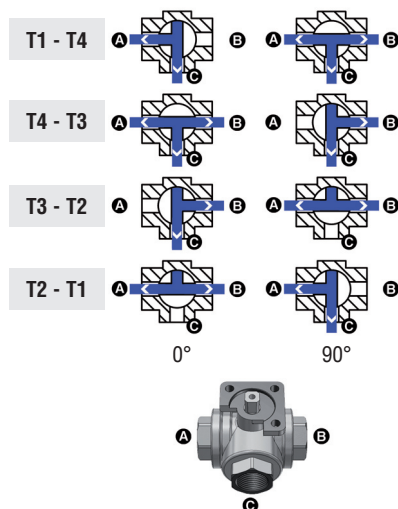
** maximum differential pressure 10 bar, for 16 bar please see Universal series
IT CANNOT BE MOTORISED WITH ACTUATOR EQUIPPED WITH MANUAL OVERRIDE

| CODE | CONNECTION | | DN | PN | Kv _s | |
|---------------------------------------|-------------|-----|----|----|-----------------|--|
| UNIVERSAL series • FF THREADED | | | | | | |
| UC2F2C3D4 | 2" | 90° | 50 | 16 | 204 | |
| UC2G2C3D4 | 2"1/2 | 90° | 65 | 16 | 315 | |
| UC2H2C3D4 | 3" *** | 90° | 80 | 16 | 426 | |
| UNIVERSAL series • TO BE GLUED | | | | | | |
| UC2F2C4D4 | 63 (2") | 90° | 50 | 16 | 204 | |
| UC2G2C4D4 | 75 (2"1/2) | 90° | 65 | 16 | 315 | |
| UC2H2C4D4 | 90 (3") *** | 90° | 80 | 16 | 426 | |

*** maximum differential pressure 10 bar
IT CANNOT BE MOTORISED WITH ACTUATOR EQUIPPED WITH MANUAL OVERRIDE

**"T"-PORT • 3-WAY with connection kit, full bore**

BALL POSITIONING



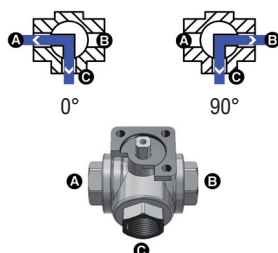
| CODE | CONNECTION | | DN | PN | Kv _s | |
|--|--------------|-----|----|----|-----------------|--|
| DIAMANT series COMPARATO connection • FF THREADED | | | | | | |
| DC3R6C3D3 | 3/8" | 90° | 10 | 16 | 2,2 | |
| DC3A6C3D3 | 1/2" | 90° | 15 | 16 | 3,3 | |
| DC3B6C3D3 | 3/4" | 90° | 20 | 16 | 8,1 | |
| DC3C6C3D3 | 1" | 90° | 25 | 16 | 12,3 | |
| DC3D6C3D3 | 1"1/4 | 90° | 32 | 16 | 23,4 | |
| DC3E6C3D3 | 1"1/2 * | 90° | 40 | 16 | 28,5 | |
| DIAMANT series COMPARATO connection • TO BE GLUED | | | | | | |
| DC3R6C4D3 | 16 (3/8") | 90° | 10 | 16 | 2,2 | |
| DC3A6C4D3 | 20 (1/2") | 90° | 15 | 16 | 3,3 | |
| DC3B6C4D3 | 25 (3/4") | 90° | 20 | 16 | 8,1 | |
| DC3C6C4D3 | 32 (1") | 90° | 25 | 16 | 12,3 | |
| DC3D6C4D3 | 40 (1"1/4) | 90° | 32 | 16 | 23,4 | |
| DC3E6C4D3 | 50 (1"1/2) * | 90° | 40 | 16 | 28,5 | |

* maximum differential pressure 10 bar, for 16 bar please see Compact series
TO BE MOTORISED WITH 11 Nm ACTUATORS

| CODE | CONNECTION | | DN | PN | Kv _s | |
|-------------------------------------|------------|-----|----|----|-----------------|--|
| COMPACT series • FF THREADED | | | | | | |
| UC3E6C3D3 | 1"1/2 | 90° | 40 | 16 | 28,5 | |
| UC3F6C3D3 | 2" | 90° | 50 | 16 | 54 | |
| COMPACT series • TO BE GLUED | | | | | | |
| UC3E6C4D3 | 50 (1"1/2) | 90° | 40 | 16 | 28,5 | |
| UC3F6C4D3 | 63 (2") | 90° | 50 | 16 | 54 | |

**"L"-PORT • 3-WAY with connection kit, full bore**

L2 - L1



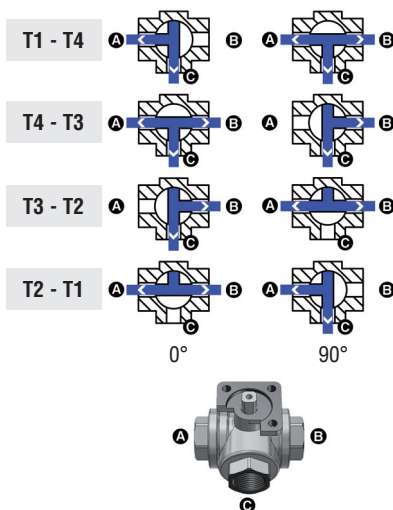
| CODE | CONNECTION | | DN | PN | Kv _s | |
|--|---------------|-----|----|----|-----------------|--|
| DIAMANT series COMPARATO connection • FF THREADED | | | | | | |
| DC3R5C3D3 | 3/8" | 90° | 10 | 16 | 2,9 | |
| DC3A5C3D3 | 1/2" | 90° | 15 | 16 | 4,4 | |
| DC3B5C3D3 | 3/4" | 90° | 20 | 16 | 9 | |
| DC3C5C3D3 | 1" | 90° | 25 | 16 | 16 | |
| DC3D5C3D3 | 1"1/4 | 90° | 32 | 16 | 28,5 | |
| DC3E5C3D3 | 1"1/2 ** | 90° | 40 | 16 | 37,2 | |
| DIAMANT series COMPARATO connection • TO BE GLUED | | | | | | |
| DC3R5C4D3 | 16 (3/8") | 90° | 10 | 16 | 2,9 | |
| DC3A5C4D3 | 20 (1/2") | 90° | 15 | 16 | 4,4 | |
| DC3B5C4D3 | 25 (3/4") | 90° | 20 | 16 | 9 | |
| DC3C5C4D3 | 32 (1") | 90° | 25 | 16 | 16 | |
| DC3D5C4D3 | 40 (1"1/4) | 90° | 32 | 16 | 28,5 | |
| DC3E5C4D3 | 50 (1"1/2) ** | 90° | 40 | 16 | 37,2 | |

* maximum differential pressure 10 bar, for 16 bar please see Compact series
TO BE MOTORISED WITH 11 Nm ACTUATORS

| CODE | CONNECTION | | DN | PN | Kv _s | |
|-------------------------------------|------------|-----|----|----|-----------------|--|
| COMPACT series • FF THREADED | | | | | | |
| UC3E5C3D3 | 1"1/2 | 90° | 40 | 16 | 37,2 | |
| UC3F5C3D3 | 2" | 90° | 50 | 16 | 73,2 | |
| COMPACT series • TO BE GLUED | | | | | | |
| UC3E5C4D3 | 50 (1"1/2) | 90° | 40 | 16 | 37,2 | |
| UC3F5C4D3 | 63 (2") | 90° | 50 | 16 | 73,2 | |

**"T"-PORT • 3-WAY with spacer and emergency manual override, full bore**

BALL POSITIONING



| CODE | CONNECTION | | DN | PN | Kv _s | |
|--|--------------|-----|----|----|-----------------|--|
| DIAMANT series COMPARATO connection • FF THREADED | | | | | | |
| DC3R6C3D4 | 3/8" | 90° | 10 | 16 | 2,2 | |
| DC3A6C3D4 | 1/2" | 90° | 15 | 16 | 3,3 | |
| DC3B6C3D4 | 3/4" | 90° | 20 | 16 | 8,1 | |
| DC3C6C3D4 | 1" | 90° | 25 | 16 | 12,3 | |
| DC3D6C3D4 | 1"1/4 | 90° | 32 | 16 | 23,4 | |
| DC3E6C3D4 | 1"1/2 * | 90° | 40 | 16 | 28,5 | |
| DIAMANT series COMPARATO connection • TO BE GLUED | | | | | | |
| DC3R6C4D4 | 16 (3/8") | 90° | 10 | 16 | 2,2 | |
| DC3A6C4D4 | 20 (1/2") | 90° | 15 | 16 | 3,3 | |
| DC3B6C4D4 | 25 (3/4") | 90° | 20 | 16 | 8,1 | |
| DC3C6C4D4 | 32 (1") | 90° | 25 | 16 | 12,3 | |
| DC3D6C4D4 | 40 (1"1/4) | 90° | 32 | 16 | 23,4 | |
| DC3E6C4D4 | 50 (1"1/2) * | 90° | 40 | 16 | 28,5 | |

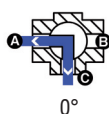
* maximum differential pressure 10 bar, for 16 bar please see Compact series
 TO BE MOTORISED WITH 11 Nm ACTUATORS
 IT CANNOT BE MOTORISED WITH ACTUATOR EQUIPPED WITH MANUAL OVERRIDE

| CODE | CONNECTION | | DN | PN | Kv _s | |
|-------------------------------------|------------|-----|----|----|-----------------|--|
| COMPACT series • FF THREADED | | | | | | |
| UC3E6C3D4 | 1"1/2 | 90° | 40 | 16 | 28,5 | |
| UC3F6C3D4 | 2" | 90° | 50 | 16 | 54 | |
| COMPACT series • TO BE GLUED | | | | | | |
| UC3E6C4D4 | 50 (1"1/2) | 90° | 40 | 16 | 28,5 | |
| UC3F6C4D4 | 63 (2") | 90° | 50 | 16 | 54 | |

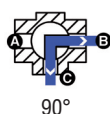
IT CANNOT BE MOTORISED WITH ACTUATOR EQUIPPED WITH MANUAL OVERRIDE

**"L"-PORT • 3-WAY with spacer and emergency manual override, full bore**

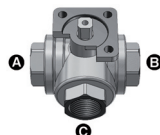
L2 - L1



0°



90°



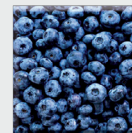
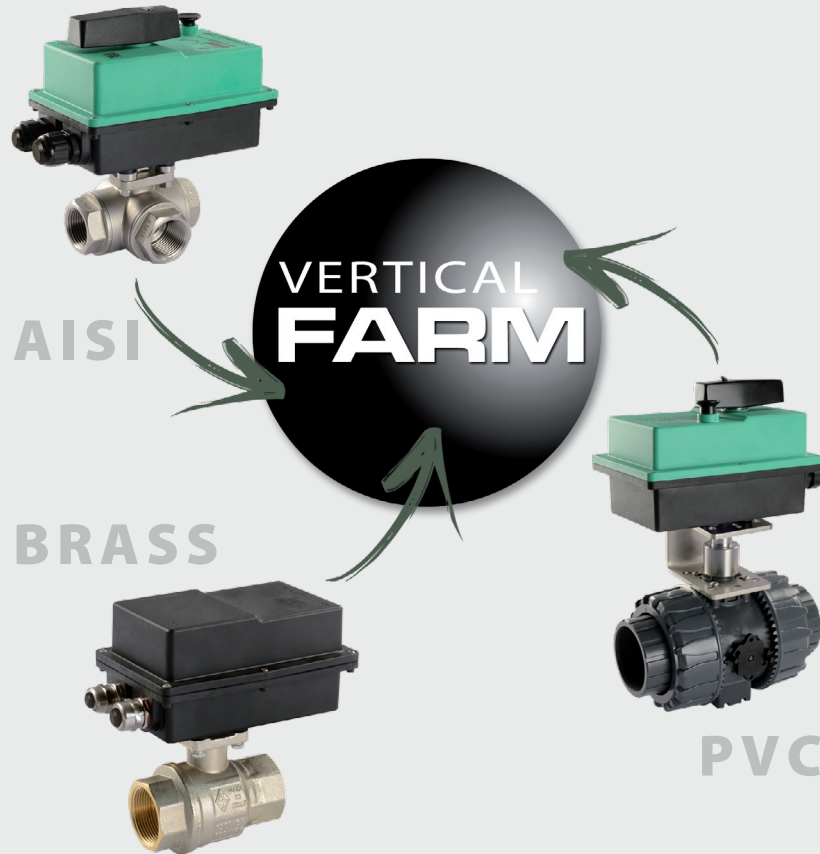
| CODE | CONNECTION | | DN | PN | Kv _s | |
|--|---------------|-----|----|----|-----------------|--|
| DIAMANT series COMPARATO connection • FF THREADED | | | | | | |
| DC3R5C3D4 | 3/8" | 90° | 10 | 16 | 2,9 | |
| DC3A5C3D4 | 1/2" | 90° | 15 | 16 | 4,4 | |
| DC3B5C3D4 | 3/4" | 90° | 20 | 16 | 9 | |
| DC3C5C3D4 | 1" | 90° | 25 | 16 | 16 | |
| DC3D5C3D4 | 1"1/4 | 90° | 32 | 16 | 28,5 | |
| DC3E5C3D4 | 1"1/2 ** | 90° | 40 | 16 | 37,2 | |
| DIAMANT series COMPARATO connection • TO BE GLUED | | | | | | |
| DC3R5C4D4 | 16 (3/8") | 90° | 10 | 16 | 2,9 | |
| DC3A5C4D4 | 20 (1/2") | 90° | 15 | 16 | 4,4 | |
| DC3B5C4D4 | 25 (3/4") | 90° | 20 | 16 | 9 | |
| DC3C5C4D4 | 32 (1") | 90° | 25 | 16 | 16 | |
| DC3D5C4D4 | 40 (1"1/4) | 90° | 32 | 16 | 28,5 | |
| DC3E5C4D4 | 50 (1"1/2) ** | 90° | 40 | 16 | 37,2 | |

* maximum differential pressure 10 bar, for 16 bar please see Compact series
 TO BE MOTORISED WITH 11 Nm ACTUATORS
 IT CANNOT BE MOTORISED WITH ACTUATOR EQUIPPED WITH MANUAL OVERRIDE

| CODE | CONNECTION | | DN | PN | Kv _s | |
|-------------------------------------|------------|-----|----|----|-----------------|--|
| COMPACT series • FF THREADED | | | | | | |
| UC3E5C3D4 | 1"1/2 | 90° | 40 | 16 | 37,2 | |
| UC3F5C3D4 | 2" | 90° | 50 | 16 | 73,2 | |
| COMPACT series • TO BE GLUED | | | | | | |
| UC3E5C4D4 | 50 (1"1/2) | 90° | 40 | 16 | 37,2 | |
| UC3F5C4D4 | 63 (2") | 90° | 50 | 16 | 73,2 | |

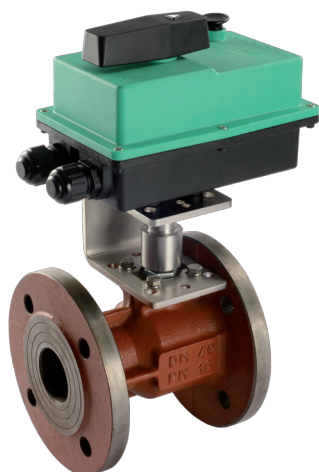
IT CANNOT BE MOTORISED WITH ACTUATOR EQUIPPED WITH MANUAL OVERRIDE

MOTORISED VALVES



PRO Range • ISO 5211 connection**Compact PRO ALL IN ONE: 2-POINT • 3-POINT**

- OPERATING TIMES: 45 SEC 90°
- CLASS PROTECTION: IP67
- Manual opening
- 2 extra micro switches
- Different operating times and accessories see p. 38
- Not available with spacer for insulation

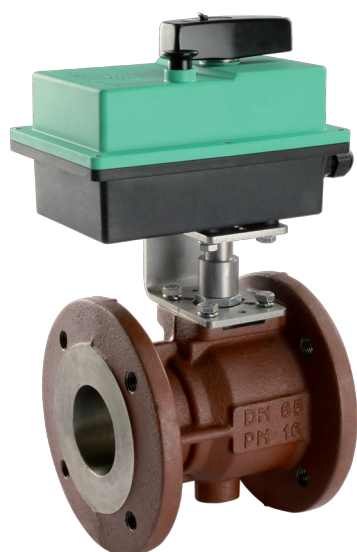


| CODE | CONNECTION | DN | PN | Kv _s | |
|---------------------------------|---------------|----|----|-----------------|--|
| Power supply 230 V • 50 / 60 Hz | | | | | |
| CY222AC2F6 | PN16 Flange | 25 | 16 | 64,5 | |
| CY222AD2F6 | PN16 Flange * | 32 | 16 | 103,8 | |
| Power supply 24 V • 50 / 60 Hz | | | | | |
| CY242AC2F6 | PN16 Flange | 25 | 16 | 64,5 | |
| CY242AD2F6 | PN16 Flange * | 32 | 16 | 103,8 | |

* maximum differential pressure 10 bar

Universal PRO ALL IN ONE: 2-POINT • 3-POINT

- OPERATING TIMES: 55 SEC 90°
- CLASS PROTECTION: IP67
- Manual opening
- 2 extra micro switches
- Different operating times and accessories see p. 39
- Not available with spacer for insulation



| CODE | CONNECTION | DN | PN | Kv _s | |
|----------------------------|-------------|----|----|-----------------|--|
| Power supply 230 V • 50 Hz | | | | | |
| UY222AD2F6 | PN16 Flange | 32 | 16 | 103,8 | |
| UY222AE2F6 | PN16 Flange | 40 | 16 | 174 | |
| UY222AF2F6 | PN16 Flange | 50 | 16 | 301,3 | |
| Power supply 24 V • 50 Hz | | | | | |
| UY242AD2F6 | PN16 Flange | 32 | 16 | 103,8 | |
| UY242AE2F6 | PN16 Flange | 40 | 16 | 174 | |
| UY242AF2F6 | PN16 Flange | 50 | 16 | 301,3 | |

**2-POINT • 3-POINT**

- CLASS PROTECTION: IP67

- Manual opening
- 2 extra micro switches
- Versions with proportional control available on request



| CODE | OPERATING TIME 90° | DN | PN | |
|--|--------------------|-----|----|--|
| Power supply 100... 240 V • 50 / 60 Hz | | | | |
| U22C2G2F6 | 27 SEC | 65 | 16 | |
| U22C2H2F6 | 27 SEC | 80 | 16 | |
| U22C2I2F6 | 50 SEC | 100 | 16 | |
| U22C2L2F6 | 50 SEC | 125 | 16 | |
| U22C2M2F6 | 50 SEC | 150 | 16 | |
| Power supply 24 V • AC / DC | | | | |
| U24C2G2F6 | 27 SEC | 65 | 16 | |
| U24C2H2F6 | 27 SEC | 80 | 16 | |
| U24C2I2F6 | 50 SEC | 100 | 16 | |
| U24C2L2F6 | 50 SEC | 125 | 16 | |
| U24C2M2F6 | 50 SEC | 150 | 16 | |

**2-POINT • 3-POINT**

- CLASS PROTECTION: IP67
- Manual opening
- 2 extra micro switches
- Not suitable for mixing

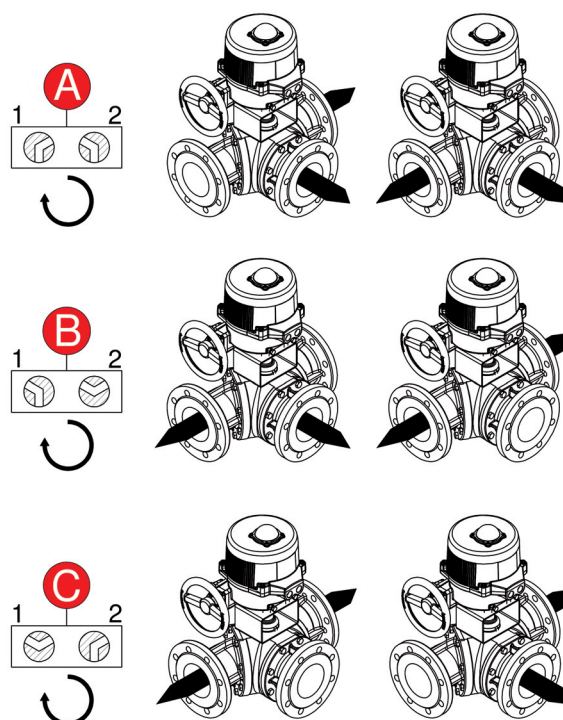


| CODE | OPERATING TIME 120° | DN | PN | |
|--|---------------------|-----|----|--|
| Power supply 100... 240 V • 50 / 60 Hz | | | | |
| U22C3F2F6 * | 12 SEC | 50 | 16 | |
| U22C3G2F6 * | 12 SEC | 65 | 16 | |
| U22C3H2F6 * | 36 SEC | 80 | 16 | |
| U22C3I2F6 * | 36 SEC | 100 | 16 | |
| U22C3L2F6 * | 67 SEC | 125 | 16 | |
| U22C3M2F6 * | 67 SEC | 150 | 16 | |
| Power supply 24 V • AC / DC | | | | |
| U24C3F2F6 * | 12 SEC | 50 | 16 | |
| U24C3G2F6 * | 12 SEC | 65 | 16 | |
| U24C3H2F6 * | 36 SEC | 80 | 16 | |
| U24C3I2F6 * | 36 SEC | 100 | 16 | |
| U24C3L2F6 * | 67 SEC | 125 | 16 | |
| U24C3M2F6 * | 67 SEC | 150 | 16 | |

* add the letter corresponding to the ball position at the end of the code

PLEASE INDICATE THE POSITION OF THE BALL WHEN ORDERING

1. STARTING position
2. Position AFTER 120° CLOCKWISE



Motorised valve • **BUTTERFLY WAFER****P20 Range** • ISO 5211 connection

i

Compact P20 ALL IN ONE: 2-POINT • 3-POINT

- **OPERATING TIMES:** 45 SEC 90°
- **CLASS PROTECTION:** IP67
- **NITRILE SEALING**
- Manual opening
- 2 extra micro switches
- Different operating times and accessories see p. 38
- **Butterfly valves are supplied in opening position and must be installed in open position only.**



| CODE | CONNECTION | DN | PN | Kv _s | |
|---------------------------------|------------|---------|----|-----------------|--|
| Power supply 230 V • 50 / 60 Hz | | | | | |
| CY222AE2G6 | Wafer | 32 / 40 | 16 | 62 | |
| Power supply 24 V • 50 / 60 Hz | | | | | |
| CY242AE2G6 | Wafer | 32 / 40 | 16 | 62 | |

Universal P20 ALL IN ONE: 2-POINT • 3-POINT

- **OPERATING TIMES:** 55 SEC 90°
- **CLASS PROTECTION:** IP67
- **NITRILE SEALING**
- Manual opening
- 2 extra micro switches
- Different operating times and accessories see p. 38
- **Butterfly valves are supplied in opening position and must be installed in open position only.**



| CODE | CONNECTION | DN | PN | Kv _s | |
|----------------------------|------------|-----|----|-----------------|--|
| Power supply 230 V • 50 Hz | | | | | |
| UY222AF2G6 | Wafer | 50 | 16 | 79 | |
| UY222AG2G6 | Wafer | 65 | 16 | 174 | |
| UY222AH2G6 | Wafer | 80 | 16 | 275 | |
| UY222AI2G6 | Wafer | 100 | 6 | 496 | |
| Power supply 24 V • 50 Hz | | | | | |
| UY242AF2G6 | Wafer | 50 | 16 | 79 | |
| UY242AG2G6 | Wafer | 65 | 16 | 174 | |
| UY242AH2G6 | Wafer | 80 | 16 | 275 | |
| UY242AI2G6 | Wafer | 100 | 6 | 496 | |



2-POINT • 3-POINT

- CLASS PROTECTION: IP67
- NITRILE SEALING
- Manual opening
- 2 extra micro switches
- Versions with proportional control available on request
- Butterfly valves are supplied in opening position and must be installed in open position only.



| CODE | CONNECTION | OPERATING TIME 90° | DN | PS | |
|--|------------|--------------------|-----|----|--|
| Power supply 100... 240 V • 50 / 60 Hz | | | | | |
| U22C5I2F6 | Wafer | 27 SEC | 100 | 16 | |
| U22C5L2F6 | Wafer | 27 SEC | 125 | 16 | |
| U22C5M2F6 | Wafer | 50 SEC | 150 | 16 | |
| U22C5N2F6 | Wafer | 50 SEC | 200 | 16 | |
| U22C5O2F6 | Wafer | 50 SEC | 250 | 16 | |
| Power supply 24 V • AC / DC | | | | | |
| U24C5I2F6 | Wafer | 27 SEC | 100 | 16 | |
| U24C5L2F6 | Wafer | 27 SEC | 125 | 16 | |
| U24C5M2F6 | Wafer | 50 SEC | 150 | 16 | |
| U24C5N2F6 | Wafer | 50 SEC | 200 | 16 | |
| U24C5O2F6 | Wafer | 50 SEC | 250 | 16 | |

Accessories

Add the numbers and/or letters listed in the “ID” column corresponding to the selected accessories at the end of the base model code.

| ID | DESCRIPTION |
|----|-----------------------------------|
| E | EPDM sealing version |
| X | Version with STAINLESS STEEL lens |
| L | LUG version |

SEAL MATERIAL FOCUS

NITRILE SEALING

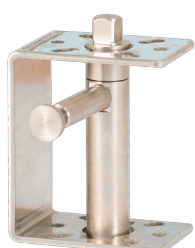
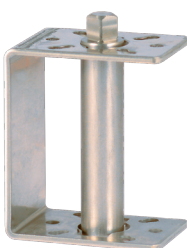
- Range temperature: +5°C / +85°C
- Applications: general industrial circuits with untreated water

EPDM SEALING

- Range temperature: -10°C / +120°C
- Applications: potable water / general industrial circuits

Diamant PRO

SPACERS



Actuator with **COMPARATO** connection
Ball valve with **COMPARATO** connection

| CODE | DESCRIPTION |
|--|---|
| spacer height: h 90 mm | |
| ADSTD1 | spacer |
| RFASDN90 | component: control rod |
| spacer height: h 90 mm • with MANUAL OVERRIDE | |
| ADSTD2 * | spacer |
| RFAPDCN * | component: control rod with manual override |

* Not suitable for actuators with EMERGENCY MANUAL OVERRIDE

Actuator with **COMPARATO** connection
Ball valve with **ISO F03 / F04 / F05** connection

| CODE | DESCRIPTION |
|--|---|
| spacer height: h 90 mm | |
| DIDM01 | spacer |
| RFASDI90 | component: control rod |
| spacer height: h 90 mm • with MANUAL OVERRIDE | |
| DIDM02 * | spacer |
| RFAPDCI * | component: control rod with manual override |

* Not suitable for actuators with EMERGENCY MANUAL OVERRIDE

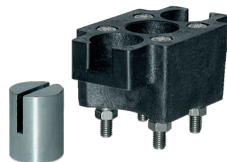
Actuator with **ISO F03 / F05** connection
Ball valve with **ISO F03 / F04 / F05** connection

| CODE | DESCRIPTION |
|--|---|
| spacer height: h 90 mm | |
| DIDM01ISO | spacer |
| RFASDI90ISO | component: control rod |
| spacer height: h 90 mm • with MANUAL OVERRIDE | |
| DIDM02ISO * | spacer |
| RFAPDCISO * | component: control rod with manual override |

* Not suitable for actuators with EMERGENCY MANUAL OVERRIDE

Diamant PRO

CONNECTION KIT



Actuator with **COMPARATO** connection
Ball valve with **ISO F03** connection

| CODE | DESCRIPTION | |
|--------|---------------------------------|--|
| AIDM01 | connection kit with metal joint | |



Actuator with **COMPARATO** connection
Ball valve with **PVC 2-WAY / 3-WAY** connection

| CODE | DESCRIPTION | |
|--|---|--|
| spacer height: h 50 mm | | |
| DIDM03PVC | connection kit | |
| RFASDPVC | component: control rod | |
| spacer height: h 90 mm • with MANUAL OVERRIDE | | |
| DIDM02PVC * | connection kit | |
| RFAPDPVC * | component: control rod with manual override | |

* Not suitable for actuators with EMERGENCY MANUAL OVERRIDE

PLEASE SPECIFY WHEN ORDERING THE DIAMETER OF BALL VALVES



CAPS and TANGS

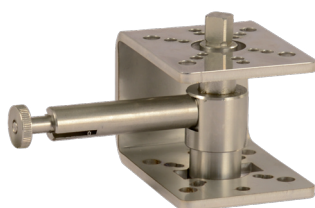


| CODE | DESCRIPTION | |
|----------------------|---------------------------|--|
| STRAIGHT cap | | |
| AC3412 | straight 1/2" - tang 3/4" | |
| AC0134 | straight 3/4" - tang 1" | |
| AC1141 | straight 1" - tang 1"1/4 | |
| ECCENTRIC cap | | |
| AC0134E | eccentric 3/4" - tang 1" | |



Compact PRO

SPACERS

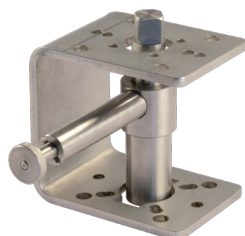


Actuator with **ISO F03 / F05** connection
Ball valve with **ISO F03 / F04 / F05** connection

| CODE | DESCRIPTION |
|--|---|
| spacer height: h 90 mm | |
| DICOM35 | spacer |
| RFASC90 | component: control rod |
| spacer height: h 66 mm • with MANUAL OVERRIDE | |
| DICO05ADC * | spacer |
| RFAPCDC * | component: control rod with manual override |

* Not suitable for actuators with EMERGENCY MANUAL OVERRIDE

PVC CONNECTION KIT



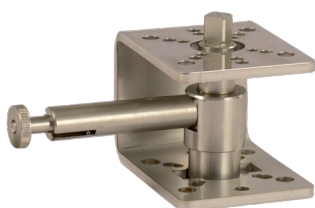
Actuator with **ISO F03 / F05** connection
Ball valve with **PVC 2-WAY / 3 -WAY** connection

| CODE | DESCRIPTION |
|--|---|
| spacer height: h 66 mm | |
| DICO03PVC | connection kit |
| RFASUPVC | component: control rod |
| spacer height: h 90 mm • with MANUAL OVERRIDE | |
| DICO02PVC * | connection kit |
| RFAPUPVC * | component: control rod with manual override |

* Not suitable for actuators with EMERGENCY MANUAL OVERRIDE

PLEASE SPECIFY WHEN ORDERING THE DIAMETER OF BALL VALVES

SPACERS



Actuator with **ISO F05 / F07** connection
Ball valve with **ISO F03 / F04 / F05 / F07** connection

| CODE | DESCRIPTION |
|---|---|
| spacer height: h 90 mm | |
| DICOM57 | spacer |
| RFASU90 | component: control rod |
| spacer height: h 66 mm • with MANUAL OVERRIDE | |
| DICO07ADC * | spacer |
| RFAPUDC * | component: control rod with manual override |

* Not suitable for actuators with EMERGENCY MANUAL OVERRIDE

Winemaking

WINEMAKING PLANTS



MOTORISED VALVES for the WINEMAKING sector and SPARE PARTS

| | | |
|---|--|----|
|  | Actuators DIAMANT PRO | 90 |
|  | Ball valves with spacer DIAMANT PRO | 90 |
|  | Actuators COMPACT PRO UNIVERSAL PRO | 92 |
|  | Motorised valves COMPACT PRO UNIVERSAL PRO | 93 |
|  | SPACERS | 96 |

Diamant PRO • **COMPARATO** connection

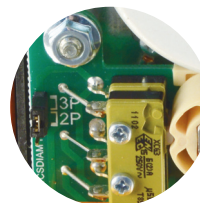
i

ALL IN ONE: 2-POINT • 3-POINT

- **TORQUE:** 11 Nm
- **OPERATING TIMES:** 35 SEC 90°
- **CLASS PROTECTION:** IP67
- 2 EXTRA MICRO SWITCHES
- ANTI-CONDENSATION KIT



ALL IN ONE JUMPER
for selecting 2-POINT or 3-POINT



| CODE | FOR BALL VALVE | | POWER SUPPLY | |
|----------|----------------|------|--------------|----------|
| DY242P2R | 2- or 3-WAY | 90° | 24V | 50/60 Hz |
| DY342P2R | 3 WAY | 180° | 24V | 50/60 Hz |

2-WAY MM with spacer and manual opening for THERMAL BREAK, full bore

- MAXIMUM FLUID TEMPERATURE: 50°C



| CODE | CONNECTION | | DN | PN | Kv _s | |
|----------|------------|-----|----|----|-----------------|--|
| DC2A2AD9 | 1/2" | 90° | 15 | 16 | 16,3 | |
| DC2B2AD9 | 3/4" | 90° | 20 | 16 | 29,5 | |
| DC2C2AD9 | 1" | 90° | 25 | 16 | 43 | |

3-WAY MMM with spacer and manual opening for THERMAL BREAK, full bore

- MAXIMUM FLUID TEMPERATURE: 50°C
- BALL POSITIONING P. 6



| CODE | CONNECTION | | DN | PN | Kv _s | |
|---|------------|------|----|----|-----------------|--|
| MIXING - DIVERTING 3-HOLE 90° BALL | | | | | | |
| DC3B3AD9 | 3/4" | 90° | 20 | 16 | 11,5 | |
| DC3C3AD9 | 1" | 90° | 25 | 16 | 18,3 | |
| DIVERTING 2-HOLE 180° BALL | | | | | | |
| DC3B2AD9 | 3/4" | 180° | 20 | 16 | 11,5 | |
| DC3C2AD9 | 1" | 180° | 25 | 16 | 18,3 | |

- 3-hole version to be combined with the **90°** version actuator • DY242P2R
- 2-hole version to be combined with the **180°** version actuator • DY342P2R

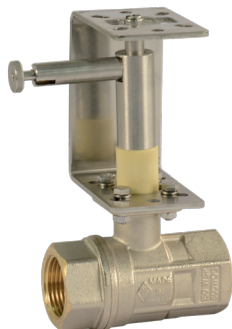
Diamant PRO • COMPARATO connection



i

2-WAY FF with spacer and manual opening for THERMAL BREAK, full bore

- MAXIMUM FLUID TEMPERATURE: 50°C

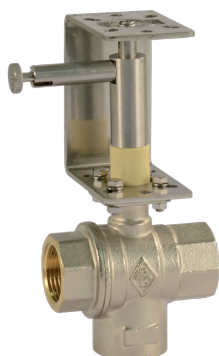


| CODE | CONNECTION | | DN | PN | Kvs | |
|-----------|------------|-----|----|----|------|--|
| DC2S2P5D9 | 1/4" | 90° | - | 40 | 5,4 | |
| DC2R2P5D9 | 3/8" | 90° | 10 | 40 | 6 | |
| DC2A2P5D9 | 1/2" | 90° | 15 | 40 | 16,3 | |
| DC2B2P5D9 | 3/4" | 90° | 20 | 40 | 29,5 | |
| DC2C2P5D9 | 1" | 90° | 25 | 40 | 43 | |
| DC2D2P5D9 | 1"1/4 * | 90° | 32 | 40 | 89 | |

* maximum differential pressure 25 bar, for 40 bar please see Compact series p. 93

3-WAY FFF with spacer and manual opening for THERMAL BREAK, full bore

- MAXIMUM FLUID TEMPERATURE: 50°C
- BALL POSITIONING P. 6 - 7



| CODE | CONNECTION | | DN | PN | Kvs | |
|------------------------------------|------------|------|----|----|------|--|
| MIXING - DIVERTING 3-HOLE 90° BALL | | | | | | |
| DC3A3E5D9 | 1/2" | 90° | 15 | 25 | 6 | |
| DC3B3E5D9 | 3/4" | 90° | 20 | 16 | 11,5 | |
| DC3C3E5D9 | 1" * | 90° | 25 | 16 | 18,3 | |
| DIVERTING 2-HOLE 180° BALL | | | | | | |
| DC3A2E5D9 | 1/2" | 180° | 15 | 25 | 6 | |
| DC3B2E5D9 | 3/4" | 180° | 20 | 16 | 11,5 | |
| DC3C2E5D9 | 1" * | 180° | 25 | 16 | 18,3 | |

* maximum differential pressure 10 bar, for 16 bar please see Compact series p. 95

- 3-hole version to be combined with the **90°** version actuator • DY242P2R
- 2-hole version to be combined with the **180°** version actuator • DY342P2R



| CODE | CONNECTION | | DN | PN | Kvs | |
|------------------------|------------|-----|----|----|-----|--|
| DIVERTING "T"-PORT 90° | | | | | | |
| DC3A6E5D9 | 1/2" | 90° | 15 | 30 | 3,9 | |
| DC3B6E5D9 | 3/4" * | 90° | 20 | 30 | 7,9 | |
| DIVERTING "L"-PORT 90° | | | | | | |
| DC3A5E5D9 | 1/2" | 90° | 15 | 30 | 3,9 | |
| DC3B5E5D9 | 3/4" * | 90° | 20 | 30 | 7,9 | |

* maximum differential pressure 16 bar, for 30 bar please see Compact series p. 94

PRO Range • ISO 5211 connection



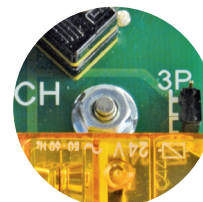
i

Compact PRO ALL IN ONE: 2-POINT • 3-POINT

- **TORQUE:** 22 Nm
- **OPERATING TIMES:** 45 SEC 90°
- **CLASS PROTECTION:** IP67
- 2 EXTRA MICRO SWITCHES
- ANTI-CONDENSATION KIT
- ISO 5211 F03-F05 □9-□11



ALL IN ONE JUMPER
for selecting 2-POINT or 3-POINT



| CODE | FOR BALL VALVE | | POWER SUPPLY | |
|------------|----------------|------|--------------|----------|
| CY2422PSAR | 2- or 3-WAY | 90° | 24V | 50/60 Hz |
| CY3422PSAR | 3 WAY | 180° | 24V | 50/60 Hz |

Universal PRO ALL IN ONE: 2-POINT • 3-POINT

- **TORQUE:** 40 Nm
- **OPERATING TIMES:** 55 SEC 90°
- **CLASS PROTECTION:** IP67
- 2 EXTRA MICRO SWITCHES
- ANTI-CONDENSATION KIT
- ISO 5211 F05-F07 □11-□14



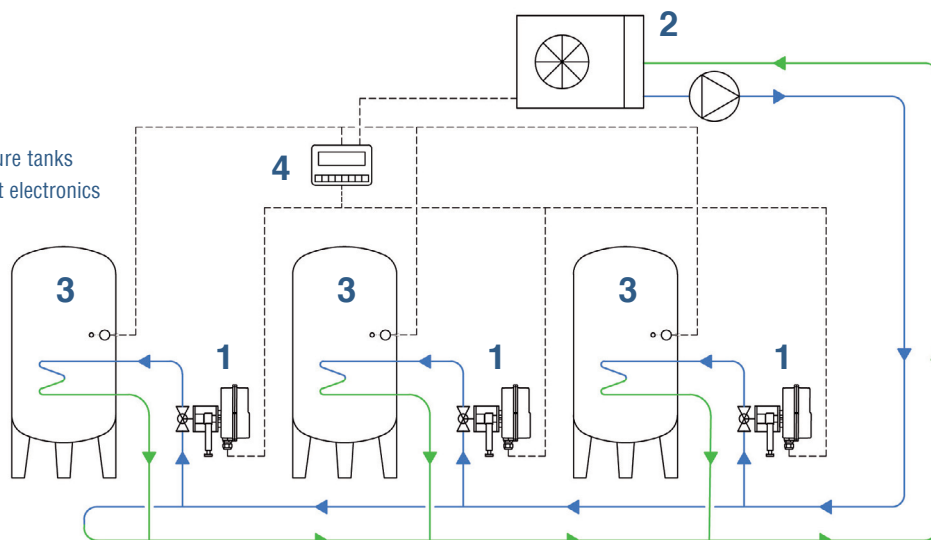
ALL IN ONE JUMPER
for selecting 2-POINT or 3-POINT



| CODE | FOR BALL VALVE | | POWER SUPPLY | |
|------------|----------------|------|--------------|-------|
| UY2422PSAR | 2- or 3-WAY | 90° | 24V | 50 Hz |
| UY3422PSAR | 3 WAY | 180° | 24V | 50 Hz |

EXAMPLE OF USE: WINEMAKING SYSTEM

- 1 : Diamant PRO
Compact PRO
Universal PRO
- 2 : Chiller
- 3 : Controlled-temperature tanks
- 4 : External management electronics



P20 Range • ISO 5211 connection

i

Compact P20 ALL IN ONE: 2-POINT • 3-POINT

- OPERATING TIMES: 45 SEC 90°
- CLASS PROTECTION: IP67
- MAXIMUM FLUID TEMPERATURE: 50°C

- POWER SUPPLY: 24V 50/60 Hz
- 2 EXTRA MICRO SWITCHES
- ANTI-CONDENSATION KIT

**THERMAL BREAK and MANUAL OPENING**

| CODE | CONNECTION | DN | PN | Kv _s | |
|-------------------|------------|----|----|-----------------|--|
| POWER SUPPLY 24 V | | | | | |
| CY242RD2M5D9 | 1"1/4 | 32 | 40 | 89 | |
| CY242RE2M5D9 | 1"1/2 | 40 | 40 | 230 | |
| CY242RF2M5D9 | 2" * | 50 | 40 | 265 | |

* maximum differential pressure 25 bar

Universal P20 ALL IN ONE: 2-POINT • 3-POINT

- OPERATING TIMES: 55 SEC 90°
- CLASS PROTECTION: IP67
- MAXIMUM FLUID TEMPERATURE: 50°C

- POWER SUPPLY: 24V 50 Hz
- 2 EXTRA MICRO SWITCHES
- ANTI-CONDENSATION KIT

**THERMAL BREAK and MANUAL OPENING**

| CODE | CONNECTION | DN | PN | Kv _s | |
|-------------------|------------|-----|----|-----------------|--|
| POWER SUPPLY 24 V | | | | | |
| UY242RF2M5D9 | 2" | 50 | 40 | 265 | |
| UY242RG2M5D9 | 2"1/2 | 65 | 25 | 540 | |
| UY242RH2M5D9 | 3" | 80 | 16 | 873 | |
| UY242RI2M5D9 | 4" * | 100 | 16 | 1.390 | |

* maximum differential pressure 6 bar

P20 Range • ISO 5211 connection

i

Compact P20 ALL IN ONE: 2-POINT • 3-POINT

- OPERATING TIMES: 45 SEC 90°
- CLASS PROTECTION: IP67
- MAXIMUM FLUID TEMPERATURE: 50°C

- POWER SUPPLY: 24V 50/60 Hz
- 2 EXTRA MICRO SWITCHES
- ANTI-CONDENSATION KIT
- BALL POSITIONING P. 6

**THERMAL BREAK and MANUAL OPENING**

| CODE | CONNECTION | DN | PN | Kv _s | |
|---|------------|----|----|-----------------|--|
| MIXING - DIVERTING 3-HOLE 90° BALL | | | | | |
| CY242RC3E5D9 | 1" | 25 | 16 | 18,3 | |
| CY242RD3E5D9 | 1"1/4 | 32 | 10 | 27,2 | |
| CY242RE3E5D9 | 1"1/2 * | 40 | 10 | 47,3 | |
| DIVERTING 2-HOLE 180° BALL | | | | | |
| CY342RC2E5D9 | 1" | 25 | 16 | 18,3 | |
| CY342RD2E5D9 | 1"1/4 | 32 | 10 | 27,2 | |
| CY342RE2E5D9 | 1"1/2 * | 40 | 10 | 47,3 | |

* maximum differential pressure 6 bar

Universal P20 ALL IN ONE: 2-POINT • 3-POINT

- OPERATING TIMES: 55 SEC 90°
- CLASS PROTECTION: IP67
- MAXIMUM FLUID TEMPERATURE: 50°C

- POWER SUPPLY: 24V 50/60 Hz
- 2 EXTRA MICRO SWITCHES
- ANTI-CONDENSATION KIT
- BALL POSITIONING P. 6

**THERMAL BREAK and MANUAL OPENING**

| CODE | CONNECTION | DN | PN | Kv _s | |
|---|------------|----|----|-----------------|--|
| MIXING - DIVERTING 3-HOLE 90° BALL | | | | | |
| UY242RE3E5D9 | 1"1/2 | 40 | 10 | 47,3 | |
| UY242RF3E5D9 | 2" | 50 | 10 | 73 | |
| DIVERTING 2-HOLE 180° BALL | | | | | |
| UY342RE2E5D9 | 1"1/2 | 40 | 10 | 47,3 | |
| UY342RF2E5D9 | 2" | 50 | 10 | 73 | |

PRO Range • ISO 5211 connection

i

Compact PRO ALL IN ONE: 2-POINT • 3-POINT

- OPERATING TIMES: 45 SEC 90°
- CLASS PROTECTION: IP67
- MAXIMUM FLUID TEMPERATURE: 50°C

- POWER SUPPLY: 24V 50/60 Hz
- 2 EXTRA MICRO SWITCHES
- ANTI-CONDENSATION KIT
- BALL POSITIONING P. 7

**THERMAL BREAK and MANUAL OPENING**

| CODE | CONNECTION | DN | PN | Kv _s | |
|---------------------------|------------|----|----|-----------------|--|
| DIVERTING "T"-PORT | | | | | |
| CY242RB6E5D9 | 3/4" | 20 | 30 | 7,9 | |
| CY242RC6E5D9 | 1" | 25 | 16 | 13 | |
| CY242RD6E5D9 | 1"1/4 * | 32 | 10 | 20,7 | |
| DIVERTING "L"-PORT | | | | | |
| CY242RB5E5D9 | 3/4" | 20 | 30 | 7,9 | |
| CY242RC5E5D9 | 1" | 25 | 16 | 13 | |
| CY242RD5E5D9 | 1"1/4 * | 32 | 10 | 20,7 | |

* maximum differential pressure 6 bar

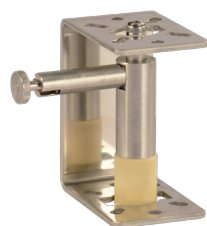
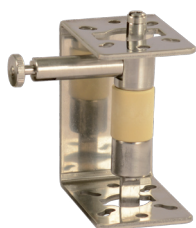
Universal PRO ALL IN ONE: 2-POINT • 3-POINT

- OPERATING TIMES: 55 SEC 90°
- CLASS PROTECTION: IP67
- MAXIMUM FLUID TEMPERATURE: 50°C

- POWER SUPPLY: 24V 50/60 Hz
- 2 EXTRA MICRO SWITCHES
- ANTI-CONDENSATION KIT
- BALL POSITIONING P. 7

**THERMAL BREAK and MANUAL OPENING**

| CODE | CONNECTION | DN | PN | Kv _s | |
|---------------------------|------------|----|----|-----------------|--|
| DIVERTING "T"-PORT | | | | | |
| UY242RD6E5D9 | 1"1/4 | 32 | 10 | 20,7 | |
| UY242RE6E5D9 | 1"1/2 | 40 | 10 | 38,7 | |
| UY242RF6E5D9 | 2" | 50 | 10 | 54 | |
| DIVERTING "L"-PORT | | | | | |
| UY242RD5E5D9 | 1"1/4 | 32 | 10 | 20,7 | |
| UY242RE5E5D9 | 1"1/2 | 40 | 10 | 38,7 | |
| UY242RF5E5D9 | 2" | 50 | 10 | 54 | |

PRO Range • ISO 5211 connection**Diamant PRO**

Actuator with **COMPARATO** connection
Ball valve with **COMPARATO** connection

| CODE | DESCRIPTION | |
|----------------------|---|--|
| spacer height: 90 mm | | |
| ADSTD9 | spacer | |
| RFAPTTN | component: control rod with manual override | |

Actuator with **COMPARATO** connection
Ball valve with **ISO 5211 F03 / F04 / F05** connection

| CODE | DESCRIPTION | |
|----------------------|---|--|
| spacer height: 90 mm | | |
| DIDMD9 | spacer | |
| RFAPTTI | component: control rod with manual override | |

Actuator with **ISO 5211 F03 / F05** connection
Ball valve with **ISO 5211 F03 / F04 / F05** connection

| CODE | DESCRIPTION | |
|----------------------|--|--|
| spacer height: 90 mm | | |
| DIDMD9ISO | spacer | |
| RFAPTTF | component: control rod with manual opening | |

Compact PRO

Actuator with **ISO 5211 F03 / F05** connection
Ball valve with **ISO 5211 F03 / F04 / F05** connection

| CODE | DESCRIPTION | |
|----------------------|---|--|
| spacer height: 66 mm | | |
| DICO05AD9 | spacer | |
| RFAPCTT | component: control rod with manual override | |

Universal PRO

Actuator with **ISO 5211 F05 / F07** connection
Ball valve with **ISO 5211 F03 / F04 / F05 / F07** connection

| CODE | DESCRIPTION | |
|----------------------|---|--|
| spacer height: 66 mm | | |
| DICO07AD9 | spacer | |
| RFAPUTT | component: control rod with manual override | |

UNIVERSAL PNEUMATIC



**UNIVERSAL PNEUMATIC
BRASS**

98



**UNIVERSAL PNEUMATIC
AISI 316**

98



**UNIVERSAL PNEUMATIC
CAST IRON**

99



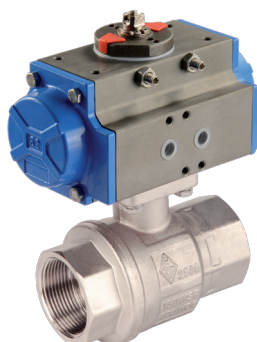
ACCESSORIES

99

Universal Pneumatic



2-WAY BRASS FF, full bore



| CODE | Ø | PN | |
|------------------------|-------|----|--|
| SPRING RETURN actuator | | | |
| P7000460014 | 1/4" | 40 | |
| P7000460038 | 3/8" | 40 | |
| P7000460012 | 1/2" | 40 | |
| P7000460034 | 3/4" | 40 | |
| P7000460001 | 1" | 40 | |
| P7000460114 | 1"1/4 | 40 | |
| P7000460112 | 1"1/2 | 40 | |
| P7000460002 | 2" | 40 | |
| P7000460212 | 2"1/2 | 25 | |
| P7000460003 | 3" | 16 | |
| P7000460004 | 4" | 16 | |

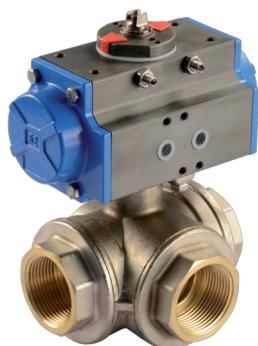
| CODE | Ø | PN | |
|------------------------|-------|----|--|
| DOUBLE ACTING actuator | | | |
| P7000450014 * | 1/4" | 40 | |
| P7000450038 * | 3/8" | 40 | |
| P7000450012 * | 1/2" | 40 | |
| P7000450034 * | 3/4" | 40 | |
| P7000450001 * | 1" | 40 | |
| P7000450114 * | 1"1/4 | 40 | |
| P7000450112 | 1"1/2 | 40 | |
| P7000450002 | 2" | 40 | |
| P7000450212 | 2"1/2 | 25 | |
| P7000450003 | 3" | 16 | |
| P7000450004 | 4" | 16 | |

* connection kit for solenoid valve: BADA32

"T"-PORT • 3-WAY FFF DIVERTING, full bore

• FOR VERSION SUPPLY "L" PORT please add "L" to the basic code

• Ball positioning see p. 7



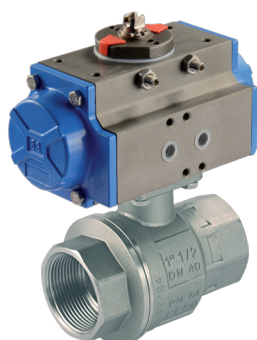
| CODE | Ø | PN | |
|------------------------|-------|----|--|
| SPRING RETURN actuator | | | |
| P7000660012 | 1/2" | 30 | |
| P7000660034 | 3/4" | 30 | |
| P7000660001 | 1" | 16 | |
| P7000660114 | 1"1/4 | 10 | |
| P7000660112 | 1"1/2 | 10 | |
| P7000660002 | 2" | 10 | |

| CODE | Ø | PN | |
|------------------------|-------|----|--|
| DOUBLE ACTING actuator | | | |
| P7000650012 * | 1/2" | 30 | |
| P7000650034 | 3/4" | 30 | |
| P7000650001 | 1" | 16 | |
| P7000650114 | 1"1/4 | 10 | |
| P7000650112 | 1"1/2 | 10 | |
| P7000650002 | 2" | 10 | |

* connection kit for solenoid valve: BADA32

2-WAY AISI 316 FF, full bore

• FOR 3-WAY VERSION AND OTHER MODELS QUOTATIONS ON REQUEST



| CODE | Ø | PN | |
|------------------------|-------|----|--|
| SPRING RETURN actuator | | | |
| P7000830012 | 1/2" | 64 | |
| P7000830034 | 3/4" | 64 | |
| P7000830001 | 1" | 64 | |
| P7000830114 | 1"1/4 | 64 | |
| P7000830112 | 1"1/2 | 64 | |
| P7000830002 | 2" | 64 | |

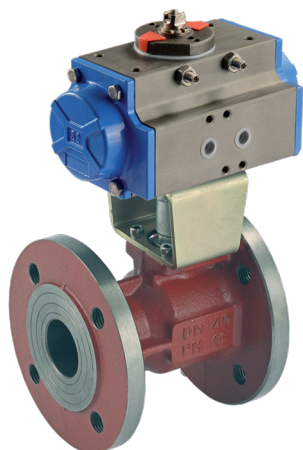
| CODE | Ø | PN | |
|------------------------|-------|----|--|
| DOUBLE ACTING actuator | | | |
| P7000820012 * | 1/2" | 64 | |
| P7000820034 * | 3/4" | 64 | |
| P7000820001 * | 1" | 64 | |
| P7000820114 * | 1"1/4 | 64 | |
| P7000820112 | 1"1/2 | 64 | |
| P7000820002 | 2" | 64 | |

* connection kit for solenoid valve: BADA32

Universal Pneumatic



2-WAY FLANGED CAST IRON, full bore



| CODE | DN | PN |
|-------------------------------|-----|----|
| SPRING RETURN actuator | | |
| P7300220001 | 25 | 40 |
| P7300220114 | 32 | 40 |
| P7300220112 | 40 | 40 |
| P7300220002 | 50 | 40 |
| P7300220212 | 65 | 40 |
| P7300220003 | 80 | 40 |
| P7300220004 | 100 | 40 |
| P7300220005 | 125 | 40 |
| P7300220006 | 150 | 25 |

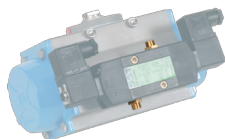
| CODE | DN | PN |
|-------------------------------|-----|----|
| DOUBLE ACTING actuator | | |
| P7300120001 | 25 | 40 |
| P7300120114 | 32 | 40 |
| P7300120112 | 40 | 40 |
| P7300120002 | 50 | 40 |
| P7300120212 | 65 | 40 |
| P7300120003 | 80 | 40 |
| P7300120004 | 100 | 40 |
| P7300120005 | 125 | 40 |
| P7300120006 | 150 | 25 |

PNEUMATIC
Motorised Valves

Accessories



NAMUR MONOSTABLE
SOLENOID VALVE 3/2 - 5/2



SPEED REGULATOR FOR
NAMUR SOLENOID VALVE



CONNECTION FOR SOLENOID VALVE
NAMUR KIT



LIMIT-SWITCHES BOX IP65

* **NECESSARY EXCLUSIVELY FOR
THOSE CODES WITH ASTERISK**

| CODE | DESCRIPTION |
|-------------------|--|
| EVN24AC | NAMUR solenoid valve 24V AC |
| EVN24DC | NAMUR solenoid valve 24V DC |
| EVN110AC50 | NAMUR solenoid valve 110V AC 50Hz |
| EVN220AC | NAMUR solenoid valve 230V AC |
| RVN | Speed regulator for NAMUR solenoid valve |
| BADA32 * | Connection kit for Namur solenoid valve for double effect pneumatic actuator DA 32 |
| BMFC | Box with 2 electromechanical limit switch |
| BMFCDA32 * | Box with 2 electromechanical limit switch for DA 32 |

OTHER MODELS AVAILABLE ON REQUEST

FOR INFORMATION, PLEASE CONTACT OUR OFFICES

+39 019 510.371 • info@comparato.com

COMPARATO TOOL

SPECIFIC TOOLS for MIXING VALVES AT YOUR SERVICE!

COMPARATO softwares make the access to all functions of the actuated valves with built-in electronics easy: thanks to a RS485 serial port with Modbus RTU communication protocol it is possible to set all values and settings easily and to monitor the functioning status of the plant.



DIMMIX

valve size calculations for
DIAMIX L and COMPAMIX L
actuated valves



LEGIOTOOL

datalogger function for
Anti-Legionella cycles for
DIAMIX L and COMPAMIX L mixing valves



MIXTOOL

programming and control of
DIAMIX PLUS and COMPAMIX PLUS
mixing valves



PRTOOL

management and programming of
DIAMIX PR and COMPAMIX PR
mixing valves for radiant panel






CLIMA PDC TOOL

management of CLIMA PDC diverting valves
for hybrid system with heat pump

MIXING VALVES: REGULATION

with **BUILT-IN ELECTRONICS**

| | | |
|---|--|-----|
|  | DIAMIX COMPAMIX Fixed-point | 102 |
|  | DIAMIX PLUS COMPAMIX PLUS  Fixed-point High-temperature weather compensation function Setpoint signal 0–10V | 104 |
|  | DIAMIX PR COMPAMIX PR  Radiant panels | 106 |
|  | DIAMIX L COMPAMIX L  Domestic water Anti-Legionella | 108 |

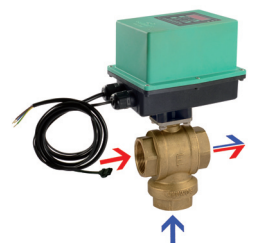
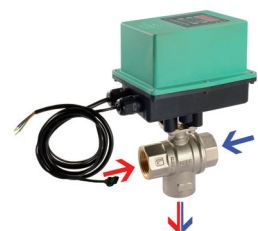
Diamix • Compamix

*i***FIXED-point**

- **OPERATING TIMES:**
DIAMIX 35 SEC 90°
COMPAMIX 45 SEC 90°
- **CLASS PROTECTION:** IP67
- **POWER SUPPLY:** 230V 50/60 Hz
- **110V VERSION ON REQUEST**
- **ADJUSTMENT RANGE:** -15°C to 90°C

FUNCTIONS:

- Fixed-point temperature control



| CODE | CONNECTION | Kv _s | DN | PN | Δp max | |
|---|------------|-----------------|----|----|--------|---------|
| VERTICAL MIXED OUTLET • MMM | | | | | | |
| DIAMIXNB | 3/4" | 11,5 | 20 | 16 | 16 bar | |
| DIAMIXNC | 1" | 18,3 | 25 | 16 | 16 bar | |
| VERTICAL MIXED OUTLET • FFF | | | | | | |
| DIAMIXNFA | 1/2" | 6 | 15 | 25 | 25 bar | |
| DIAMIXNFB | 3/4" | 11,5 | 20 | 16 | 16 bar | |
| DIAMIXNFC | 1" | 18,3 | 25 | 16 | 16 bar | |
| COMPAMIXD | 1"1/4 | 27,2 | 32 | 10 | 10 bar | |
| COMPAMIXE | 1"1/2 | 47,3 | 40 | 10 | 6 bar | |
| COMPAMIXF | 2" | 73 | 50 | 10 | 4 bar | |
| HORIZONTAL-LINE MIXED OUTLET • FFF | | | | | | |
| DIAMIXNFAM * | 1/2" | 6 | ** | 15 | 16 | 3,4 bar |
| DIAMIXNFBM * | 3/4" | 4,8 | ** | 20 | 16 | 3,4 bar |
| DIAMIXNFCM * | 1" | 8,6 | ** | 25 | 16 | 3,4 bar |
| DIAMIXNFDM * | 1"1/4 | 12,8 | ** | 32 | 16 | 3,4 bar |
| DIAMIXNFEM * | 1"1/2 | 11,5 | ** | 40 | 16 | 3,4 bar |
| DIAMIXNFFM * | 2" | 19,5 | ** | 50 | 16 | 3,4 bar |
| VERTICAL-LINE MIXED OUTLET | | | | | | |
| DIAMIXNFBV * | 3/4" MMM | 6,7 | ** | 20 | 16 | 3,5 bar |
| DIAMIXNFCV * | 1" MMM | 11,4 | ** | 25 | 16 | 3,5 bar |
| DIAMIXNFDV * | 1"1/4 MMM | 17,5 | ** | 32 | 16 | 3,5 bar |
| DIAMIXNFEV * | 1"1/2 FFF | 26,8 | ** | 40 | 16 | 3,5 bar |
| DIAMIXNFFV * | 2" FFF | 52,6 | ** | 50 | 16 | 3,5 bar |

* only for heating/cooling application

** the value refers to the most disadvantaged way (L)

4 SECOND VERSION • FAST**FAST VERSION**

| CODE | CONNECTION | Kv _s | DN | PN | Δp max | |
|------------------------------------|------------|-----------------|----|----|--------|--|
| VERTICAL MIXED OUTLET • FFF | | | | | | |
| DIAMIXNFAQ | 1/2" | 6 | 15 | 25 | 25 bar | |



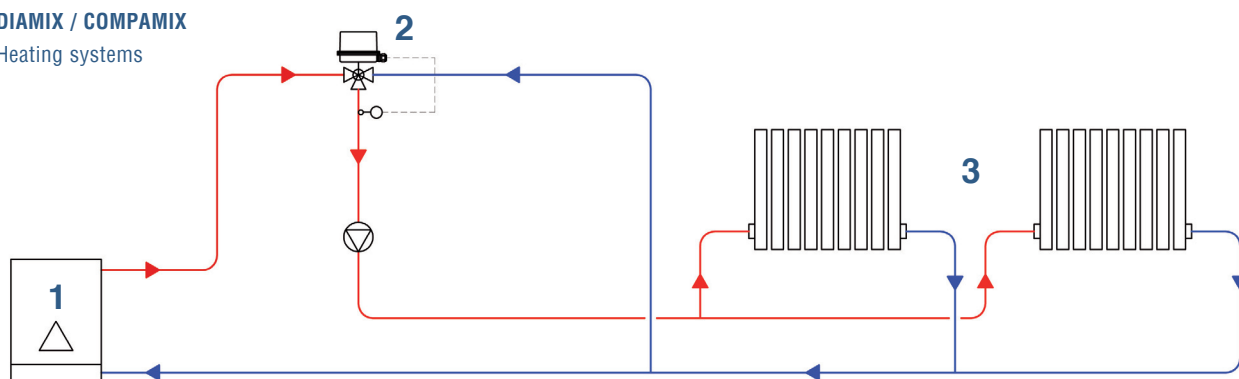
Accessories

Add the numbers and/or letters listed in the "ID" column corresponding to the selected accessories at the end of the base model code. Code example: DIAMIXNBK

| ID | DESCRIPTION | NOTES |
|----|--|----------------------------------|
| K | Brass immersion temperature probe | G 1/8" - pocket not included |
| 04 | 24V 50-60 Hz version | |
| D1 | Spacer for insulation | Diamix - h 90 Compamix - h 90 |
| D2 | Spacer for insulation and manual opening | Diamix - h 90 Compamix - h 66 |

EXAMPLE OF USE: HEATING

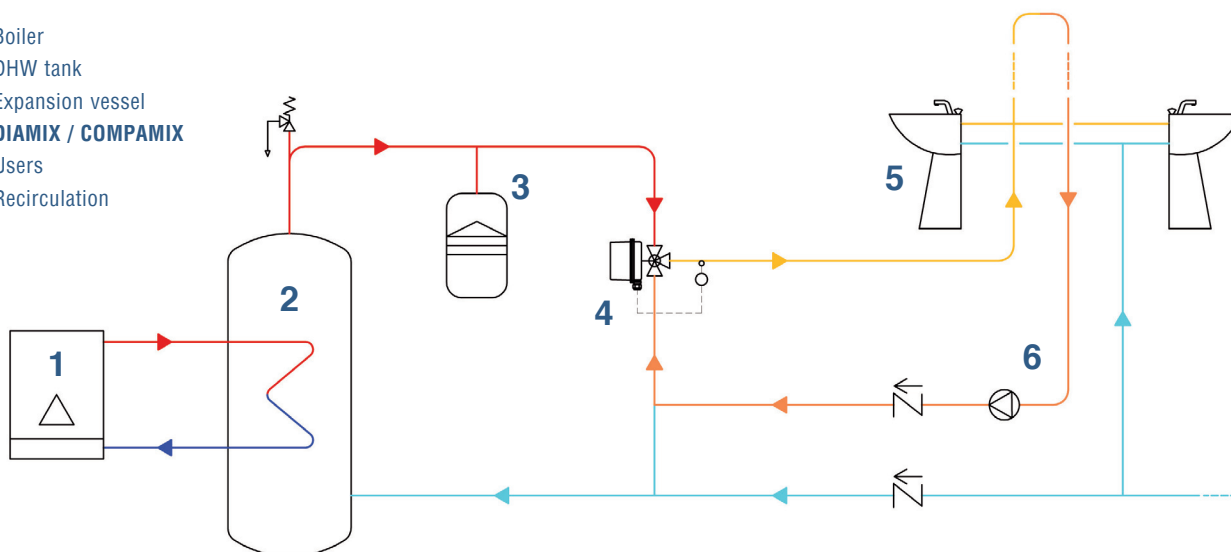
- 1 : Boiler
- 2 : DIAMIX / COMPAMIX
- 3 : Heating systems



Built-in **ELECTRONICS**
Mixing Valves

EXAMPLE OF USE: DOMESTIC

- 1 : Boiler
- 2 : DHW tank
- 3 : Expansion vessel
- 4 : DIAMIX / COMPAMIX
- 5 : Users
- 6 : Recirculation



Diamix PLUS • Compamix PLUS

i

FIXED-point • HIGHT-TEMPERATURE weather compensation • Setpoint 0 - 10V **Modbus**

- **OPERATING TIMES:**
DIAMIX PLUS 35 SEC 90°
COMPAMIX PLUS 45 SEC 90°
- **CLASS PROTECTION:** IP67
- **POWER SUPPLY:** 230V 50/60 Hz
- **110V VERSION ON REQUEST**
- **ADJUSTMENT RANGE:** -15°C to 90°C

**FUNCTIONS:**

- Fixed-point temperature control
- Temperature control with weather compensation function, high/medium temperature systems
- Remote control of the temperature, fixed-point, remote setpoint setting with 0-10V signal
- Remote management with Modbus-RTU protocol
- Comparato MixTool software for the communication between PC and mixing valve



| CODE | CONNECTION | Kv _s | DN | PN | Δp max | |
|---|------------|-----------------|----|----|--------|---------|
| VERTICAL MIXED OUTLET • MMM | | | | | | |
| DIAMIXPB | 3/4" | 11,5 | 20 | 16 | 16 bar | |
| DIAMIXPC | 1" | 18,3 | 25 | 16 | 16 bar | |
| VERTICAL MIXED OUTLET • FFF | | | | | | |
| DIAMIXPFA | 1/2" | 6 | 15 | 25 | 25 bar | |
| DIAMIXPFB | 3/4" | 11,5 | 20 | 16 | 16 bar | |
| DIAMIXPFC | 1" | 18,3 | 25 | 16 | 16 bar | |
| COMPAMIXPD | 1"1/4 | 27,2 | 32 | 10 | 10 bar | |
| COMPAMIXPE | 1"1/2 | 47,3 | 40 | 10 | 6 bar | |
| COMPAMIXPF | 2" | 73 | 50 | 10 | 4 bar | |
| HORIZONTAL-LINE MIXED OUTLET • FFF | | | | | | |
| DIAMIXPFAM * | 1/2" | 6 | ** | 15 | 16 | 3,4 bar |
| DIAMIXPFBM * | 3/4" | 4,8 | ** | 20 | 16 | 3,4 bar |
| DIAMIXPFCM * | 1" | 8,6 | ** | 25 | 16 | 3,4 bar |
| DIAMIXPFDm * | 1"1/4 | 12,8 | ** | 32 | 16 | 3,4 bar |
| DIAMIXPFEM * | 1"1/2 | 11,5 | ** | 40 | 16 | 3,4 bar |
| DIAMIXPFFM * | 2" | 19,5 | ** | 50 | 16 | 3,4 bar |
| VERTICAL-LINE MIXED OUTLET | | | | | | |
| DIAMIXPFBV * | 3/4" MMM | 6,7 | ** | 20 | 16 | 3,5 bar |
| DIAMIXPFCV * | 1" MMM | 11,4 | ** | 25 | 16 | 3,5 bar |
| DIAMIXPFDV * | 1"1/4 MMM | 17,5 | ** | 32 | 16 | 3,5 bar |
| DIAMIXPFEV * | 1"1/2 FFF | 26,8 | ** | 40 | 16 | 3,5 bar |
| DIAMIXPFFV * | 2" FFF | 52,6 | ** | 50 | 16 | 3,5 bar |

* only for heating/cooling application

** the value refers to the most disadvantaged way (L)

4 SECOND VERSION • FAST**FAST VERSION**

| CODE | CONNECTION | Kv _s | DN | PN | Δp max | |
|------------------------------------|------------|-----------------|----|----|--------|--|
| VERTICAL MIXED OUTLET • FFF | | | | | | |
| DIAMIXPFAQ | 1/2" | 6 | 15 | 25 | 25 bar | |



Accessories

Add the numbers and/or letters listed in the “ID” column corresponding to the selected accessories at the end of the base model code. Code example: DIAMIXPBK

| ID | DESCRIPTION | NOTES |
|----|--|--|
| K | Brass immersion temperature probe | G 1/8" - pocket not included |
| 04 | 24V 50-60 Hz version | |
| D1 | Spacer for insulation | Diamix PLUS - h 90 Compamix PLUS - h 90 |
| D2 | Spacer for insulation and manual opening | Diamix PLUS - h 90 Compamix PLUS - h 66 |

| CODE | DESCRIPTION |
|----------|--|
| RFSONDAE | Sensor for external temperature for weather compensation |
| USBMOD | Modbus - USB interface |

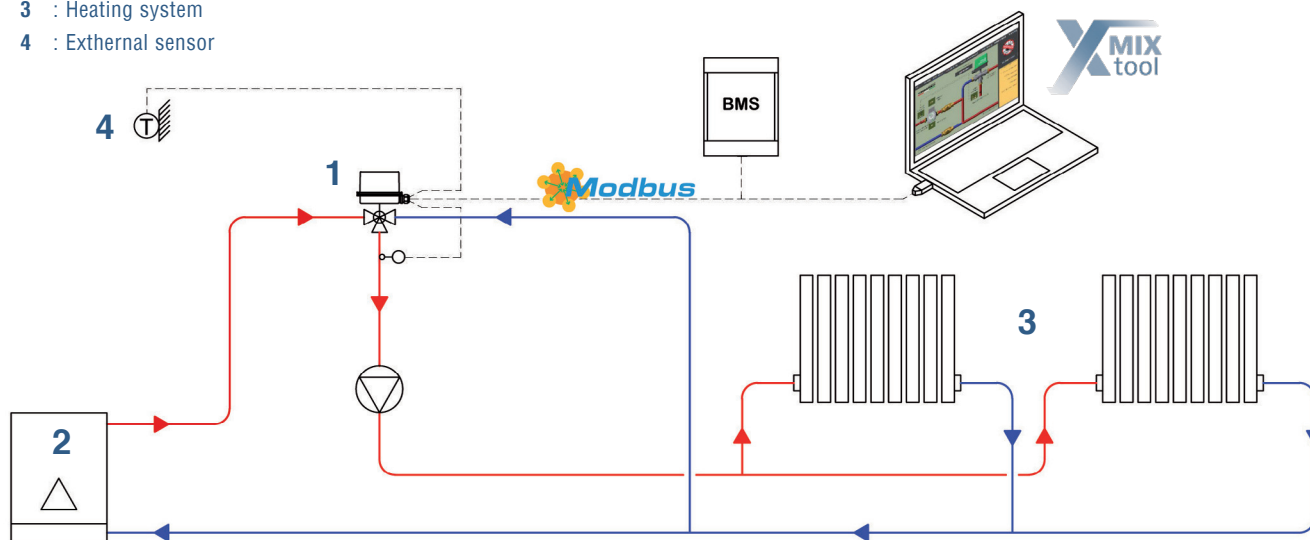
EXAMPLE OF USE: HEATING

1 : DIAMIX PLUS / COMPAMIX PLUS

2 : Boiler

3 : Heating system

4 : External sensor



EXAMPLE OF USE: REMOTE SETPOINT ADJUSTMENT

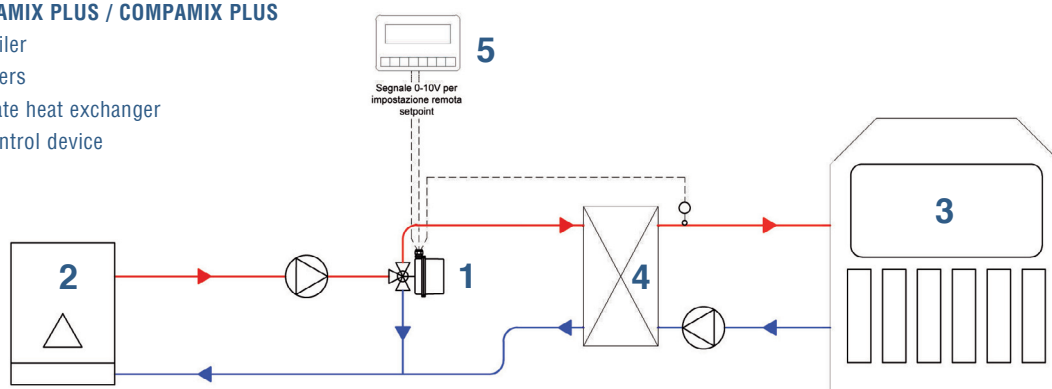
1 : DIAMIX PLUS / COMPAMIX PLUS

2 : Boiler

3 : Users

4 : Plate heat exchanger

5 : Control device



Diamix PR • Compamix PR

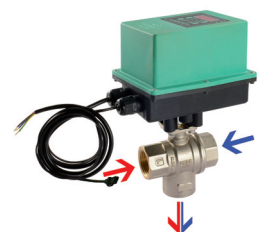
i

RADIANT PANELS

- **OPERATING TIMES:**
DIAMIX PR 35 sec 90°
COMPAMIX PR 45 sec 90°
- **CLASS PROTECTION:** IP67
- **POWER SUPPLY:** 230V 50/60 Hz
- **110V VERSION ON REQUEST**
- **ADJUSTMENT RANGE:** 24°C to 50°C Heating
10°C to 30°C Cooling

**FUNCTIONS:**

- RADIANT PANELS temperature regulation
- Fixed-point or weather compensation function
- Fixed-point or dew-point temperature tracking cooling
- Summer/winter switching
- Dehumidifier system control
- Remote management with Modbus-RTU protocol
- Comparato PRTool software for the communication between PC and mixing valve



| CODE | CONNECTION | Kv _s | DN | PN | Δp max | |
|---|------------|-----------------|----|----|---------|--|
| VERTICAL MIXED OUTLET • MMM | | | | | | |
| DIAMIXPBPR | 3/4" | 11,5 | 20 | 16 | 16 bar | |
| DIAMIXPCPR | 1" | 18,3 | 25 | 16 | 16 bar | |
| VERTICAL MIXED OUTLET • FFF | | | | | | |
| DIAMIXPFAPR | 1/2" | 6 | 15 | 25 | 25 bar | |
| DIAMIXPFBPR | 3/4" | 11,5 | 20 | 16 | 16 bar | |
| DIAMIXPFCPR | 1" | 18,3 | 25 | 16 | 16 bar | |
| COMPAMIXPDPR | 1"1/4 | 27,2 | 32 | 10 | 10 bar | |
| COMPAMIXPEPR | 1"1/2 | 47,3 | 40 | 10 | 6 bar | |
| COMPAMIXPFPR | 2" | 73 | 50 | 10 | 4 bar | |
| HORIZONTAL-LINE MIXED OUTLET • FFF | | | | | | |
| DIAMIXPFAPRM | 1/2" | 6 * | 15 | 16 | 3,4 bar | |
| DIAMIXPFBPRM | 3/4" | 4,8 * | 20 | 16 | 3,4 bar | |
| DIAMIXPFCPRM | 1" | 8,6 * | 25 | 16 | 3,4 bar | |
| DIAMIXPFDPRM | 1"1/4 | 12,8 * | 32 | 16 | 3,4 bar | |
| DIAMIXPFEPRM | 1"1/2 | 11,5 * | 40 | 16 | 3,4 bar | |
| DIAMIXPFFPRM | 2" | 19,5 * | 50 | 16 | 3,4 bar | |
| VERTICAL-LINE MIXED OUTLET | | | | | | |
| DIAMIXPFBPRV | 3/4" MMM | 6,7 * | 20 | 16 | 3,5 bar | |
| DIAMIXPFCPRV | 1" MMM | 11,4 * | 25 | 16 | 3,5 bar | |
| DIAMIXPFDPRV | 1"1/4 MMM | 17,5 * | 32 | 16 | 3,5 bar | |
| DIAMIXPFEPRV | 1"1/2 FFF | 26,8 * | 40 | 16 | 3,5 bar | |
| DIAMIXPFFPRV | 2" FFF | 52,6 * | 50 | 16 | 3,5 bar | |

* the value refers to the most disadvantaged way (L)



Accessories

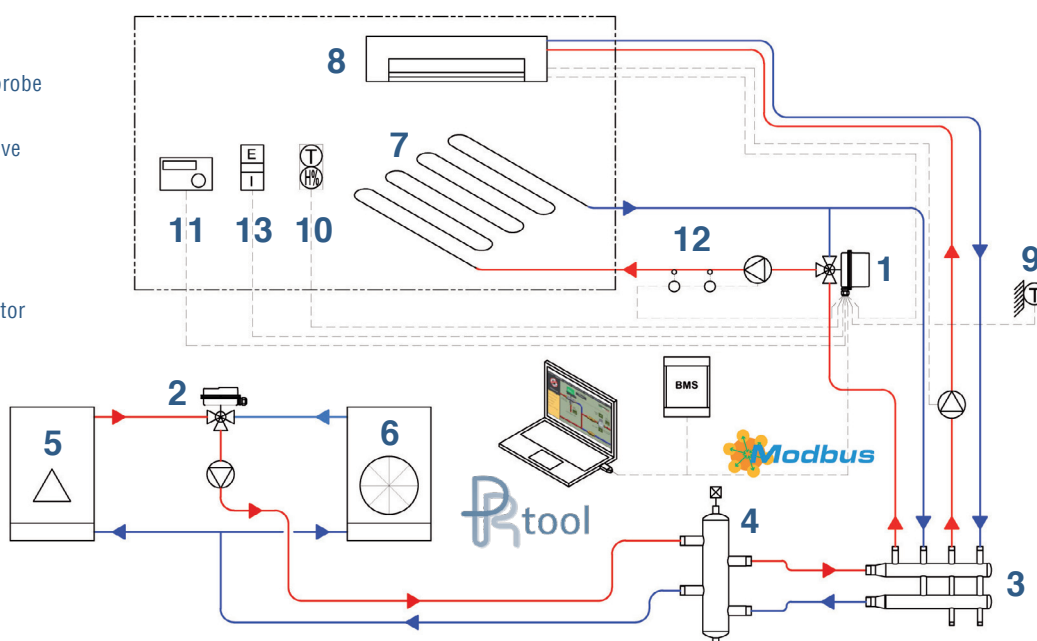
Add the numbers and/or letters listed in the “ID” column corresponding to the selected accessories at the end of the base model code. Code example: DIAMIXPBPRK

| ID | DESCRIPTION | NOTES |
|----|--|--|
| K | Brass immersion temperature probe | G 1/8" - pocket not included |
| 04 | 24V 50-60 Hz version | |
| D1 | Spacer for insulation | Diamix PR - h 90 Compamix PR - h 90 |
| D2 | Spacer for insulation and manual opening | Diamix PR - h 90 Compamix PR - h 66 |

| CODE | DESCRIPTION |
|------------|---|
| RFSONDAE | Sensor for external temperature for weather compensation |
| AL24VDC | Power supply 24 V DC |
| RFTRUEE10 | Temperature and humidity probe for anti-condensing function |
| see p. 202 | Room thermostat |
| USBMOD | Modbus-USB interface |

EXAMPLE OF USE: RADIANT PANEL HEATING / COOLING

- 1 : DIAMIX PR / COMPAMIX PR
- 2 : Diamant PRO / Compact PRO / Universal PRO
- 3 : DIACOL manifold
- 4 : DIACOM hydraulic separator
- 5 : Boiler
- 6 : Chiller
- 7 : Radiant panel system
- 8 : Dehumidifier
- 9 : External temperature probe for climatic function
- 10 : Temperature and relative humidity sensor
- 11 : Room thermostat
- 12 : Safety thermostats heating / cooling
- 13 : Summer / winter selector



Diamix L • Compamix L



i

ANTI-LEGIONELLA FUNCTION



- **OPERATING TIMES:**
DIAMIX L 12 SEC 90°
COMPAMIX L 45 SEC 90°
- **CLASS PROTECTION:** IP67
- **POWER SUPPLY:** 230V 50/60 Hz
- **110V VERSION ON REQUEST**
- **ADJUSTMENT RANGE:** 30°C to 65°C



FUNCTIONS:

- Domestic hot water mixing
- Programmable thermal disinfection cycle
- Completed cycle storage
- Recirculation pump hour scheduling
- Remote management with Modbus-RTU protocol
- Comparato LegioTool software for the communication between PC and mixing valve
- Comparato DIMmix software for Mixing Valve sizing



| CODE | CONNECTION | Kv _s | DN | PN | Δp max | |
|------------------------------------|------------|-----------------|----|----|--------|--|
| VERTICAL MIXED OUTLET • MMM | | | | | | |
| DIAMIXPBL * | 3/4" | 11,5 | 20 | 16 | 16 bar | |
| DIAMIXPCL * | 1" | 18,3 | 25 | 16 | 16 bar | |
| VERTICAL MIXED OUTLET • FFF | | | | | | |
| DIAMIXPFAL * | 1/2" | 6 | 15 | 25 | 25 bar | |
| DIAMIXPFBL * | 3/4" | 11,5 | 20 | 16 | 16 bar | |
| DIAMIXPFCL * | 1" | 18,3 | 25 | 16 | 16 bar | |
| COMPAMIXPDL | 1"1/4 | 27,2 | 32 | 10 | 10 bar | |
| COMPAMIXPEL | 1"1/2 | 47,3 | 40 | 10 | 6 bar | |
| COMPAMIXPFL | 2" | 73 | 50 | 10 | 4 bar | |

* Power supply 230V 60Hz on request

ANTI-LEGIONELLA FUNCTION FOCUS

Besides all the functions of standard version, Diamix L or Compamix L mixing / thermo-regulating valve has a specific software which allows the actuator to make autonomously all processes of thermal disinfection in plants with recirculation ring. In this way, the danger of **presence and proliferation of legionella bacteria is noticeably reduced**. The multiple variables connected to the realization of plants where this equipment can be installed are so numerous that it is impossible to totally exclude the risk.



Accessories

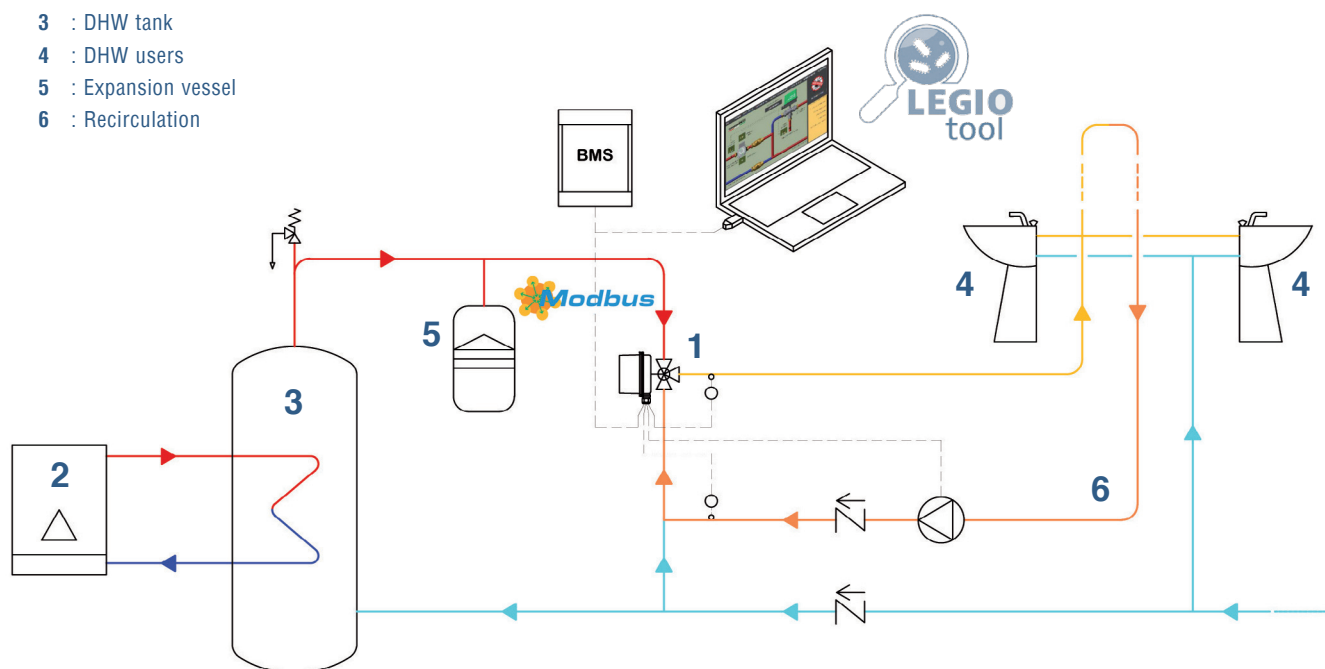
Add the numbers and/or letters listed in the “ID” column corresponding to the selected accessories at the end of the base model code. Code example: DIAMIXPBLK

| ID | DESCRIPTION | NOTE |
|----|--|--------------------------------------|
| K | Brass immersion temperature probe | G 1/8" - pocket not included |
| 04 | 24V 50-60 Hz version | |
| D1 | Spacer for insulation | Diamix L - h 90 Compamix L - h 90 |
| D2 | Spacer for insulation and manual opening | Diamix L - h 90 Compamix L - h 66 |

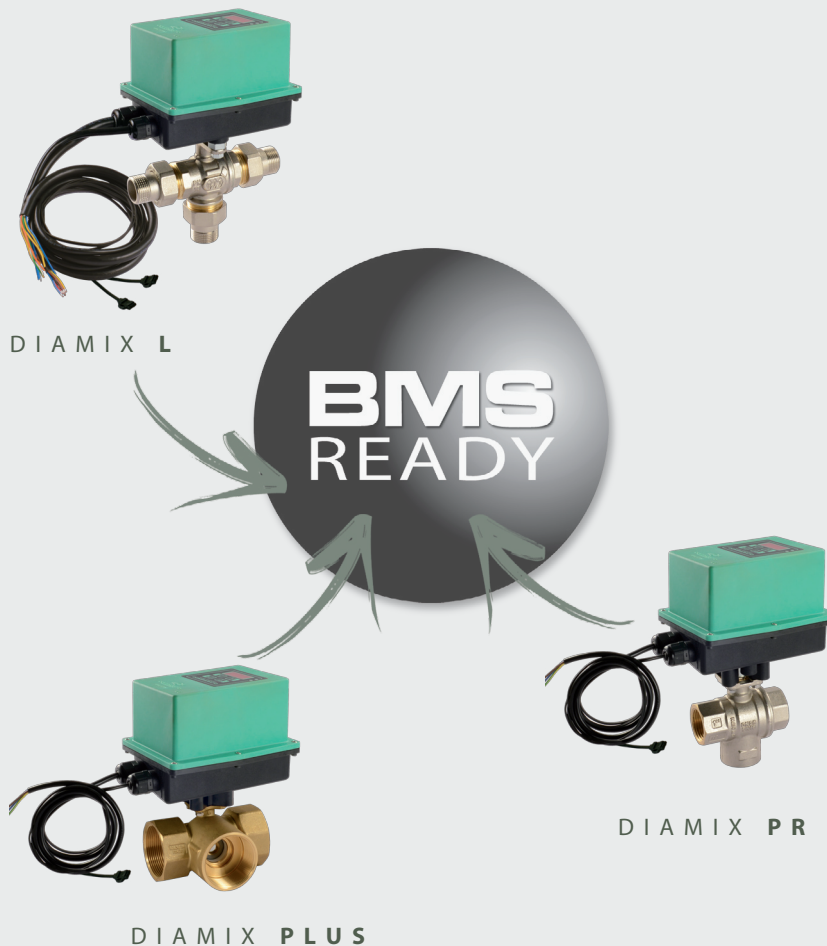
| CODE | DESCRIPTION |
|--------|----------------------|
| USBMOD | Modbus-USB interface |

EXAMPLE OF USE: DOMESTIC HOT WATER SYSTEM

- 1 : DIAMIX L / COMPAMIX L
- 2 : Boiler
- 3 : DHW tank
- 4 : DHW users
- 5 : Expansion vessel
- 6 : Recirculation



MIXING VALVES with **BUILT-IN ELECTRONIC**



A Building Management System is a system designed for buildings, which controls and monitors their systems and their mechanical and electrical equipments. It allows the remote management through a single interface. The manager has full remote access to the control, feedback and programming of each unit. The new generation of Comparato's thermoregulating valves interface with BMS systems through a Modbus-RTU communication protocol.

The Modbus is an open communication protocol which is now the effective standard all around the world. Its easy implementation makes the Modbus very popular in the building automation industry, too.

BALANCING SYSTEMS



Pressure Independent Control Valve
PICV

**SINTESI
DIAMANT**

112



Control valves for
ELECTRONIC FLOW RATE CONTROL

ePICV

114



Control valves for electronic
RETURN TEMPERATURE CONTROL

eRTCV

116



Control valves for
TEMPERATURE DIFFERENTIAL CONTROL

DTCV

118



PICV Balancing ball valve

- P.I.C.V.: PRESSURE INDEPENDENT CONTROL VALVE
- EQUAL PERCENTAGE BALL PROFILE
- SHUT-OFF FUNCTION
- APPLICATION EXAMPLE P. 113



| CODE | CONNECTION | DN | PN | Qmax [l/h] | |
|---------|------------|----|----|------------|--|
| SCPV15A | 1/2" | 15 | 25 | 360 | |
| SCPV15B | 1/2" | 15 | 25 | 700 | |
| SCPV15C | 1/2" | 15 | 25 | 1.000 | |
| SCPV20A | 3/4" | 20 | 25 | 780 | |
| SCPV20B | 3/4" | 20 | 25 | 1.150 | |
| SCPV25A | 1" | 25 | 25 | 2.200 | |
| SCPV25B | 1" | 25 | 25 | 2.700 | |
| SCPV32A | 1"1/4 | 25 | 25 | 3.000 | |
| SCPV32B | 1"1/4 | 25 | 25 | 4.000 | |



PICV Balancing ball valve

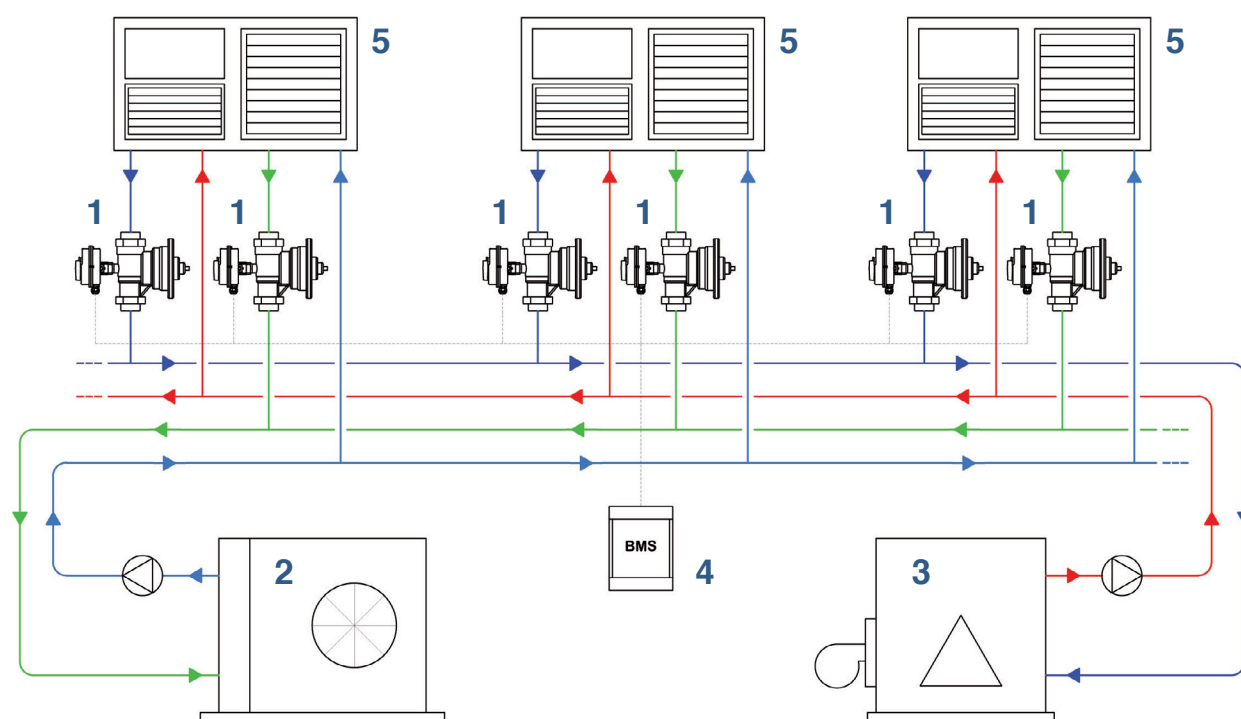
- P.I.C.V.: PRESSURE INDEPENDENT CONTROL VALVE
- EQUAL PERCENTAGE BALL PROFILE
- SHUT-OFF FUNCTION



| CODE | CONNECTION | DN | PN | Qmax [l/h] |
|---------|------------|----|----|------------|
| DCPV40A | 1"1/2 | 40 | 16 | 6.000 |
| DCPV40B | 1"1/2 | 40 | 16 | 9.000 |
| DCPV50A | 2" | 50 | 16 | 12.000 |
| DCPV50B | 2" | 50 | 16 | 18.000 |

EXAMPLE OF USE: 4-PIPE HEATING / COOLING SYSTEM

- 1 : Diamant PILOT PICV
 2 : Chiller
 3 : Boiler
 4 : External management electronics
 5 : A.H.U.



THE PICV COMBINES THE DIFFERENTIAL PRESSURE CONTROL FUNCTION WITH THE FEATURES OF A REGULATION VALVE AND A 2-WAY CONTROL VALVE.



Regulating valves for electronic flow control



FEATURES AND FUNCTIONS

- Pressure-independent flow rate control
- 2-way regulating ball valve with equal percentage profile
- Shut-off function
- Flow sensor with Vortex technology
- Integrated control panel and datalogger function
- Analogue signal 0-10V for flow rate setpoint
- Modbus-RTU remote management

| CODE | CONNECTION | DN | PN * | Kvs (m³/h) | FLOW RATE min/max |
|----------------------------|------------|----|------|------------|-------------------|
| POWER SUPPLY 230V 50/60 Hz | | | | | |
| EPICV2215 | G1/2"B | 15 | 8 | 1,2 | 0,05 ÷ 0,9 m³/h |
| EPICV2220 | G3/4"B | 20 | 8 | 2,8 | 0,11 ÷ 1,9 m³/h |
| EPICV2225 | G1"B | 25 | 8 | 4,7 | 0,21 ÷ 3,0 m³/h |
| EPICV2232 | G1"1/4B | 32 | 8 | 7,7 | 0,3 ÷ 5,1 m³/h |
| EPICV2240 | G1"1/2B | 40 | 8 | 12,4 | 0,54 ÷ 9,0 m³/h |
| POWER SUPPLY 24V 50/60 Hz | | | | | |
| EPICV2415 | G1/2"B | 15 | 8 | 1,2 | 0,05 ÷ 0,9 m³/h |
| EPICV2420 | G3/4"B | 20 | 8 | 2,8 | 0,11 ÷ 1,9 m³/h |
| EPICV2425 | G1"B | 25 | 8 | 4,7 | 0,21 ÷ 3,0 m³/h |
| EPICV2432 | G1"1/4B | 32 | 8 | 7,7 | 0,3 ÷ 5,1 m³/h |
| EPICV2440 | G1"1/2B | 40 | 8 | 12,4 | 0,54 ÷ 9,0 m³/h |

* PN16 version available on request

Accessories

| CODE | DN |
|------------|----|
| INSULATION | |
| CBCV15 | 15 |
| CBCV20 | 20 |
| CBCV25 | 25 |
| CBCV32 | 32 |
| CBCV40 | 40 |

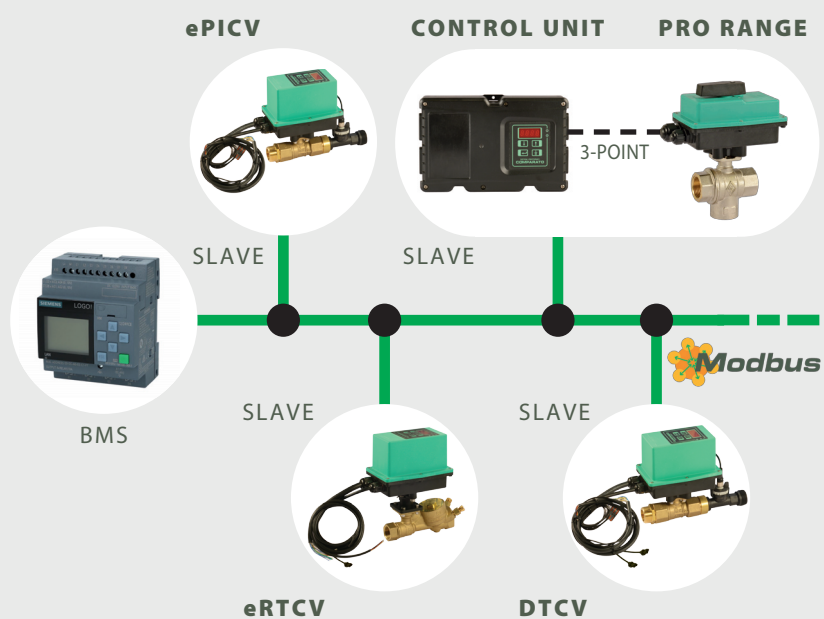


Modbus is a communication serial protocol commonly used in industrial automations.



- ✓ STANDARD
- ✓ EASY TO USE
- ✓ RAPIDITY
- ✓ NO HARDWARE LIMITS
- ✓ RELIABLE COMMUNICATION

SYSTEM ARCHITECTURE





Regulating valves for electronic return temperature control



FEATURES AND FUNCTIONS




- Pressure-independent flow rate control
- Return temperature control for heating and/or cooling systems
- Shut-off function
- Contact temperature sensors
- Integrated control panel and datalogger function
- Analogue signal 0-10V for flow rate setpoint
- Modbus-RTU remote management

| CODE + Calibration | CONNECTION | DN | PN | FLOW RATE max | |
|----------------------------|------------|----|----|---------------|------|
| POWER SUPPLY 230V 50/60 Hz | | | | | |
| ERTCV2215A _ | 1/2" | 15 | 25 | 0,36 | m³/h |
| ERTCV2215B _ | 1/2" | 15 | 25 | 0,70 | m³/h |
| ERTCV2215C _ | 1/2" | 15 | 25 | 1,0 | m³/h |
| ERTCV2220A _ | 3/4" | 20 | 25 | 0,78 | m³/h |
| ERTCV2220B _ | 3/4" | 20 | 25 | 1,15 | m³/h |
| ERTCV2225A _ | 1" | 25 | 25 | 2,2 | m³/h |
| ERTCV2225B _ | 1" | 25 | 25 | 2,7 | m³/h |
| ERTCV2225C _ | 1"1/4 | 25 | 25 | 3,0 | m³/h |
| ERTCV2225D _ | 1"1/4 | 25 | 25 | 4,0 | m³/h |
| ERTCV2240A _ | 1"1/2 | 40 | 16 | 6,0 | m³/h |
| ERTCV2240B _ | 1"1/2 | 40 | 16 | 9,0 | m³/h |
| ERTCV2250A _ | 2" | 50 | 16 | 12,0 | m³/h |
| ERTCV2250B _ | 2" | 50 | 16 | 18,0 | m³/h |

INSERT THE LETTER CORRESPONDING TO THE REGULATOR CALIBRATION AT THE END OF THE CODE



Regulator calibration

| | |
|---|--|
| A |  Radiators |
| B |  Radiant panels |
| C |  Fancoil |






| CODE + Calibration | CONNECTION | DN | PN | FLOW RATE max | |
|---------------------------|------------|----|----|---------------|--|
| POWER SUPPLY 24V 50/60 Hz | | | | | |
| ERTCV2415A _ | 1/2" | 15 | 25 | 0,36 m³/h | |
| ERTCV2415B _ | 1/2" | 15 | 25 | 0,70 m³/h | |
| ERTCV2415C _ | 1/2" | 15 | 25 | 1,0 m³/h | |
| ERTCV2420A _ | 3/4" | 20 | 25 | 0,78 m³/h | |
| ERTCV2420B _ | 3/4" | 20 | 25 | 1,15 m³/h | |
| ERTCV2425A _ | 1" | 25 | 25 | 2,2 m³/h | |
| ERTCV2425B _ | 1" | 25 | 25 | 2,7 m³/h | |
| ERTCV2425C _ | 1"1/4 | 25 | 25 | 3,0 m³/h | |
| ERTCV2425D _ | 1"1/4 | 25 | 25 | 4,0 m³/h | |
| ERTCV2440A _ | 1"1/2 | 40 | 16 | 6,0 m³/h | |
| ERTCV2440B _ | 1"1/2 | 40 | 16 | 9,0 m³/h | |
| ERTCV2450A _ | 2" | 50 | 16 | 12,0 m³/h | |
| ERTCV2450B _ | 2" | 50 | 16 | 18,0 m³/h | |

INSERT THE LETTER CORRESPONDING TO THE REGULATOR CALIBRATION AT THE END OF THE CODE



Regulator calibration

| | |
|---|--|
| A |  Radiators |
| B |  Radiant panels |
| C |  Fancoil |

Accessories

| CODE | CONNECTION |
|------------|------------|
| INSULATION | |
| CBCV15R | 1/2" |
| CBCV20R | 3/4" |
| CBCV25R | 1" |
| CBCV32R | 1"1/4 |
| CBCV40R | 1"1/2 |
| CBCV50R | 2" |



Regulating valves for electronic differential temperature control



FEATURES AND FUNCTIONS

- Pressure-independent flow rate control
- Δt control with flow rate limitation
- Δt control with power limitation
- Energy Monitoring
- 2-way regulating ball valve with equal percentage profile
- Shut-off function
- Contact temperature sensors
- Flow sensor with Vortex technology
- Integrated monitoring and control interface
- Analog inputs and digital outputs
- Modbus-RTU remote management

| CODE | CONNECTION | DN | PN * | Kvs (m³/h) | FLOW RATE min/max |
|---------------------------------------|------------|----|------|------------|-------------------|
| ALIMENTAZIONE ELETTRICA 230V 50/60 Hz | | | | | |
| DTCV2215 | G1/2"B | 15 | 8 | 1,2 | 0,05 ÷ 0,9 m³/h |
| DTCV2220 | G3/4"B | 20 | 8 | 2,8 | 0,11 ÷ 1,9 m³/h |
| DTCV2225 | G1"B | 25 | 8 | 4,7 | 0,21 ÷ 3,0 m³/h |
| DTCV2232 | G1"1/4B | 32 | 8 | 7,7 | 0,3 ÷ 5,1 m³/h |
| DTCV2240 | G1"1/2B | 40 | 8 | 12,4 | 0,54 ÷ 9,0 m³/h |
| ALIMENTAZIONE ELETTRICA 24V 50/60 Hz | | | | | |
| DTCV2415 | G1/2"B | 15 | 8 | 1,2 | 0,05 ÷ 0,9 m³/h |
| DTCV2420 | G3/4"B | 20 | 8 | 2,8 | 0,11 ÷ 1,9 m³/h |
| DTCV2425 | G1"B | 25 | 8 | 4,7 | 0,21 ÷ 3,0 m³/h |
| DTCV2432 | G1"1/4B | 32 | 8 | 7,7 | 0,3 ÷ 5,1 m³/h |
| DTCV2440 | G1"1/2B | 40 | 8 | 12,4 | 0,54 ÷ 9,0 m³/h |

* PN16 version available on request

INSERT THE LETTER CORRESPONDING TO THE REGULATOR CALIBRATION AT THE END OF THE CODE



Regulator calibration

A
B
C

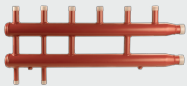
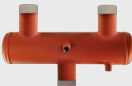












Radiators
Radiant panels
Fancoil

Accessories

| CODE | DN |
|------------|----|
| INSULATION | |
| CBCV15 | 15 |
| CBCV20 | 20 |
| CBCV25 | 25 |
| CBCV32 | 32 |
| CBCV40 | 40 |

COMPONENTS FOR CENTRAL HEATING SYSTEMS

| | | |
|---|---|-----|
|  | Manifolds DIACOL | 120 |
|  | Manifolds for circulation pumps DIACOP | 125 |
|  | Hydraulic separators DIACOM | 126 |
|  | 3-circuit hydraulic separators DIADIS | 127 |
|  | Deposit separators DIADEF | 128 |
|  | Magnetic deposit separators DIADEF MAGNETIC | 129 |
|  | Magnetic filters DIAFIL | 130 |
|  | Air separators DIASEP | 131 |
|  | Devices holder INAIL SAFETY | 132 |
|  | DEAREATORS | 132 |
|  | STAINLESS STEEL manifolds DIAS | 132 |
|  | Venturi ejector DIASOL | 133 |

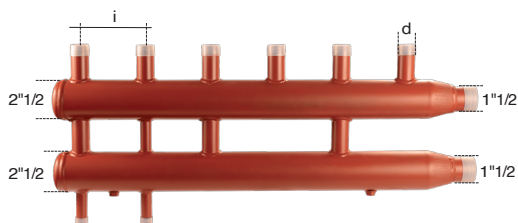
Diacol 125

*i*

DN 25 connections

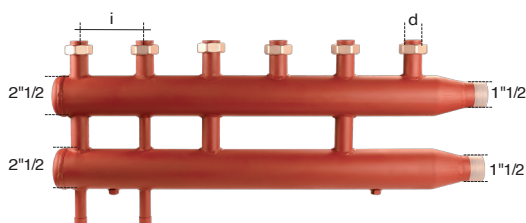
- INTERAXIS: 125 mm
- DUAL

INOX ON REQUEST



THREAD 1" M

| CODE | ZONES | d | i | |
|--------|-------|----|--------|--|
| C02D01 | 2 | 1" | 125 mm | |
| C03D01 | 3 | 1" | 125 mm | |
| C04D01 | 4 | 1" | 125 mm | |
| C05D01 | 5 | 1" | 125 mm | |
| C06D01 | 6 | 1" | 125 mm | |



NUT 1 1/4"

| CODE | ZONES | d | i | |
|----------|-------|----|--------|--|
| C02D01GR | 2 | 1" | 125 mm | |
| C03D01GR | 3 | 1" | 125 mm | |
| C04D01GR | 4 | 1" | 125 mm | |
| C05D01GR | 5 | 1" | 125 mm | |
| C06D01GR | 6 | 1" | 125 mm | |

INSULATION



| CODE | ZONES | i | |
|----------|-------|--------|--|
| CBC02D01 | 2 | 125 mm | |
| CBC03D01 | 3 | 125 mm | |
| CBC04D01 | 4 | 125 mm | |
| CBC05D01 | 5 | 125 mm | |
| CBC06D01 | 6 | 125 mm | |

Accessory

FIXING KIT



| CODE | DESCRIPTION |
|-------------|--|
| KSC1 | Support brackets with slots for regulation, screw anchors, threaded screw and nuts |

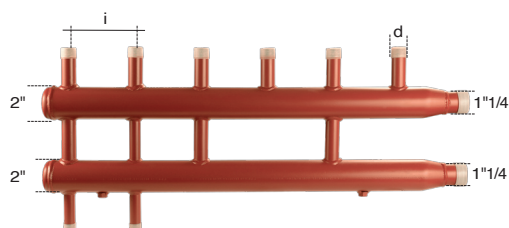
Diacol 125

*i*

DN 20 connections

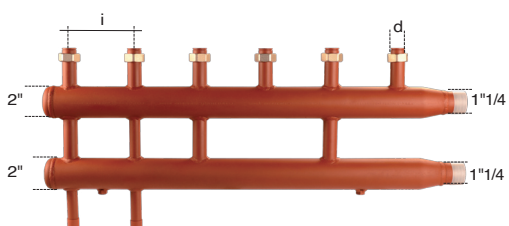
- INTERAXIS: 125 mm
- DUAL

INOX ON REQUEST



THREAD 3/4" M

| CODE | ZONES | d | i | |
|--------|-------|------|--------|--|
| C02D34 | 2 | 3/4" | 125 mm | |
| C03D34 | 3 | 3/4" | 125 mm | |
| C04D34 | 4 | 3/4" | 125 mm | |
| C05D34 | 5 | 3/4" | 125 mm | |
| C06D34 | 6 | 3/4" | 125 mm | |



NUT 1"

SUITABLE FOR PUMP UNITS

| CODE | ZONES | d | i | |
|----------|-------|------|--------|--|
| C02D34GR | 2 | 3/4" | 125 mm | |
| C03D34GR | 3 | 3/4" | 125 mm | |
| C04D34GR | 4 | 3/4" | 125 mm | |
| C05D34GR | 5 | 3/4" | 125 mm | |
| C06D34GR | 6 | 3/4" | 125 mm | |

INSULATION



| CODE | ZONES | i | |
|----------|-------|--------|--|
| CBC02D34 | 2 | 125 mm | |
| CBC03D34 | 3 | 125 mm | |
| CBC04D34 | 4 | 125 mm | |
| CBC05D34 | 5 | 125 mm | |
| CBC06D34 | 6 | 125 mm | |

Accessory

FIXING KIT



| CODE | DESCRIPTION |
|------|--|
| KSC1 | Support brackets with slots for regulation, screw anchors, threaded screw and nuts |

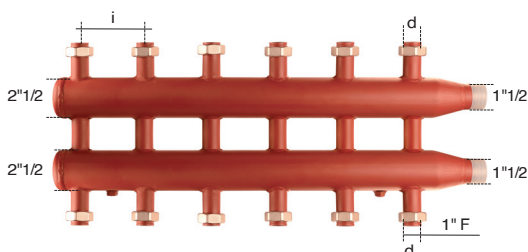
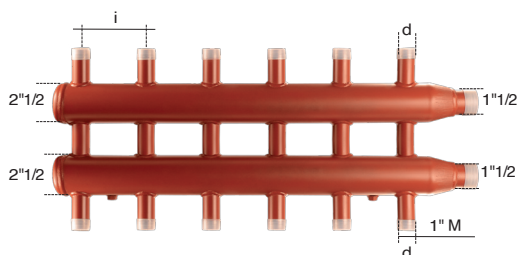
Diacol 125

*i*

DN 25 connections

- INTERAXIS: 125 mm
- DUAL
- OPPOSED CONNECTIONS

INOX ON REQUEST



INSULATION



THREAD 1" M

| CODE | ZONES | d | i | |
|--------|-------|----|--------|--|
| C21D01 | 2+1 | 1" | 125 mm | |
| C22D01 | 2+2 | 1" | 125 mm | |
| C31D01 | 3+1 | 1" | 125 mm | |
| C32D01 | 3+2 | 1" | 125 mm | |
| C33D01 | 3+3 | 1" | 125 mm | |
| C41D01 | 4+1 | 1" | 125 mm | |
| C42D01 | 4+2 | 1" | 125 mm | |
| C51D01 | 5+1 | 1" | 125 mm | |

NUT 1" 1/4

| CODE | ZONES | d | i | |
|----------|-------|----|--------|--|
| C21D01GR | 2+1 | 1" | 125 mm | |
| C22D01GR | 2+2 | 1" | 125 mm | |
| C31D01GR | 3+1 | 1" | 125 mm | |
| C32D01GR | 3+2 | 1" | 125 mm | |
| C33D01GR | 3+3 | 1" | 125 mm | |
| C41D01GR | 4+1 | 1" | 125 mm | |
| C42D01GR | 4+2 | 1" | 125 mm | |
| C51D01GR | 5+1 | 1" | 125 mm | |

| CODE | ZONES | i | |
|----------|-------|--------|--|
| CBC21D01 | 2+1 | 125 mm | |
| CBC22D01 | 2+2 | 125 mm | |
| CBC31D01 | 3+1 | 125 mm | |
| CBC32D01 | 3+2 | 125 mm | |
| CBC33D01 | 3+3 | 125 mm | |
| CBC41D01 | 4+1 | 125 mm | |
| CBC42D01 | 4+2 | 125 mm | |
| CBC51D01 | 5+1 | 125 mm | |

Accessory



FIXING KIT

| CODE | DESCRIPTION |
|------|--|
| KSC1 | Support brackets with slots for regulation, screw anchors, threaded screw and nuts |

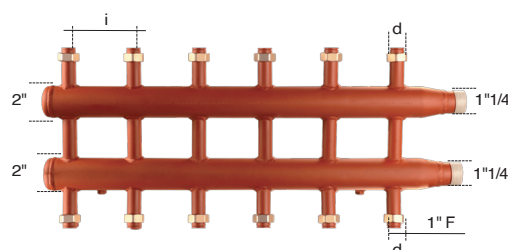
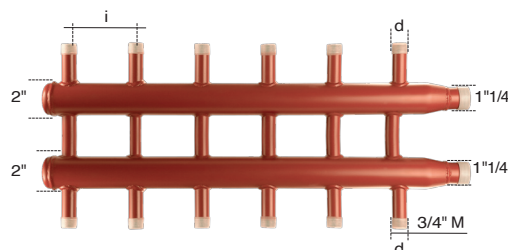
Diacol 125

*i*

DN 20 connections

- INTERAXIS: 125 mm
- DUAL
- OPPOSED CONNECTIONS

INOX ON REQUEST



INSULATION



THREAD 3/4" M

| CODE | ZONES | d | i | |
|--------|-------|------|--------|--|
| C21D34 | 2+1 | 3/4" | 125 mm | |
| C22D34 | 2+2 | 3/4" | 125 mm | |
| C31D34 | 3+1 | 3/4" | 125 mm | |
| C32D34 | 3+2 | 3/4" | 125 mm | |
| C33D34 | 3+3 | 3/4" | 125 mm | |
| C41D34 | 4+1 | 3/4" | 125 mm | |
| C42D34 | 4+2 | 3/4" | 125 mm | |
| C51D34 | 5+1 | 3/4" | 125 mm | |

NUT 1"

| CODE | ZONES | d | i | |
|-------------------------|-------|------|--------|--|
| SUITABLE FOR PUMP UNITS | | | | |
| C21D34GR | 2+1 | 3/4" | 125 mm | |
| C22D34GR | 2+2 | 3/4" | 125 mm | |
| C31D34GR | 3+1 | 3/4" | 125 mm | |
| C32D34GR | 3+2 | 3/4" | 125 mm | |
| C33D34GR | 3+3 | 3/4" | 125 mm | |
| C41D34GR | 4+1 | 3/4" | 125 mm | |
| C42D34GR | 4+2 | 3/4" | 125 mm | |
| C51D34GR | 5+1 | 3/4" | 125 mm | |

| CODE | ZONES | i | |
|----------|-------|--------|--|
| CBC21D34 | 2+1 | 125 mm | |
| CBC22D34 | 2+2 | 125 mm | |
| CBC31D34 | 3+1 | 125 mm | |
| CBC32D34 | 3+2 | 125 mm | |
| CBC33D34 | 3+3 | 125 mm | |
| CBC41D34 | 4+1 | 125 mm | |
| CBC42D34 | 4+2 | 125 mm | |
| CBC51D34 | 5+1 | 125 mm | |

Accessory



FIXING KIT

| CODE | DESCRIPTION |
|------|--|
| KSC1 | Support brackets with slots for regulation, screw anchors, threaded screw and nuts |

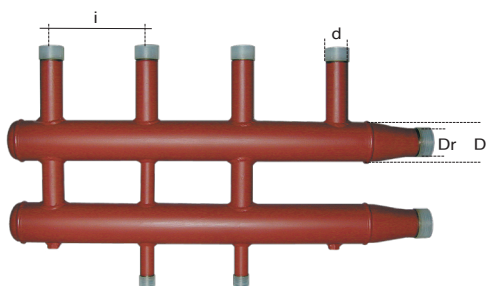
Diacol 140

*i*

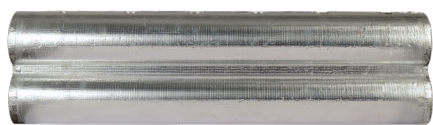
DN 25 connections

- INTERAXIS: 140 mm
- DUAL

INOX ON REQUEST



INSULATION



THREAD 1" M

| CODE | ZONES | Dr | d | D | i | |
|------|-------|---------|----|--------|--------|--|
| C2T | 2 | 1"1/4 M | 1" | 2" | 140 mm | |
| C3T | 3 | 1"1/2 M | 1" | 2"1/2" | 140 mm | |
| C4T | 4 | 1"1/2 M | 1" | 3" | 140 mm | |
| C5T | 5 | 2" M | 1" | 3" | 140 mm | |
| C6T | 6 | 2" M | 1" | 3" | 140 mm | |

| CODE | ZONES | i | |
|-------|-------|--------|--|
| CBC2T | 2 | 140 mm | |
| CBC3T | 3 | 140 mm | |
| CBC4T | 4 | 140 mm | |
| CBC5T | 5 | 140 mm | |
| CBC6T | 6 | 140 mm | |

THREAD 1" M • OPPOSED CONNECTIONS

| CODE | ZONES | Dr | d | D | i | |
|------|-------|---------|----|--------|--------|--|
| C21T | 2+1 | 1"1/2 M | 1" | 2"1/2" | 140 mm | |
| C22T | 2+2 | 1"1/2 M | 1" | 3" | 140 mm | |
| C31T | 3+1 | 1"1/2 M | 1" | 3" | 140 mm | |
| C32T | 3+2 | 2" M | 1" | 3" | 140 mm | |
| C33T | 3+3 | 2" M | 1" | 3" | 140 mm | |
| C41T | 4+1 | 2" M | 1" | 3" | 140 mm | |
| C42T | 4+2 | 2" M | 1" | 3" | 140 mm | |
| C51T | 5+1 | 2" M | 1" | 3" | 140 mm | |

Accessory



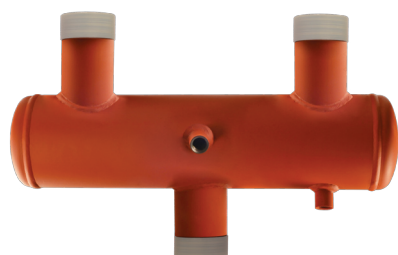
FIXING KIT

| CODE | DESCRIPTION |
|------|--|
| KSC1 | Support brackets with slots for regulation, screw anchors, threaded screw and nuts |



MANIFOLD for parallel coupling of **CIRCULATION PUMPS**

INOX ON REQUEST

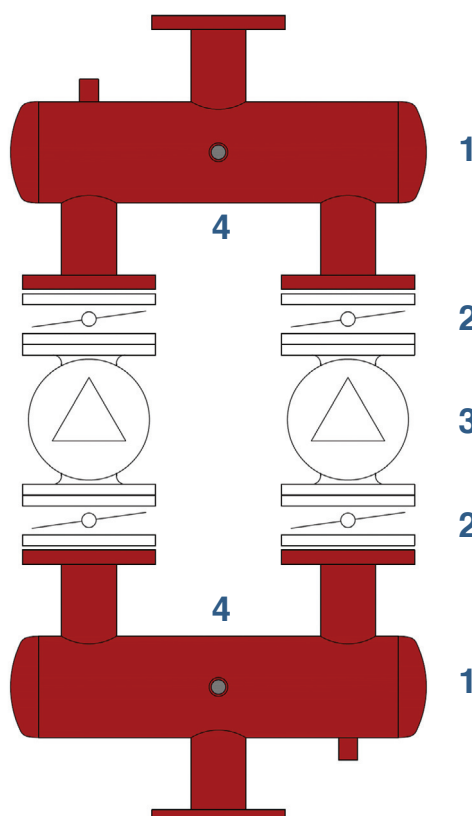


| CODE | CONNECTIONS | BODY | INTERAXIS | |
|-----------------|-------------|-------|-----------|--|
| THREADED | | | | |
| P001 | 1" M | 2" | 260 mm | |
| P114 | 1"1/4 M | 2"1/2 | 260 mm | |
| P112 | 1"1/2 M | 2"1/2 | 300 mm | |
| P002 | 2" M | 4" | 360 mm | |



| CODE | CONNECTIONS | BODY | INTERAXIS | |
|----------------|-------------|------|-----------|--|
| FLANGED | | | | |
| P212 | DN65 | 5" | 360 mm | |
| P003 | DN80 | 5" | 400 mm | |
| P004 | DN100 | 6" | 400 mm | |

EXAMPLE OF USE



- 1 : DIACOP
- 2 : Interception valves
- 3 : Pumps
- 4 : Sleeve Ø1/2" for manometer

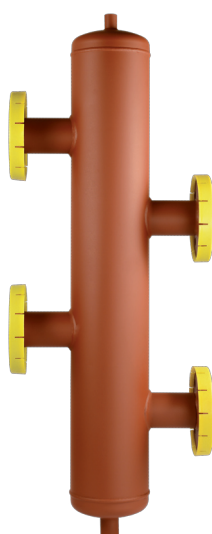
**Additional functions of AIR and DEPOSIT SEPARATOR**

- Quotations on request for non-standard hydraulic separators according to customer's design

INOX ON REQUEST

| CODE | CONNECTIONS | BODY | FLOW RATE [m³/h] | VOLUME [ℓ] | |
|-----------------|-------------|------|------------------|------------|--|
| THREADED | | | | | |
| C001 | 1" M | 3" | 2 ÷ 2,8 | 2,2 | |
| C114 | 1"1/4 M | 4" | 3,5 ÷ 5 | 5 | |
| C112 | 1"1/2 M | 4" | 5 ÷ 7,1 | 6 | |
| C002 | 2" M | 5" | 8 ÷ 11,3 | 12 | |

Δp 100 daPa Δp 200 daPa



| CODE | CONNECTIONS | BODY | FLOW RATE [m³/h] | VOLUME [ℓ] | |
|----------------|-------------|--------|------------------|------------|--|
| FLANGED | | | | | |
| C212 | DN 65 | 6" | 12 ÷ 17 | 21 | |
| C003 | DN 80 | 8" | 18 ÷ 25,5 | 42 | |
| C004 | DN 100 | 10" | 30 ÷ 42,5 | 84 | |
| C005 | DN 125 | 12" | 50 ÷ 70,5 | 146 | |
| C006 | DN 150 | 16" | 70 ÷ 99 | 260 | |
| C008 | DN 200 | 20" | 120 ÷ 170 | 548 | |
| C010 * | DN 250 | 800 mm | 150 ÷ 212 | 1.483 | |
| C012 * | DN 300 | 990 mm | 220 ÷ 315 | 2.446 | |

* coaxial connection

Δp 100 daPa Δp 200 daPa

INSULATION

| CODE | OUTLETS |
|----------|---------|
| CBC001 | 1" |
| CBC114 | 1"1/4 |
| CBC112 | 1"1/2 |
| CBC002 | 2" |
| CBC212 * | DN 65 |
| CBC003 * | DN 80 |
| CBC004 * | DN 100 |

* silver insulation

**INDEPENDENT 3-CIRCUITS**

Hydraulic separators for three independent hydraulic circuits. Uses:

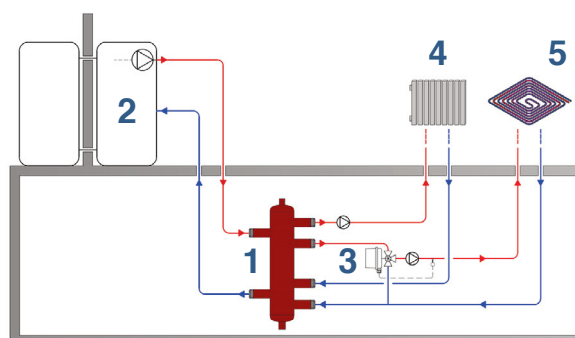
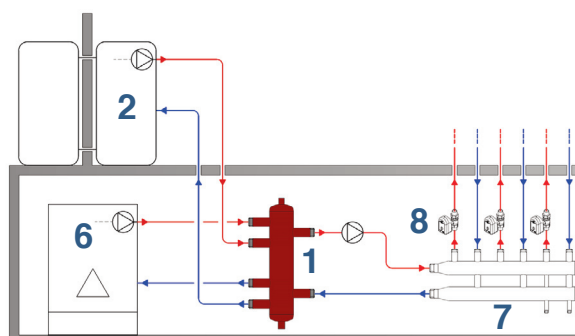
- one boiler that supplies two zones (eg: high and low temperature);
- two independent heating sources that supply the same plant.

INOX ON REQUEST**INSULATION**

| CODE | CONNECTIONS | BODY | FLOW RATE [m³/h] | VOLUME [ℓ] | |
|-----------------|-------------|------|------------------|------------|--|
| THREADED | | | | | |
| T001 | 1" M | 3" | 2 ÷ 2,8 | 2,2 | |
| T114 | 1"1/4 M | 4" | 3,5 ÷ 5 | 5 | |
| T112 | 1"1/2 M | 4" | 5 ÷ 7,1 | 6 | |
| T002 | 2" M | 5" | 8 ÷ 11,3 | 12 | |

Δp 100 daPa Δp 200 daPa

| CODE | OUTLETS | |
|--------|---------|--|
| CBT001 | 1" | |
| CBT114 | 1"1/4 | |
| CBT112 | 1"1/2 | |
| CBT002 | 2" | |

EXAMPLE OF USE: DUAL USE**HIGH AND LOW TEMPERATURE SYSTEM WITH A SINGLE GENERATOR****HYBRID SYSTEM BOILER + PDC**

- 1 : DIADIS
- 2 : Heat pump
- 3 : DIAMIX PR / COMPAMIX PR mixing valve
- 4 : Heater plant
- 5 : Radiant panel plant
- 6 : Boiler
- 7 : DIACOL Manifold
- 8 : SINTESI actuated zone valve

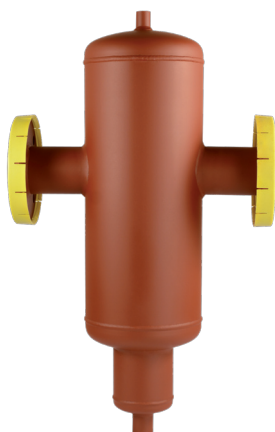
**Additional functions of AIR SEPARATOR**

- Quotations on request for non-standard deposit separators according to customer's design

INOX ON REQUEST

| CODE | CONNECTIONS | BODY | FLOW RATE [m³/h] | VOLUME [ℓ] | |
|-----------------|-------------|------|------------------|------------|--|
| THREADED | | | | | |
| DF001 | 1" M | 3" | 2 ÷ 2,8 | 1,7 | |
| DF114 | 1"1/4 M | 4" | 3,8 ÷ 5,3 | 3,4 | |
| DF112 | 1"1/2 M | 4" | 4,1 ÷ 5,8 | 3,7 | |
| DF002 | 2" M | 5" | 6,0 ÷ 8,4 | 6,4 | |

Δp 100 daPa Δp 200 daPa



| CODE | CONNECTIONS | BODY | FLOW RATE [m³/h] | VOLUME [ℓ] | |
|----------------|-------------|------|------------------|------------|--|
| FLANGED | | | | | |
| DF212 | DN 65 | 6" | 10,7 ÷ 15,1 | 10 | |
| DF003 | DN 80 | 8" | 17,1 ÷ 24,1 | 21 | |
| DF004 | DN 100 | 10" | 34,7 ÷ 49,1 | 36 | |
| DF005 | DN 125 | 12" | 51,6 ÷ 73 | 59 | |
| DF006 | DN 150 | 16" | 80,4 ÷ 113 | 119 | |
| DF008 | DN 200 | 20" | 138 ÷ 195 | 227 | |

Δp 100 daPa Δp 200 daPa

INSULATION

| CODE | OUTLETS |
|---------|---------|
| CBDF001 | 1" |
| CBDF114 | 1"1/4 |
| CBDF112 | 1"1/2 |
| CBDF002 | 2" |
| CBDF212 | DN 65 |
| CBDF003 | DN 80 |
| CBDF004 | DN 100 |

Diadef Magnetico



Hydrocyclonic deposit separator with INTEGRATED MAGNET

- Quotations on request for non-standard hydrocyclonic deposit separators according to customer's design



| CODE | CONNECTIONS | BODY | FLOW RATE [m³/h] | VOLUME [ℓ] | |
|-----------------|-------------|------|------------------|------------|--|
| THREADED | | | | | |
| DFI001 | 1" M | 4" | 1,7 ÷ 2,3 | 2,6 | |
| DFI114 | 1"1/4 M | 5" | 2,4 ÷ 3,5 | 4,3 | |
| DFI112 | 1"1/2 M | 5" | 3,3 ÷ 4,6 | 4,7 | |
| DFI002 | 2" M | 6" | 4,8 ÷ 6,7 | 8 | |

Δp 100 daPa Δp 200 daPa



| CODE | CONNECTIONS | BODY | FLOW RATE [m³/h] | VOLUME [ℓ] | |
|----------------|-------------|------|------------------|------------|--|
| FLANGED | | | | | |
| DFI212 | DN 65 | 8" | 8,6 ÷ 12,1 | 16 | |
| DFI003 | DN 80 | 8" | 13,6 ÷ 18,3 | 22 | |
| DFI004 | DN 100 | 10" | 26 ÷ 36,8 | 34 | |

Δp 100 daPa Δp 200 daPa

INSULATION



| CODE | OUTLETS |
|----------|---------|
| CBDFI001 | 1" |
| CBDFI114 | 1"1/4 |
| CBDFI112 | 1"1/2 |
| CBDFI002 | 2" |
| CBDFI212 | DN 65 |
| CBDFI003 | DN 80 |
| CBDFI004 | DN 100 |

**Additional functions of AIR SEPARATOR with INTEGRATED MAGNET**

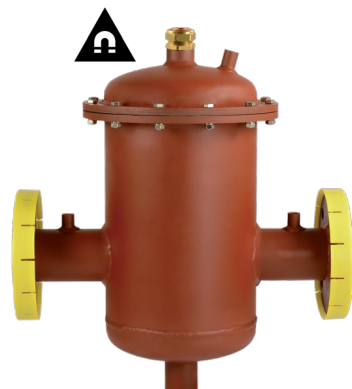
- Accessible for inspection

INOX ON REQUEST



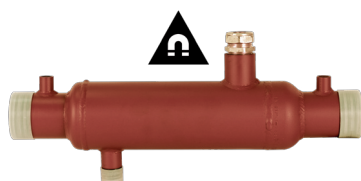
| CODE | CONNECTIONS | BODY | FLOW RATE [m³/h] | VOLUME [ℓ] | |
|-----------------|-------------|------|------------------|------------|--|
| THREADED | | | | | |
| FT001 | 1" M | 4" | 1,6 ÷ 2,3 | 1,8 | |
| FT114 | 1"1/4 M | 4" | 2,1 ÷ 2,9 | 2 | |
| FT112 | 1"1/2 M | 5" | 3,1 ÷ 4,4 | 4 | |
| FT002 | 2" M | 5" | 4,1 ÷ 5,9 | 4,3 | |

Δp 100 daPa Δp 200 daPa

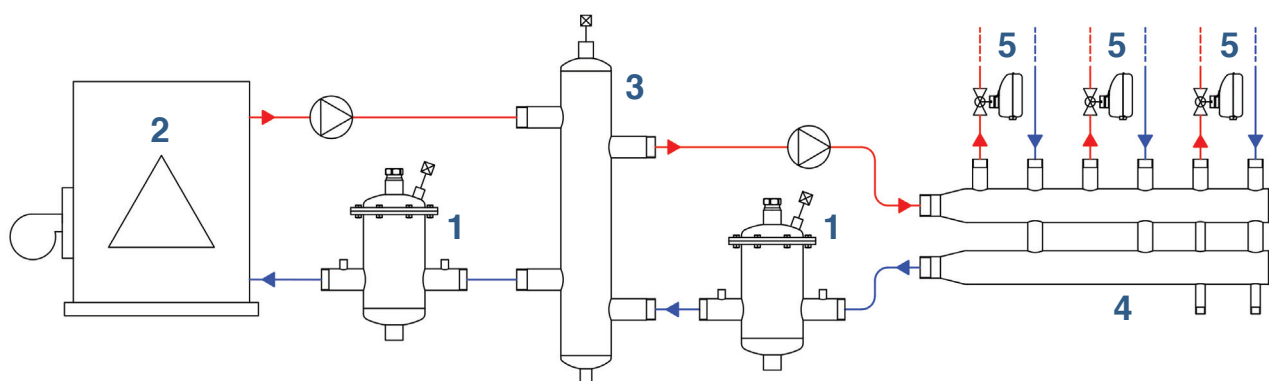


| CODE | CONNECTIONS | BODY | FLOW RATE [m³/h] | VOLUME [ℓ] | |
|----------------|-------------|------|------------------|------------|--|
| FLANGED | | | | | |
| FT212 | DN 65 | 8" | 7,5 ÷ 10,5 | 14 | |
| FT003 | DN 80 | 8" | 9,9 ÷ 14 | 15 | |
| FT004 | DN 100 | 10" | 15 ÷ 21 | 30 | |

Δp 100 daPa Δp 200 daPa



In-line connections not inspectable version on request

EXAMPLE OF USE: HEATING PLANT

- 1 : DIAFIL magnetic filter
- 2 : Boiler
- 3 : DIACOM hydraulic separator
- 4 : DIACOL manifold
- 5 : SINTESI zone motorised valve

**Air Separator**

- Quotations on request for non-standard air separators according to customer's design

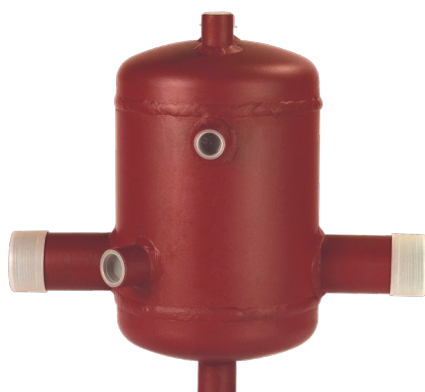
INOX ON REQUEST**SQUARE CONNECTIONS**

| CODE | CONNECTIONS | BODY | FLOW RATE [m³/h] | | | VOLUME [ℓ] | |
|-------------------------------|-------------|------|------------------|---|------|--------------|--|
| THREADED • SQUARE connections | | | | | | | |
| S001 | 1" M | 4" | 2 | ÷ | 2,8 | 2,2 | |
| S114 | 1"1/4 M | 5" | 3,5 | ÷ | 4,9 | 5 | |
| S112 | 1"1/2 M | 6" | 4,5 | ÷ | 6,4 | 6 | |
| S002 | 2" M | 8" | 7,5 | ÷ | 10,6 | 12 | |

Δp 100 daPa Δp 200 daPa

| CODE | CONNECTIONS | BODY | FLOW RATE [m³/h] | | VOLUME [ℓ] | |
|------------------------------|-------------|--------|------------------|---|--------------|-----|
| FLANGED • SQUARE connections | | | | | | |
| S212 | DN 65 | 10" | 13 | ÷ | 18,4 | 21 |
| S003 | DN 80 | 12" | 18 | ÷ | 25,4 | 42 |
| S004 | DN 100 | 16" | 30 | ÷ | 42,4 | 84 |
| S005 | DN 125 | 500 mm | 50 | ÷ | 70,7 | 146 |
| S006 | DN 150 | 600 mm | 70 | ÷ | 99 | 260 |
| S008 | DN 200 | 700 mm | 140 | ÷ | 198 | 548 |

Δp 100 daPa Δp 200 daPa

IN-LINE CONNECTIONS

| CODE | CONNECTIONS | BODY | FLOW RATE [m³/h] | | VOLUME [ℓ] | |
|--------------------------------|-------------|------|------------------|--------|--------------|--|
| THREADED • IN-LINE connections | | | | | | |
| SL001 | 1" M | 4" | 2 | ÷ 2,8 | 2,2 | |
| SL114 | 1"1/4 M | 5" | 3,5 | ÷ 4,9 | 5 | |
| SL112 | 1"1/2 M | 6" | 4,5 | ÷ 6,4 | 6 | |
| SL002 | 2" M | 8" | 7,5 | ÷ 10,6 | 12 | |

Δp 100 daPa Δp 200 daPa

| CODE | CONNECTIONS | BODY | FLOW RATE [m³/h] | | VOLUME [ℓ] | |
|-------------------------------|-------------|--------|------------------|---|--------------|-----|
| FLANGED • IN-LINE connections | | | | | | |
| SL212 | DN 65 | 10" | 13 | ÷ | 18,4 | 21 |
| SL003 | DN 80 | 12" | 18 | ÷ | 25,4 | 42 |
| SL004 | DN 100 | 16" | 30 | ÷ | 42,4 | 84 |
| SL005 | DN 125 | 500 mm | 50 | ÷ | 70,7 | 146 |
| SL006 | DN 150 | 600 mm | 70 | ÷ | 99 | 260 |
| SL008 | DN 200 | 700 mm | 140 | ÷ | 198 | 548 |

Δp 100 daPa Δp 200 daPa

INAIL safety devices holder


i


| CODE | Ø D | Ø d | |
|--------|-------|---------|--|
| CPS114 | 2" | 1"1/4 M | |
| CPS112 | 2"1/2 | 1"1/2 M | |
| CPS002 | 2" | 2" M | |
| CPS212 | 2"1/2 | 2"1/2 M | |

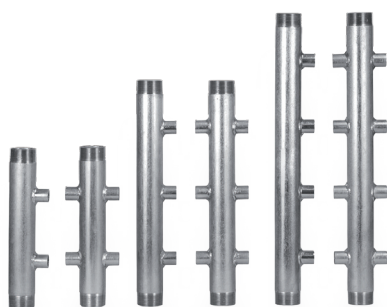
Deareators

- AIR VENTS NOT INCLUDED


i


| CODE | Ø D1 | Ø D2 | Ø D3 | |
|-------|--------|--------|--------|--|
| DI012 | 1/2" F | 3/8" F | 3/8" F | |

STAINLESS STEEL manifolds Dias


i


| CODE | OUTLETS | OUTLET | CONNECTIONS | |
|-----------|---------|--------|-------------|--|
| CX1121220 | 2 | 1/2" F | 1"1/2" M | |
| CX1121222 | 2+2 | 1/2" F | 1"1/2" M | |
| CX1121230 | 3 | 1/2" F | 1"1/2" M | |
| CX1121233 | 3+3 | 1/2" F | 1"1/2" M | |
| CX1121240 | 4 | 1/2" F | 1"1/2" M | |
| CX1121244 | 4+4 | 1/2" F | 1"1/2" M | |

Diasol

Iron ejector

- Iron ejector for monopipe heating systems
- FOR IRON EJECTOR DIASOL PLEASE CONTACT OUR OFFICES
- +39 019 510.371 • info@comparato.com

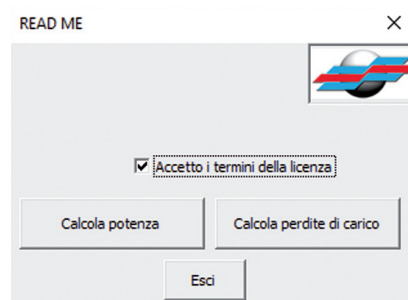


- 1 SIMPLE TYPE RETURN ONLY
- 2 DOUBLE TYPE FLOW AND RETURN

TOOL DimCol FOCUS

How do I chose the **RIGHT POWER AND PRESSURE LOSS?**
with the **DimCol SOFTWARE!**

Free Download from the website
www.comparato.com



Calcolo potenza

STEP 1: Numero di zone

STEP 2: Portata di zona (kg/h) | Salto termico (°C)

STEP 3: Calcola la potenza

Potenza per zona (kW)

Potenza totale (kW)

PARAMETRI:

- 1) PORTATA PER ZONA (kg/h) : valore massimo ammissibile per zona : 2500 Kg/h
- 2) SALTO TERMICO (°C) : variabile (Tm - Tg); valore massimo ammissibile : 70°
- 3) CALORE SPECIFICO (Kcal/kg°C) : 1 (il fluido preso in considerazione è acqua)
- 4) POTENZA (kW)
- 5) NUMERO DI ZONE (n°)

Reset | Passa a calcolo di carico / portata | ESCI

Calcolo perdite di carico / portata

STEP 1: Inserisci il numero di zone

STEP 2: Calcola perdite di carico in base alla portata | Calcola portata in base alle perdite di carico

STEP 3: Calc. perdite di carico | Calc. la portata

Perdite di carico (daPa) | Portata (kg/h)

PARAMETRI:

- 1) NUMERO DI ZONE (n°) : variabile
- 2) PORTATA COMPLESSIVA (kg/h) : variabile ; valore massimo per zona : 2500 Kg/h
- 3) PRESSIONE MASSIMA DI INGRESSO (bar) : 5 bar
- 4) TEMPERATURA (°C) : variabile ma trascurabile nell'analisi del caso
- 5) VELOCITA' FLUIDO (m/sec) : variabile ma trascurabile nell'analisi del caso
- 6) DENSITA' (kg/cm³) : fissa ed uguale a quella dell'acqua (in funzione della temperatura)

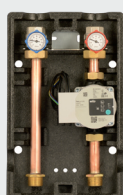
Reset | Passa a calcolo potenza | ESCI

A SELECT THE TYPE OF DESIRED SIZING

B INSERT YOUR VALUES AND SEE THE RESULTS!

available on request with non-standard measures, according to the Customer's drawings.

DISTRIBUTION SYSTEMS



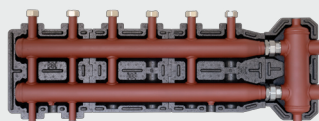
PUMP UNITS

136



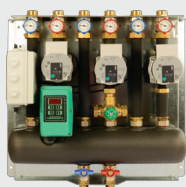
**PUMP UNITS
with METERING**

139



**COMPONENTS for
PUMP UNITS**

141



COMPACT SYSTEM

143



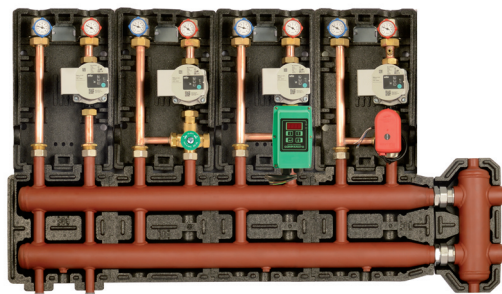
UNDER-BOILER UNITS

147

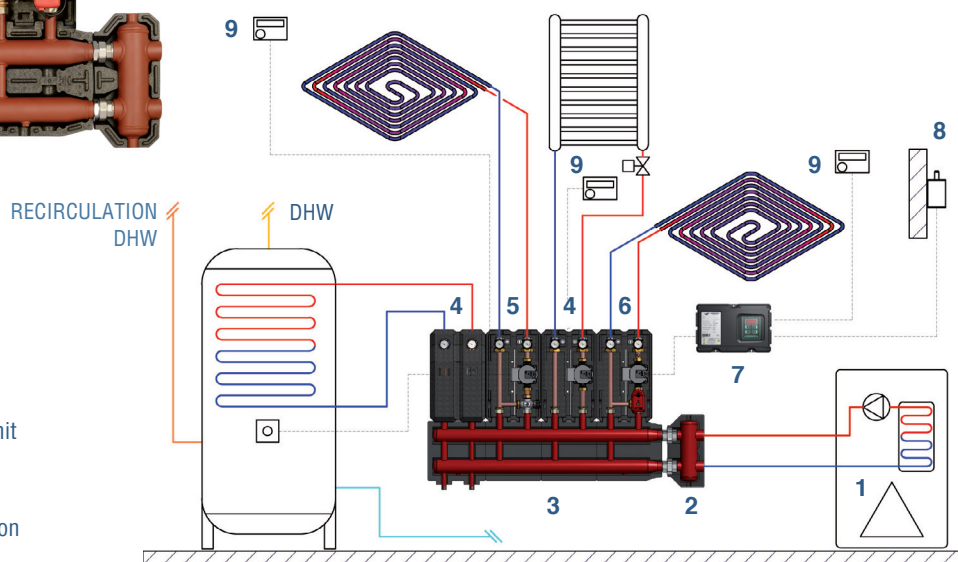
Pump units



EXAMPLE OF USE: HEATING PLANT

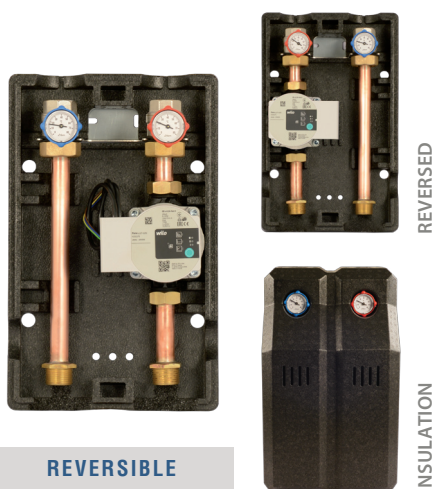


- 1 : Generator
- 2 : Diacom Mini
- 3 : Diacol 125
- 4 : Direct pump unit
- 5 : Fixed-point, mixed pump unit
- 6 : Fixed-point, modulating pump unit
- 7 : Control units
- 8 : External probe
for weather compensation function
- 9 : Room thermostat



DIRECT

- **POWER SUPPLY:** 230V 50/60 Hz
- **INTERAXIS:** 125 mm
- **UNITS ARE REVERSIBLE. THEY ARE SUPPLIED WITH OULET ON THE RIGHT SIDE AND RETURN ON THE LEFT SIDE.**
- **THEY CAN BE MATCHED ALSO TO MANIFOLDS WITH NUT CONNECTION 1" p. 141**
- **CONNECTIONS:** 1"



REVERSIBLE

REVERSED

INSULATION

| CODE | TYPE |
|--------|--|
| GR1D00 | heating |
| GR2D00 | heating • high flow rate |
| GR1DSC | heating • circulator-ready 1"x130mm |
| GR2DSC | heating • circulator-ready 1"1/2x130mm |
| GR1DFR | heating / cooling |
| GR2DFR | heating / cooling • high flow rate |

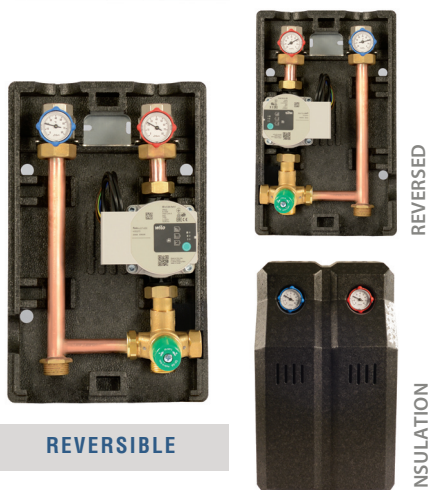
Pump units



i

MIXING FIXED-POINT

- **ALIMENTAZIONE ELETTRICA:** 230V 50/60 Hz
- **CONNECTIONS:** 1"
- **ENERGY METER KIT** see p. 140
- **INTERAXIS:** 125 mm
- **"T" RANGE:** 30°C / 60°C
- **UNITS ARE REVERSIBLE. THEY ARE SUPPLIED WITH OULET ON THE RIGHT SIDE AND RETURN ON THE LEFT SIDE.**
- **THEY CAN BE MATCHED ALSO TO MANIFOLDS WITH NUT CONNECTION 1" p. 141**



| CODE | TYPE |
|--------|--|
| GR1THT | heating |
| GR2THT | heating • high flow rate |
| GR1THC | heating • circulator-ready 1"x130mm |
| GR2THC | heating • circulator-ready 1"1/2x130mm |

MIXING ELECTRONIC

- **POWER SUPPLY:** 230V 50/60 Hz
- **CONNECTIONS:** 1"
- **ENERGY METER KIT** see p. 140
- **INTERAXIS:** 125 mm
- **"T" RANGE:** -15°C ÷ +90°C
- **THEY CAN BE MATCHED ALSO TO MANIFOLDS WITH NUT CONNECTION 1" p. 141**



| CODE | TYPE |
|--------|--------------------------|
| GR1X0D | heating |
| GR2X0D | heating • high flow rate |
| GR1XFD | cooling |
| GR2XFD | cooling • high flow rate |



| CODE | TYPE |
|--------|--------------------------|
| GR1X0S | heating |
| GR2X0S | heating • high flow rate |
| GR1XFS | cooling |
| GR2XFS | cooling • high flow rate |

Electronic Mixing units cannot be used in zones that operate in both heating and cooling modes. In the case of **hot/cold** applications in the same zone, refer to the **Modulating Mixing Units** on the following page.

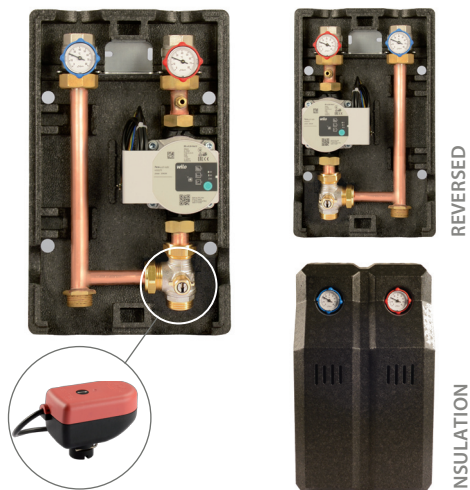
Pump units



i

MIXING MODULATING

- **POWER SUPPLY:** 230V 50/60 Hz
- **INTERAXIS:** 125 mm
- **CONNECTIONS:** 1"
- **ENERGY METER KIT** see p. 140
- **UNITS ARE REVERSIBLE. THEY ARE SUPPLIED WITH OULET ON THE RIGHT SIDE AND RETURN ON THE LEFT SIDE.**
- **THEY CAN BE MATCHED ALSO TO MANIFOLDS WITH NUT CONNECTION 1" p. 141**



REVERSIBLE

for **SINTESI** actuator see **ACCESSORIES**

| CODE | TYPE |
|--------|--|
| GR1M00 | heating |
| GR2M00 | heating • high flow rate |
| GR1MSC | heating • circulator-ready 1"x130mm |
| GR2MSC | heating • circulator-ready 1"1/2x130mm |
| GR1MFR | heating / cooling |
| GR2MFR | heating / cooling • high flow rate |

Accessories for MIXING MODULATING pump units

MODULATING ACTUATOR



| CODE | TECHNICAL FEATURES |
|-------------------|---|
| SS2221BI | 35 sec • 230 V 50-60 Hz • 3-point |
| SS2221BC2I | 120 sec • 230 V 50-60 Hz • 3-point |
| DISN05 | adapter for reversed outlet/return installation |

PROPORTIONAL ACTUATOR



| CODE | TECHNICAL FEATURES |
|--------------------|--|
| SM4010F030I | 30 sec • 24 V AC/DC • 0 - 10 V |
| SM4010F030D | 30 sec • 24 V AC/DC • 0 - 10 V • Reversed outlet/return installation |



CONTROL UNIT FOR RADIANT PANELS WITH ACTUATOR AND CONTACT TEMPERATURE PROBE

| CODE | TECHNICAL FEATURES |
|---------------|------------------------------------|
| CGRMS1 | 230 V 50/60 Hz • For one pump unit |

| CODE | TECHNICAL FEATURES |
|---------------------|--|
| RFSONDAE * | Sensor for external temperature for weather compensation |
| RFTRUEE10 ** | Sensor for temperature and relative humidity (24 V) |
| AL24VDC | Power supply for RFTRUEE10 (24 V) |

* probe can be matched to only one regulation unit

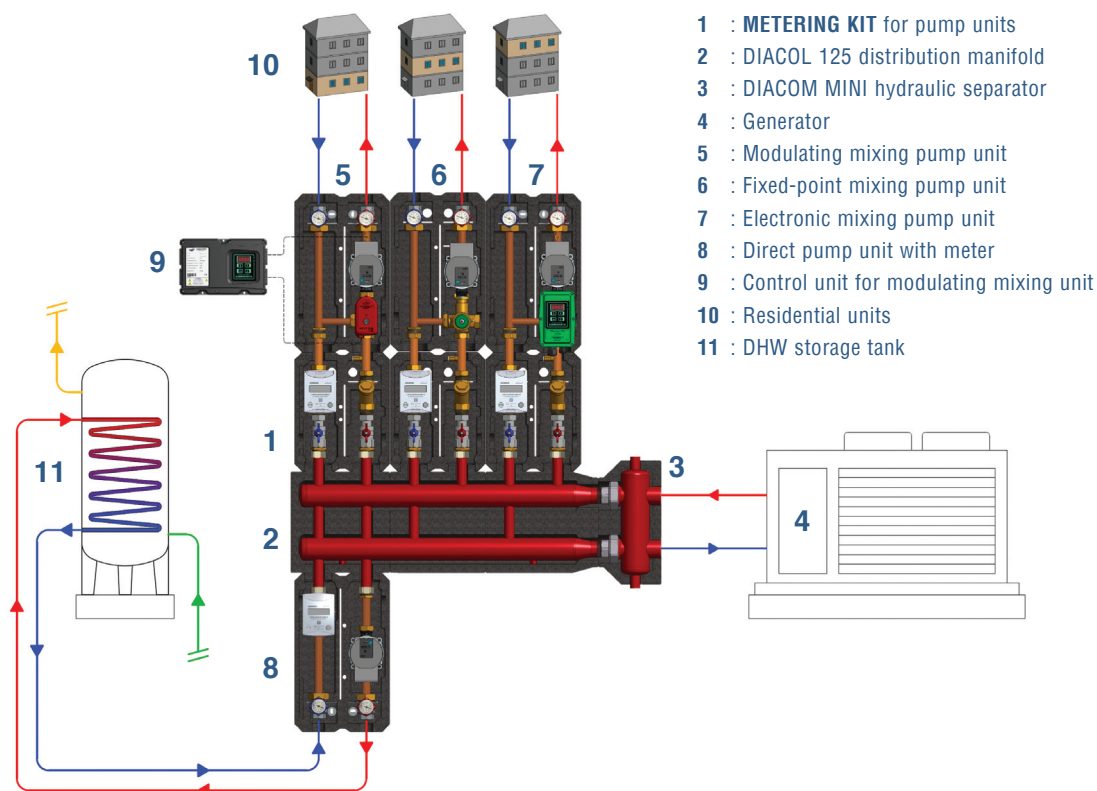
** required for anti-condensation function under cooling

Pump units • with energy meter



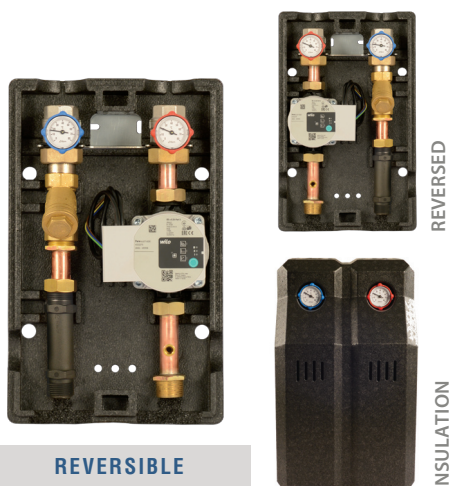
i

EXAMPLE OF USE: HEATING SYSTEM FOR 3 RESIDENTIAL UNITS WITH ENERGY METERING



DIRECT with ENERGY METER READY

- **ALIMENTAZIONE ELETTRICA:** 230V 50/60 Hz
- **CONNECTIONS:** 1"
- **INTERAXIS:** 125 mm
- **STUB PIPE:** 1"x130mm
- **UNITS ARE REVERSIBLE. THEY ARE SUPPLIED WITH OULET ON THE RIGHT SIDE AND RETURN ON THE LEFT SIDE.**
- **THEY CAN BE MATCHED ALSO TO MANIFOLDS WITH NUT CONNECTION 1" p. 141**



| CODE | TYPE | |
|--------|---|--|
| GR1C00 | heating • ready for meter 1"x130mm | |
| GR1CSC | heating ready for meter and pump 1"x130mm | |
| GR1CFR | heating / cooling ready for meter 1"x130mm | |

Accessories



| CODE | DESCRIPTION |
|------------|---|
| CFCENM01B | mechanical energy meter for heating/cooling DN20 Qp 2,5 m³/h M-Bus |
| CFCENU01B | ultrasonic energy meter for heating/cooling DN20 Qp=2.5 mc/h M-Bus reading |
| CFCENU01BW | ultrasonic energy meter for heating/cooling DN20 Qp=2.5 mc/h Wireless M-Bus reading |

Energy meter kit



i

ENERGY METER kit • TO BE INSTALLED BETWEEN MANIFOLD AND PUMP UNITS

for MIXING Pump units

- MIXING FIXED-POINT
- MIXING ELECTRONIC
- MIXING MODULATING



| CODE | DESCRIPTION |
|--------|---|
| GRKCON | Set-up kit for meter 1"x130mm with insulation |

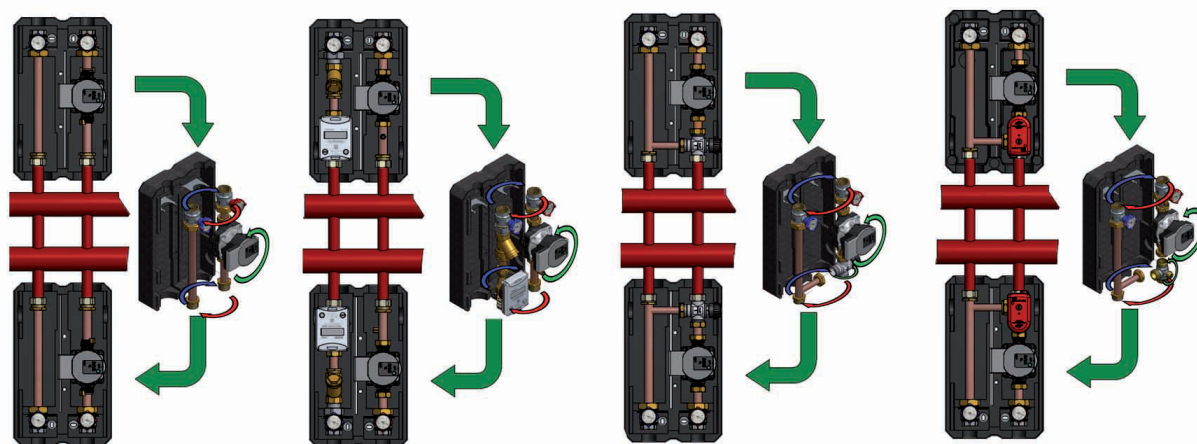
Accessories



| CODE | DESCRIPTION |
|-------------------|--|
| CFCENM01B | mechanical energy meter for heating/cooling DN20 Qp= 2,5 m³/h M-Bus |
| CFCENU01B | ultrasonic energy meter for heating/cooling DN20 Qp= 2.5 m³/h M-Bus reading |
| CFCENU01BW | ultrasonic energy meter for heating/cooling DN20 Qp= 2.5 m³/h Wireless M-Bus reading |

STANDARD VERSION vs REVERSED VERSION FOCUS

UPPER SIDE STANDARD VERSION



BOTTOM SIDE FLOW/RETURN REVERSED VERSION

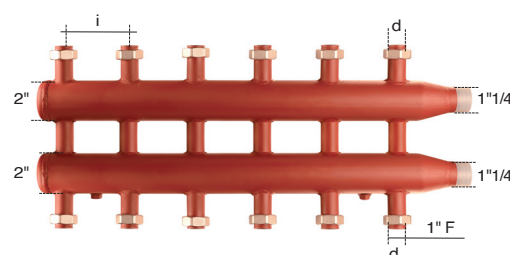
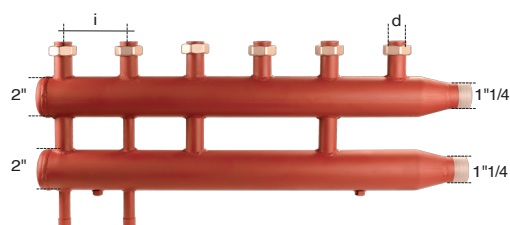
Components for Pump units



Diacol 125 • dual manifolds

- NUT JOINT: 1"

- INTERAXIS: 125 mm



DUAL manifolds

| CODE | ZONES | d | i | |
|----------|-------|------|--------|--|
| C02D34GR | 2 | 3/4" | 125 mm | |
| C03D34GR | 3 | 3/4" | 125 mm | |
| C04D34GR | 4 | 3/4" | 125 mm | |
| C05D34GR | 5 | 3/4" | 125 mm | |
| C06D34GR | 6 | 3/4" | 125 mm | |

| CODE | ZONES | i | |
|----------|-------|--------|--|
| CBC02D34 | 2 | 125 mm | |
| CBC03D34 | 3 | 125 mm | |
| CBC04D34 | 4 | 125 mm | |
| CBC05D34 | 5 | 125 mm | |
| CBC06D34 | 6 | 125 mm | |

DUAL OPPOSED manifolds

| CODE | ZONES | d | i | |
|----------|-------|------|--------|--|
| C21D34GR | 2+1 | 3/4" | 125 mm | |
| C22D34GR | 2+2 | 3/4" | 125 mm | |
| C31D34GR | 3+1 | 3/4" | 125 mm | |
| C32D34GR | 3+2 | 3/4" | 125 mm | |
| C33D34GR | 3+3 | 3/4" | 125 mm | |
| C41D34GR | 4+1 | 3/4" | 125 mm | |
| C42D34GR | 4+2 | 3/4" | 125 mm | |
| C51D34GR | 5+1 | 3/4" | 125 mm | |

| CODE | ZONES | i | |
|----------|-------|--------|--|
| CBC21D34 | 2+1 | 125 mm | |
| CBC22D34 | 2+2 | 125 mm | |
| CBC31D34 | 3+1 | 125 mm | |
| CBC32D34 | 3+2 | 125 mm | |
| CBC33D34 | 3+3 | 125 mm | |
| CBC41D34 | 4+1 | 125 mm | |
| CBC42D34 | 4+2 | 125 mm | |
| CBC51D34 | 5+1 | 125 mm | |

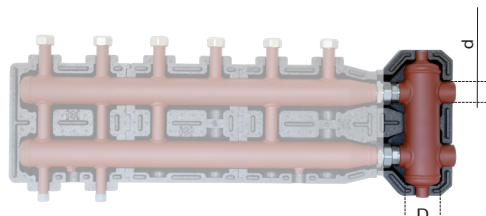
Components for Pump units

Diacom mini • Compact separator with DIRECT connection to the DIACOL 125 manifold

- FEMALE NUT
- EQUIPPED WITH CONNECTION COUPLING TO THE MANIFOLD



i



| CODE | CONNECTIONS | d | D | |
|-------|-------------|-------|---------|--|
| CM114 | threaded F | 1"1/4 | Ø 2"1/2 | |

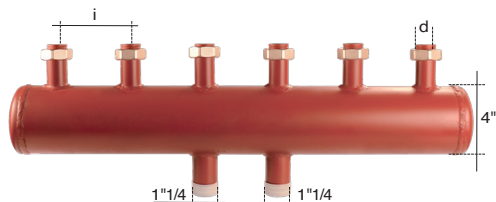
| CODE | D | |
|------------------------|---------|--|
| DIACOM MINI INSULATION | | |
| CBCM114 | Ø 2"1/2 | |

Diasys • Multifunction manifold with integrated hydraulic separator

- NUT JOINT: 1"



i



| CODE | ZONES | d | i | |
|-----------|-------|------|--------|--|
| CCI0234GR | 2 | 3/4" | 125 mm | |
| CCI0334GR | 3 | 3/4" | 125 mm | |
| CCI3134GR | 3+1 | 3/4" | 125 mm | |
| CCI3234GR | 3+2 | 3/4" | 125 mm | |

| CODE | ZONES | i | |
|-------------------|-------|--------|--|
| DIASYS INSULATION | | | |
| CBI0234GR | 2 | 125 mm | |
| CBI0334GR | 3 | 125 mm | |
| CBI3134GR | 3+1 | 125 mm | |
| CBI3234GR | 3+2 | 125 mm | |

Accessories



FIXING KIT

| CODE | DESCRIPTION |
|------|--|
| KSC1 | Support brackets with slots for regulation, screw anchors, threaded screw and nuts |

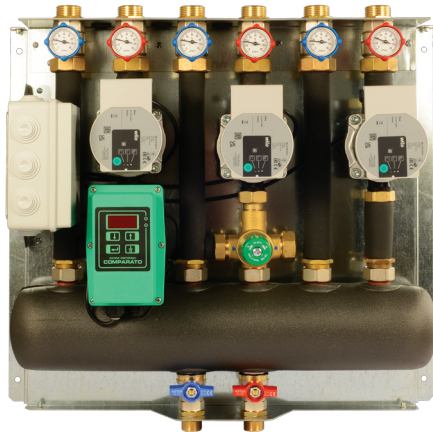
Compact System



i

Wall-hanging compact distribution unit

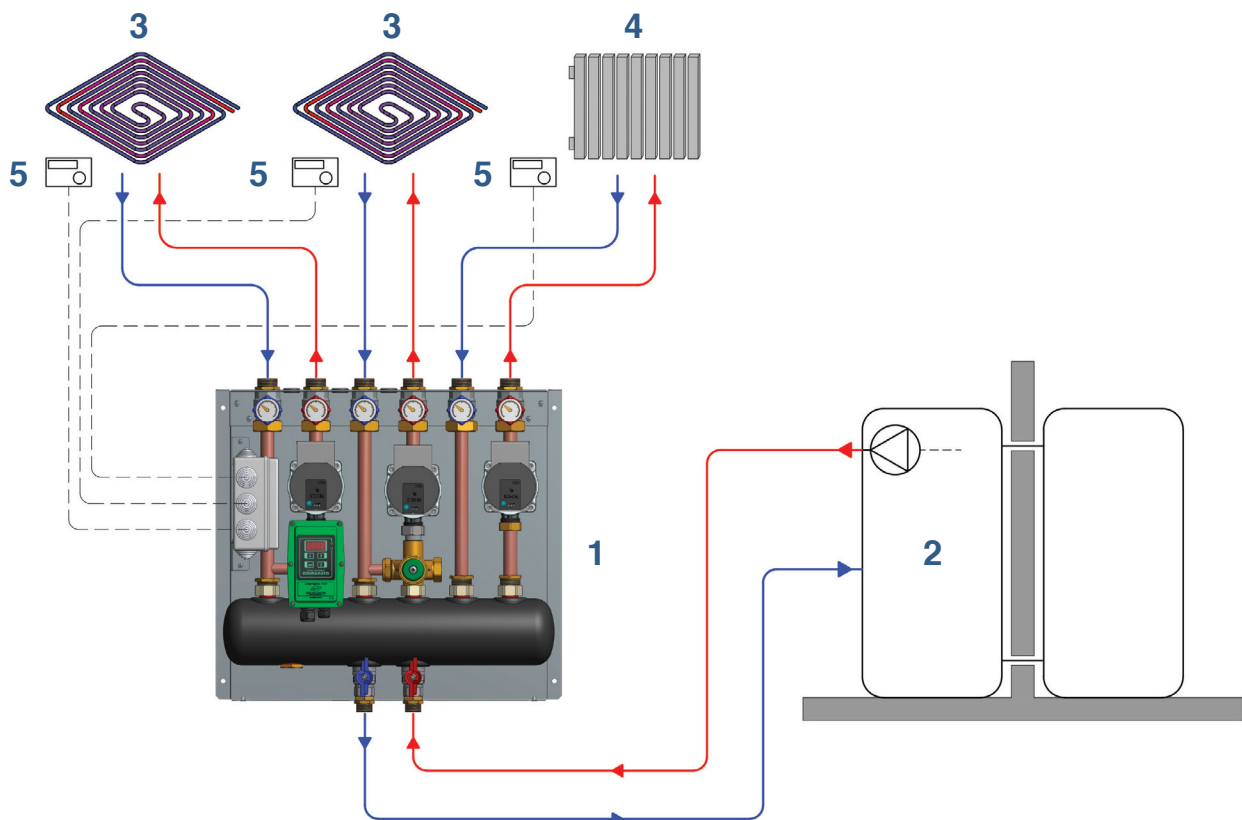
- POWER SUPPLY: 230V 50 Hz



COMPACT SYSTEM is a wall-hanging compact distribution unit that regulates singularly each thermal zone, granting the separation between generator and plant. **COMPACT SYSTEM** can be used with heat pumps, gas boilers and biomass boilers and it is suitable for heating and cooling plants.

EXAMPLE OF USE: ZONED HEATING PLANT WITH BOTH HIGH-TEMPERATURE AND LOW-TEMPERATURE ZONES

- 1 : **COMPACT SYSTEM**
- 2 : Heat pump (with integrated circulator)
- 3 : Radiant panel system
- 4 : Radiator systems
- 5 : Room thermostat



Compact System



i

TABLE for code configuration

| 0 COMPACT WALL-HANGING PUMP UNIT | |
|----------------------------------|--|
| SK2 | 2-zone distribution with hydraulic separator |
| SK3 | 3-zone distribution with hydraulic separator |
| 1 FUNCTION | |
| 0 | heating |
| R | heating and cooling |
| 2 1st ZONE TYPE · LEFT | |
| D | direct |
| H * | mixing fixed-point 30°C - 60°C |
| M | mixing modulating with on-board electronics for radiant panels |
| 3 2nd ZONE TYPE · CENTRAL | |
| D | direct |
| H * | mixing fixed-point 30°C - 60°C |
| M | mixing modulating with on-board electronics for radiant panels |
| 4 3rd ZONE TYPE · RIGHT | |
| 0 | not present |
| D | direct |
| H * | mixing fixed-point 30°C - 60°C |
| M | mixing modulating with on-board electronics for radiant panels |

* heating function only

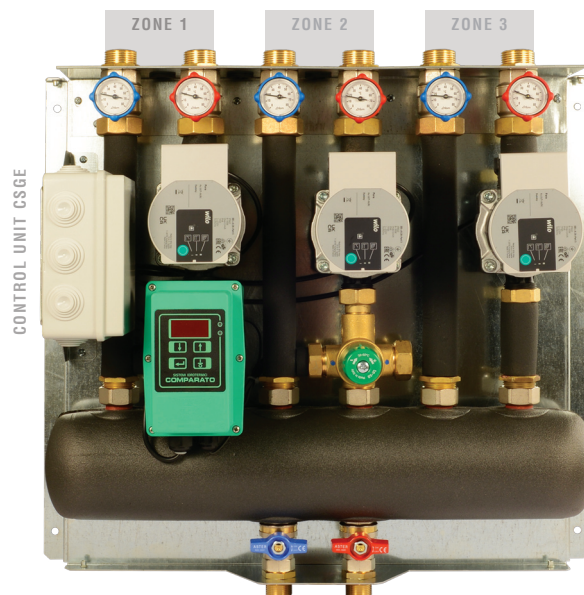
Accessories

| CODE | DESCRIPTION |
|-------------------|---|
| CSGE | Electromechanical management board |
| CSK | Sheet metal cover, RAL 9010 white powder coating |
| TEMPERATURE PROBE | |
| RFSONDAE ** | External temperature probe for weather compensation |
| RFTRUEE10 *** | Temperature and humidity probe |

** It can only be combined with mixing modulating zone (M) with on -board electronics

*** It can only be combined with mixing modulating zone (M) and cooling function (R)

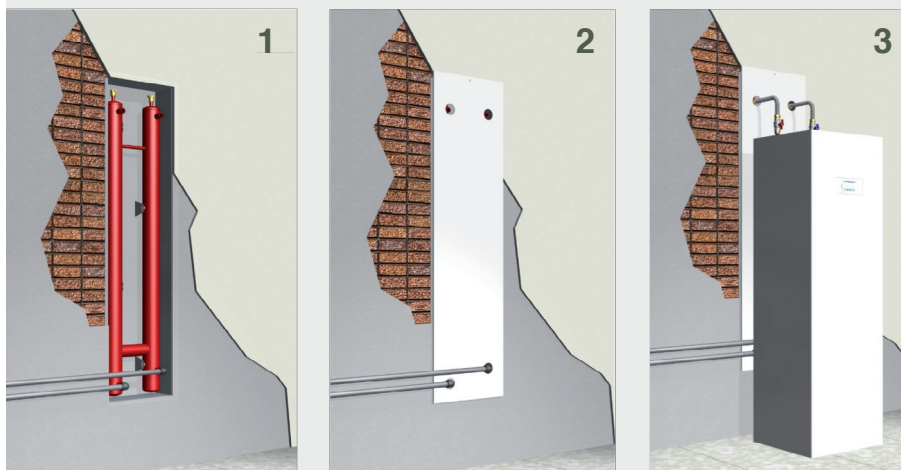
| CODE EXAMPLE | | | | |
|--------------|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 |
| SK3 | 0 | M | H | D |



MICRO BUFFER

BUILD-INTO-WALL FOR HEAT PUMP

AVAILABLE ALSO IN STAINLESS STEEL



Buffer tanks for heat pumps are essential for:

- supplying thermal inertia to the plant
- guaranteeing the hydraulic separation from the plant
- storing enough energy for defrost function

This is the innovative solution that allows to use micro buffer tanks also in apartments or detached small houses thanks to the build-into-wall installation.

FEATURES

- Up to 50l storage
- Build-into-wall installation
- Hydraulic separator integrated function

Please contact our Technical Department for further information

Under-boiler units



i

Built-in under-boiler distribution system

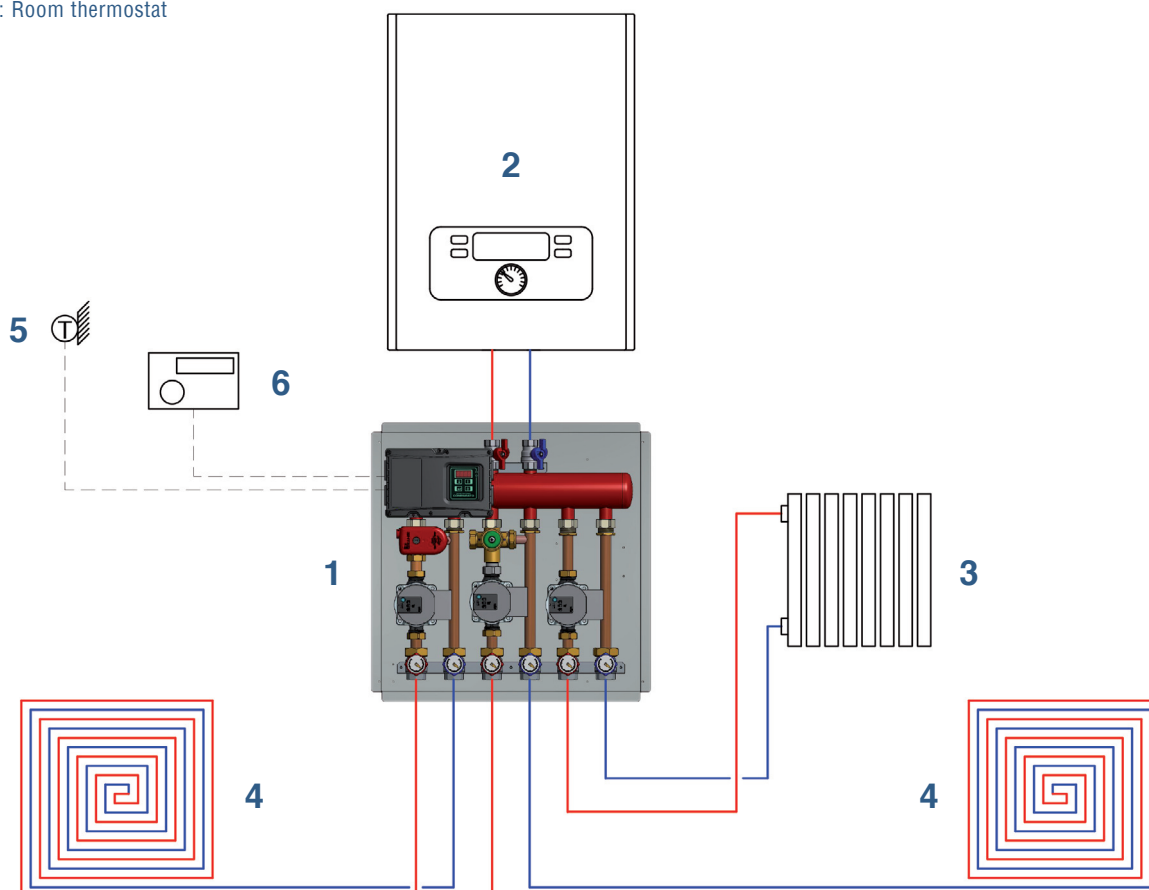
- POWER SUPPLY: 230V 50 Hz
- ELECTROMECHANICAL CONTROL UNIT INCLUDED



UNDER-BOILER UNITS are capable of independently regulating each thermal zone, making the system independent from the generator thanks to the integrated hydraulic separation function. They are suitable for use with heat pumps, gas boilers, and biomass boilers for heating applications.

EXAMPLE OF USE: ZONED HEATING PLANT WITH HIGH AND LOW TEMPERATURE CIRCUITS

- 1 : UNDER-BOILER UNIT
- 2 : Generator
- 3 : High temperature heating system
- 4 : Radiant panel system
- 5 : External temperature probe for weather compensation function
- 6 : Room thermostat



Under-boiler units


TABLE for code configuration

| 0 UNDER-BOILER UNITS PUMP UNIT | |
|--------------------------------|--|
| ST2 | 2-zone distribution with integrated hydraulic separator |
| ST3 | 3-zone distribution with integrated hydraulic separator |
| 1 1st ZONE TYPE • LEFT | |
| D | direct |
| H | mixing fixed-point 30°C - 60°C |
| M * | mixing modulating with on-board electronics for radiant panels |
| 2 2nd ZONE TYPE • CENTRAL | |
| D | direct |
| H | mixing fixed-point 30°C - 60°C |
| M * | mixing modulating with on-board electronics for radiant panels |
| 3 3rd ZONE TYPE • RIGHT | |
| 0 | not present |
| D | direct |
| H | mixing fixed-point 30°C - 60°C |
| M * | mixing modulating with on-board electronics for radiant panels |

* to be combined with the accessories below; for versions with more than one mixing modulating zone, please contact our Technical Department.

Accessories



MODULATING ACTUATOR

| CODE | TECHNICAL FEATURES |
|------------|------------------------------------|
| SS2221BI | 35 sec • 230 V 50-60 Hz • 3-point |
| SS2221BC2I | 120 sec • 230 V 50-60 Hz • 3-point |



PROPORTIONAL ACTUATOR

| CODE | TECHNICAL FEATURES |
|-------------|--------------------------------|
| SM4010F030I | 30 sec • 24 V AC/DC • 0 - 10 V |



CONTROL UNIT FOR RADIANT PANELS WITH ACTUATOR AND CONTACT TEMPERATURE PROBE

| CODE | TECHNICAL FEATURES |
|--------|--|
| CGRMS1 | 230 V 50/60 Hz • For one MIXING MODULATING group |

| CODE | DESCRIPTION |
|-----------|---|
| RFSNDAE * | External temperature probe for weather compensation |

* each probe can be matched to only one mixing modulating zone

| CODE EXAMPLE | | | |
|--------------|---|---|---|
| 0 | 1 | 2 | 3 |
| ST3 | M | H | D |



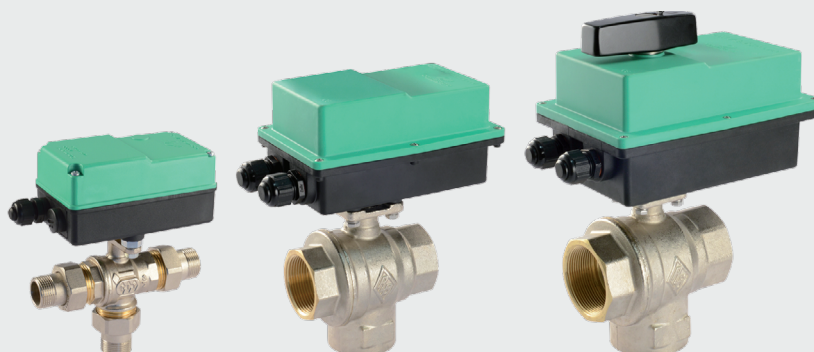
Accessory



MOULDING AND DOOR

| CODE | DESCRIPTION |
|-------|-------------------|
| QSCCS | Moulding and door |

FAST Diverting Actuated Valve for HEAT PUMPS



Diamant 2000
4 SEC.

Motorised valve

Compact PRO
9 SEC.

Motorised valve

Universal PRO
14 SEC.

Motorised valve



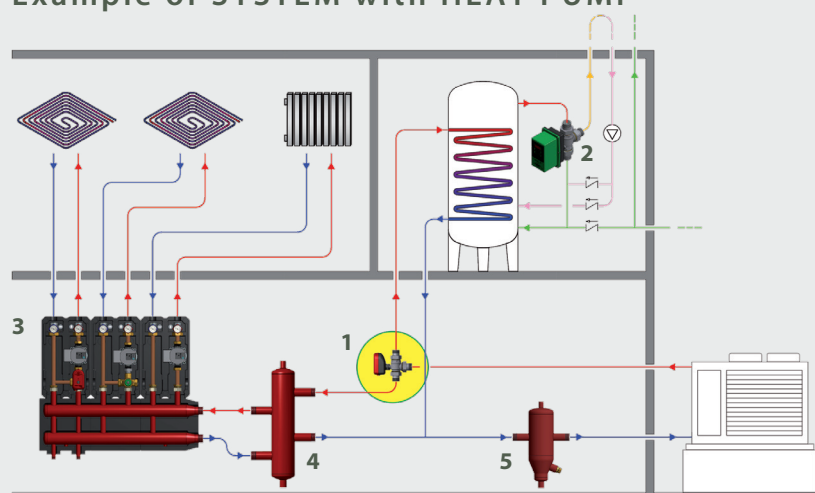
SINTESI
15 SEC.

Motorised valve

SINTESI DC
3 SEC.

Motorised valve

Example of SYSTEM with HEAT PUMP



- 1 : Diverting Actuated Valve **SINTESI**
- 2 : ANTI-LEGIONELLA Mixing Valve **DIAMIX L • COMPAMIX L**
- 3 : **PUMP UNIT** with MANIFOLD
- 4 : Hydraulic Separator **DIACOM**
- 5 : Hydrocyclonic Deposit Separator **DIADef MAGNETIC**

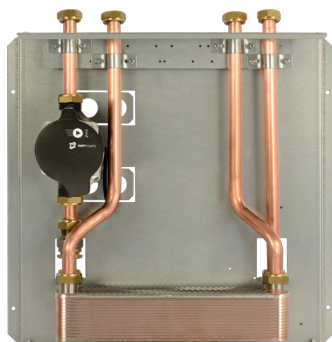
HYDRAULIC INTERFACES

| | | |
|---|---|-----|
|  | Heating ECOKAM T | 152 |
|  | Heating ECOKAM RC | 153 |
|  | Heating ECOKAM R | 154 |
|  | Domestic water ECOKAM S | 155 |
|  | Heating and domestic water ECOKAM RSC | 156 |
|  | Heating and domestic water ECOKAM RS | 157 |
|  | Instantaneous DHW production ECOSAN | 158 |
|  | Instantaneous DHW production ECOSAN PDC | 159 |
|  | Instantaneous DHW production ECOSAN PDC L | 163 |
|  | Hydraulic separation SEP KIT | 164 |
|  | Temperature regulation ECOPOOL | 165 |



Gas boiler separation

- Separation of the gas boiler from the rest of the system with a plate heat exchanger.
- Automatic switching between the solid fuel boiler and the gas boiler.
- Direct use of the solid fuel boiler.



| CODE | DESCRIPTION |
|---------|------------------------------|
| ES1P24E | gas boiler power max 24 kW * |
| ES1P35E | gas boiler power max 35 kW * |

* THE POWER OF THE SOLID FLUID HEATER DOES NOT INFLUENCE THE HEAT EXCHANGER'S DIMENSION

Accessories



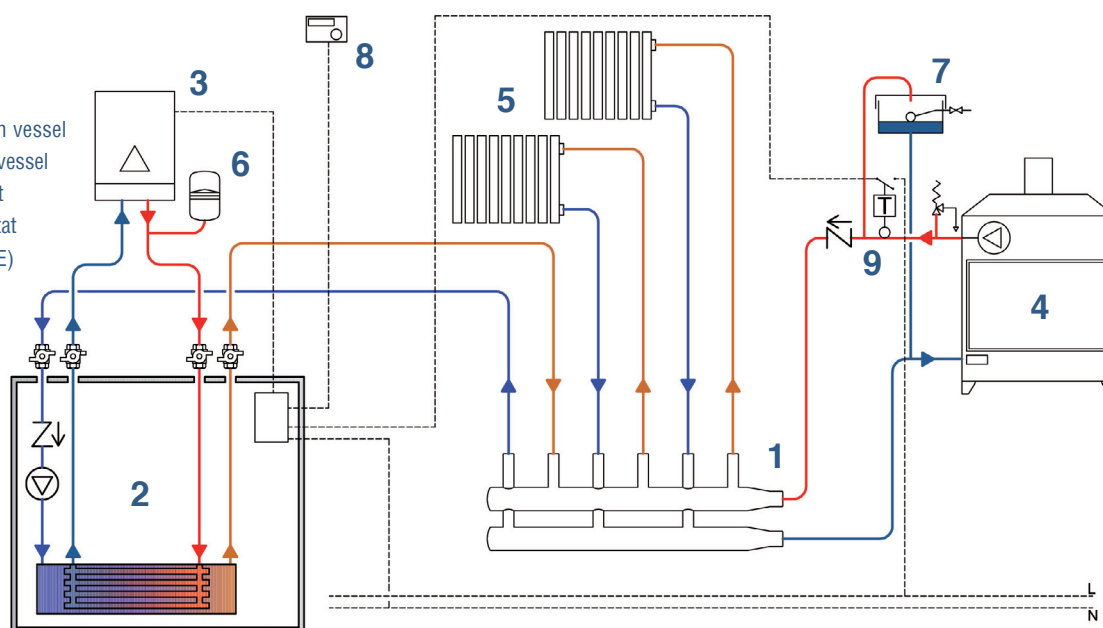
CASING

MANAGEMENT
UNIT

| CODE | DESCRIPTION |
|------|--|
| CEK | RAL 9010 white cover |
| CEGE | Management control unit for automatic switching between the solid fuel boiler and the gas boiler |

EXAMPLE OF USE

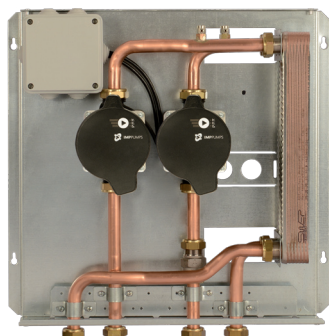
- 1 : DIACOL manifold
 2 : Ecokam T
 3 : Gas boiler
 4 : Solid fuel boiler
 5 : Heating plant
 6 : Closed expansion vessel
 7 : Open expansion vessel
 8 : Room thermostat
 9 : Contact thermostat (included in CEGE)





Separation of the solid fuel boiler

- Separation of the solid fuel boiler from the rest of the system with a plate heat exchanger.
- Automatic switching between the solid fuel boiler and the gas boiler.
- Direct use of the gas boiler.



| CODE | DESCRIPTION | |
|------------|-----------------------------------|--|
| ES2P18RCN | source power max 20 kW • 2 pumps | |
| ES2P35RCN | source power max 35 kW • 2 pumps | |
| ES1P18RCIN | source power max 20 kW • 1 pump * | |
| ES1P35RCIN | source power max 35 kW • 1 pump * | |

* HEATING SIDE

Accessories



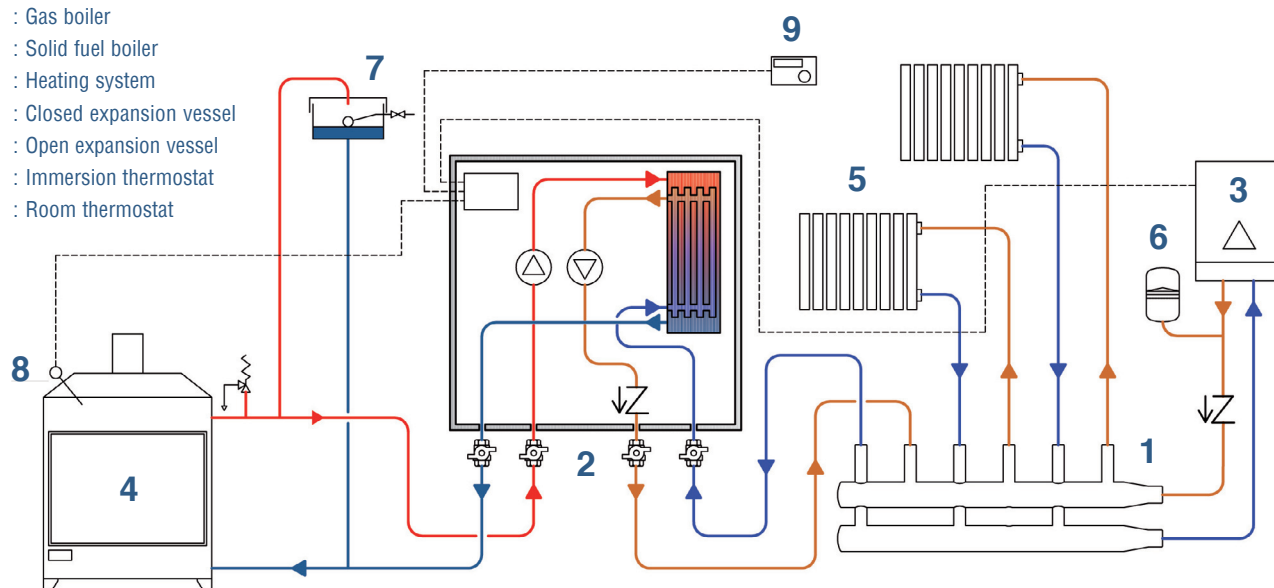
CASING

| CODE | DESCRIPTION | |
|---------|--------------------------|--|
| CEK | RAL 9010 white cover | |
| Add A * | Anti-condensation system | |

* ADD "A" AT THE END OF THE BASE MODEL CODE

EXAMPLE OF USE

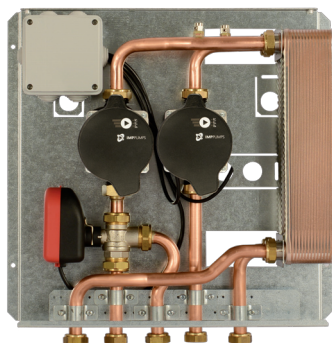
- 1 : DIACOL manifold
- 2 : **Ecokam RC**
- 3 : Gas boiler
- 4 : Solid fuel boiler
- 5 : Heating system
- 6 : Closed expansion vessel
- 7 : Open expansion vessel
- 8 : Immersion thermostat
- 9 : Room thermostat





Separation of the solid fuel boiler with a motorised valve

- Separation of the solid fuel boiler from the rest of the system with a plate heat exchanger and diverting valve.
- Automatic switching between the solid fuel boiler and the gas boiler.
- Direct use of the gas boiler.



| CODE | DESCRIPTION | |
|----------|-----------------------------------|--|
| ES2P18N | source power max 20 kW • 2 pumps | |
| ES2P35N | source power max 35 kW • 2 pumps | |
| ES1P18IN | source power max 20 kW • 1 pump * | |
| ES1P35IN | source power max 35 kW • 1 pump * | |

* HEATING SIDE

Accessories



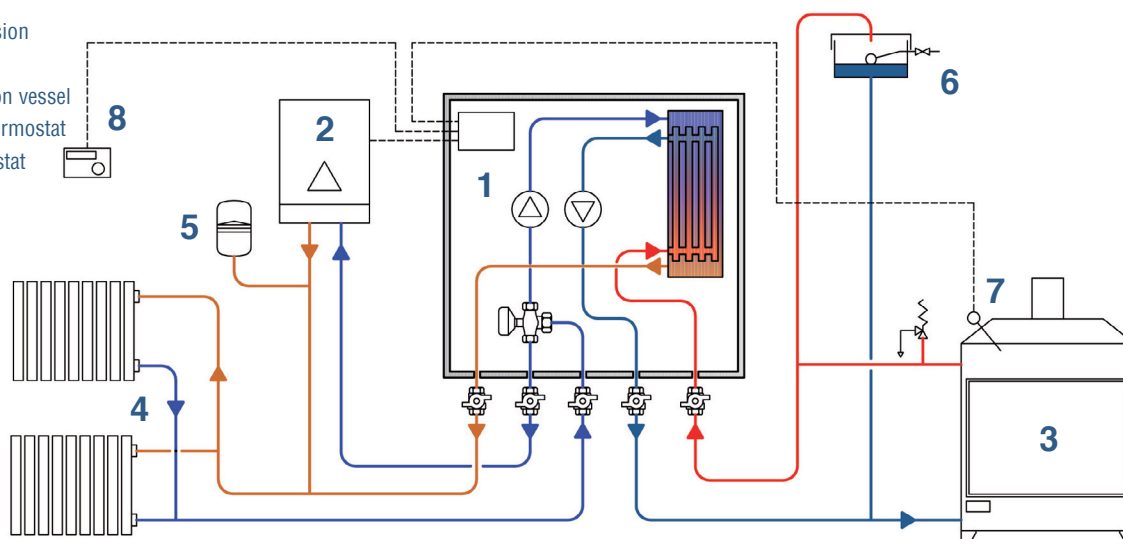
CASING

| CODE | DESCRIPTION | |
|---------|--------------------------|--|
| CEK | RAL 9010 white cover | |
| Add A * | Anti-condensation system | |

* ADD "A" AT THE END OF THE BASE MODEL CODE

EXAMPLE OF USE

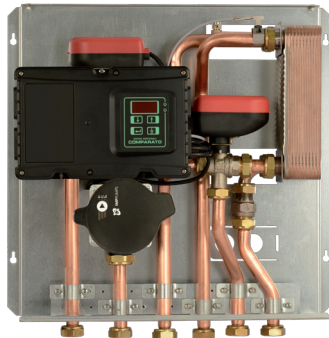
- 1 : Ecokam R
 2 : Gas boiler
 3 : Solid fuel boiler
 4 : Heating plant
 5 : Closed expansion vessel
 6 : Open expansion vessel
 7 : Immersion thermostat
 8 : Room thermostat





Production of domestic hot water, management of the solid fuel boiler.

- Management of the solid fuel boiler for the instant production of DHW and automatic switching with the gas boiler.
- With plate heat exchanger and modulating electronic controller.



| CODE | DESCRIPTION | |
|----------|--------------|--|
| ES0P18SN | without pump | |
| ES1P18SN | with pump | |

Accessory

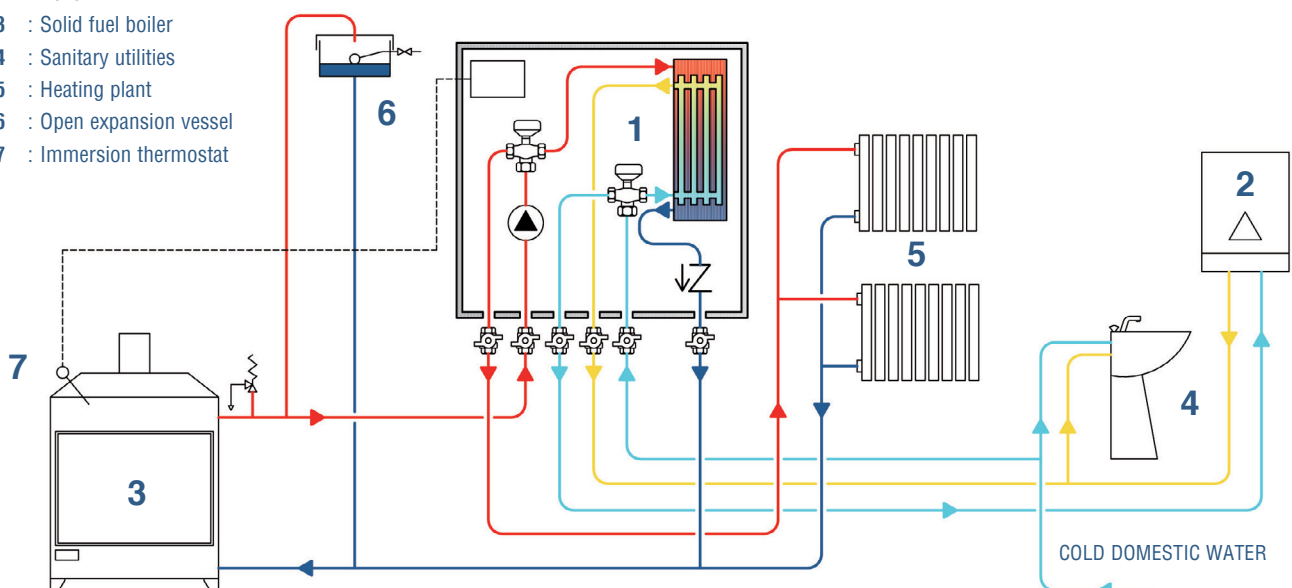


CASING

| CODE | DESCRIPTION | |
|------|----------------------|--|
| CEK | RAL 9010 white cover | |

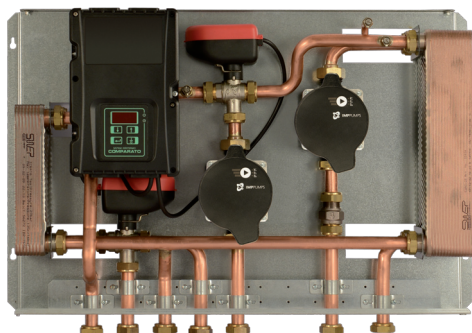
EXAMPLE OF USE

- 1 : Ecokam S
 2 : Boiler
 3 : Solid fuel boiler
 4 : Sanitary utilities
 5 : Heating plant
 6 : Open expansion vessel
 7 : Immersion thermostat



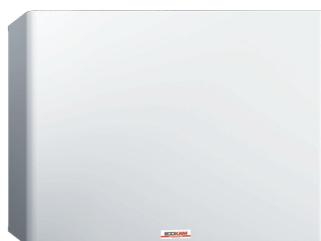
**Production of domestic hot water with separation of the solid fuel boiler**

- Separation of the solid fuel boiler from the rest of the system with a plate heat exchanger.
- Automatic switching between the solid fuel boiler and the gas boiler.
- With instant DHW production.



| CODE | DESCRIPTION |
|------------|-----------------------------------|
| ES2P18RSC | source power max 20 kW • 2 pumps |
| ES2P35RSC | source power max 35 kW • 2 pumps |
| ES1P18RSCI | source power max 20 kW • 1 pump * |
| ES1P35RSCI | source power max 35 kW • 1 pump * |

* HEATING SIDE

Accessories

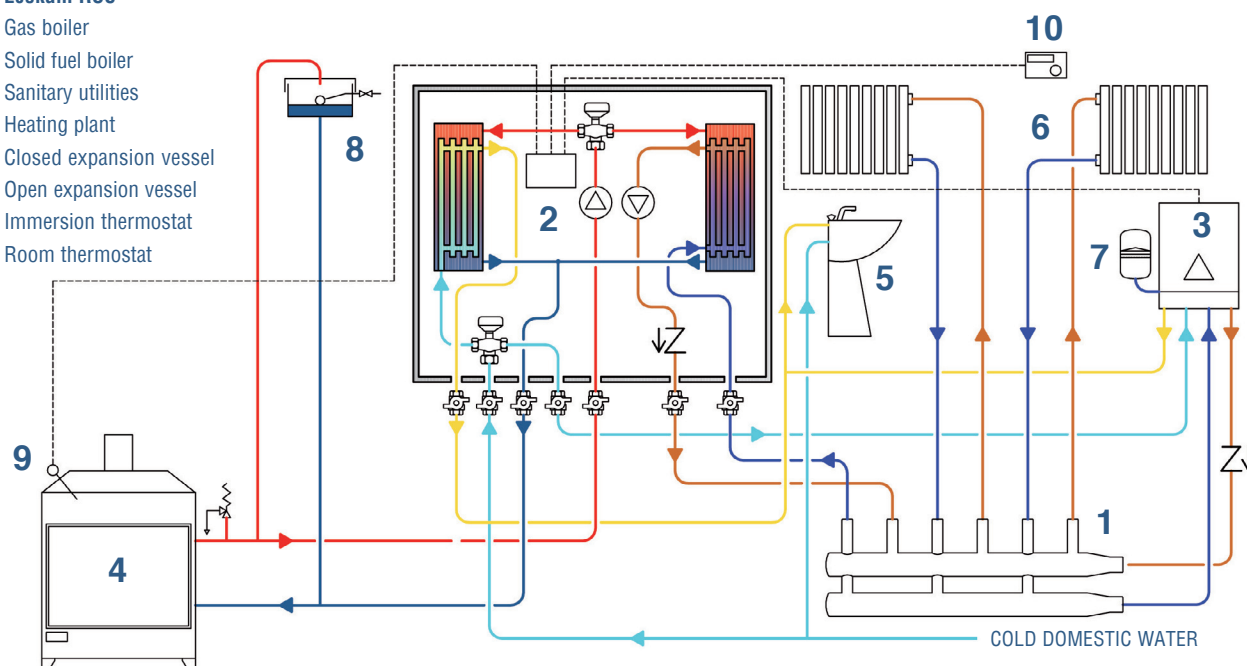
CASING

| CODE | DESCRIPTION |
|---------|--------------------------|
| CEKRS | RAL 9010 white cover |
| Add A * | Anti-condensation system |

* ADD "A" AT THE END OF THE BASE MODEL CODE

EXAMPLE OF USE

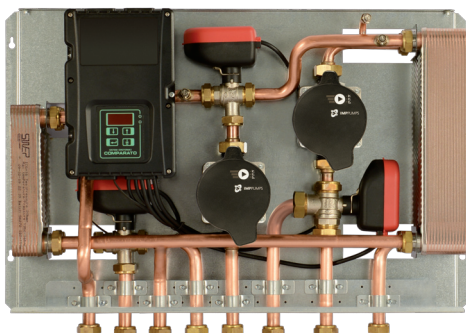
- 1 : DIACOL manifold
- 2 : **Ecokam RSC**
- 3 : Gas boiler
- 4 : Solid fuel boiler
- 5 : Sanitary utilities
- 6 : Heating plant
- 7 : Closed expansion vessel
- 8 : Open expansion vessel
- 9 : Immersion thermostat
- 10 : Room thermostat





Production of domestic hot water with separation of the solid fuel boiler and motorised valve

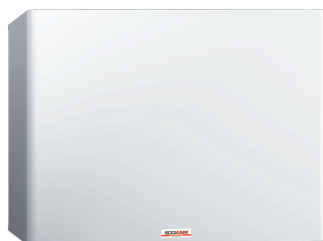
- Separation of the solid fuel boiler from the rest of the system with a plate heat exchanger and diverter valve.
- Automatic switching between the solid fuel boiler and the gas boiler.
- With instant DHW production.



| CODE | DESCRIPTION | |
|-----------|-----------------------------------|--|
| ES2P18RS | source power max 20 kW • 2 pumps | |
| ES2P35RS | source power max 35 kW • 2 pumps | |
| ES1P18RSI | source power max 20 kW • 1 pump * | |
| ES1P35RSI | source power max 35 kW • 1 pump * | |

* HEATING SIDE

Accessories



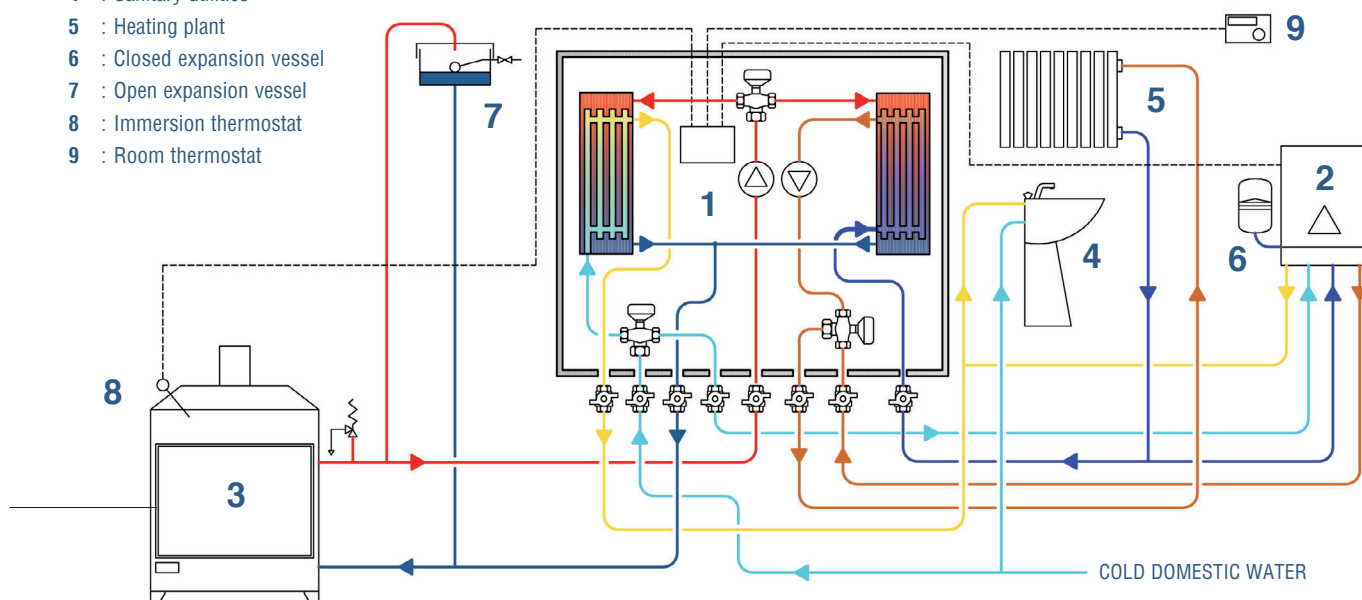
CASING

| CODE | DESCRIPTION | |
|---------|--------------------------|--|
| CEKRS | RAL 9010 white cover | |
| Add A * | Anti-condensation system | |

* ADD "A" AT THE END OF THE BASE MODEL CODE

EXAMPLE OF USE

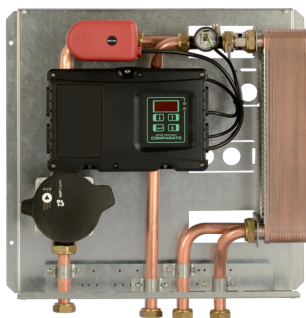
- 1 : Ecokam RS
- 2 : Gas boiler
- 3 : Solid fuel boiler
- 4 : Sanitary utilities
- 5 : Heating plant
- 6 : Closed expansion vessel
- 7 : Open expansion vessel
- 8 : Immersion thermostat
- 9 : Room thermostat





Production of domestic hot water

- Use of thermal energy from a technical water storage.
- With plate heat exchanger.
- With modulating electronic controller.



| CODE | DESCRIPTION |
|---------|--|
| ECOSP35 | power max 35 kW • 1 pump |
| ECOSP50 | power max 50 kW • 1 pump |
| ECOSP60 | power max 60 kW • 1 pump |
| ECOSI35 | power max 35 kW ready for pump 1"x130mm |
| ECOSI50 | power max 50 kW ready for pump 1"x130mm |

Accessory

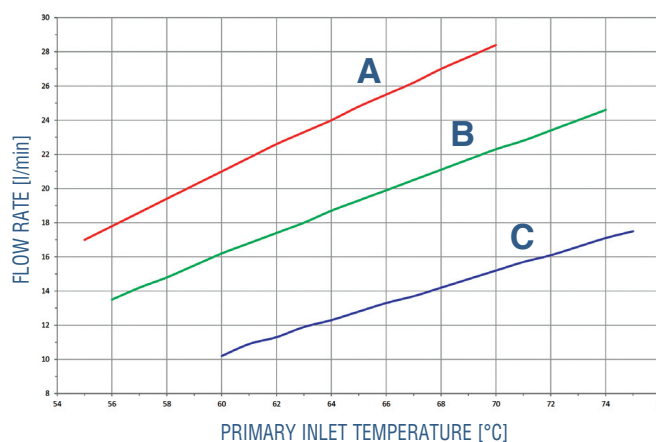


CASING

| CODE | DESCRIPTION |
|------|----------------------|
| CEK | RAL 9010 white cover |

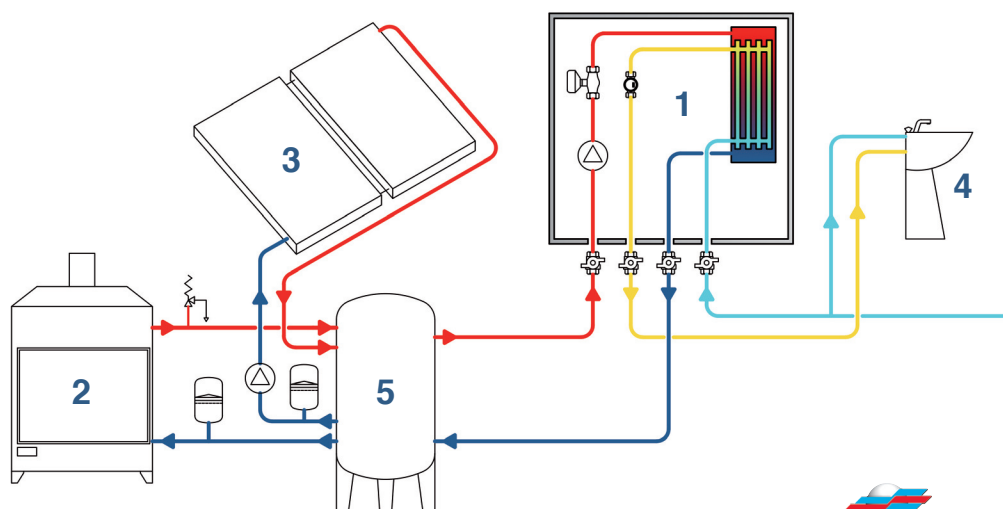
ΔT DOMESTIC HOT WATER 10 / 45°C

- A : ECOSP60
B : ECOSP50
C : ECOSP35



EXAMPLE OF USE

- 1 : ECOSAN
2 : Solid fuel boiler
3 : Solar thermal plant
4 : Sanitary utilities
5 : Puffer



Ecosan PDC

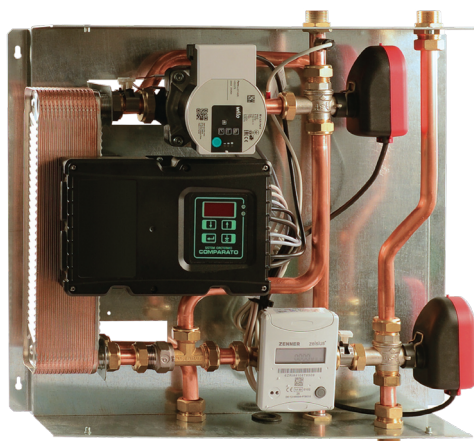


i

Production of domestic hot water



Hydraulic unit for the instant production of domestic hot water, using a plate heat exchanger, for systems equipped with **HEAT PUMPS**. The electronic temperature controller modulates the speed of the primary pump by varying the flow rate, thus maintaining the domestic hot water temperature stable, precisely, and efficiently. Thanks to the high surface area plate heat exchanger, **ECOSAN PDC** can produce DHW with a technical water temperature stored in the buffer tank of only 50°C.

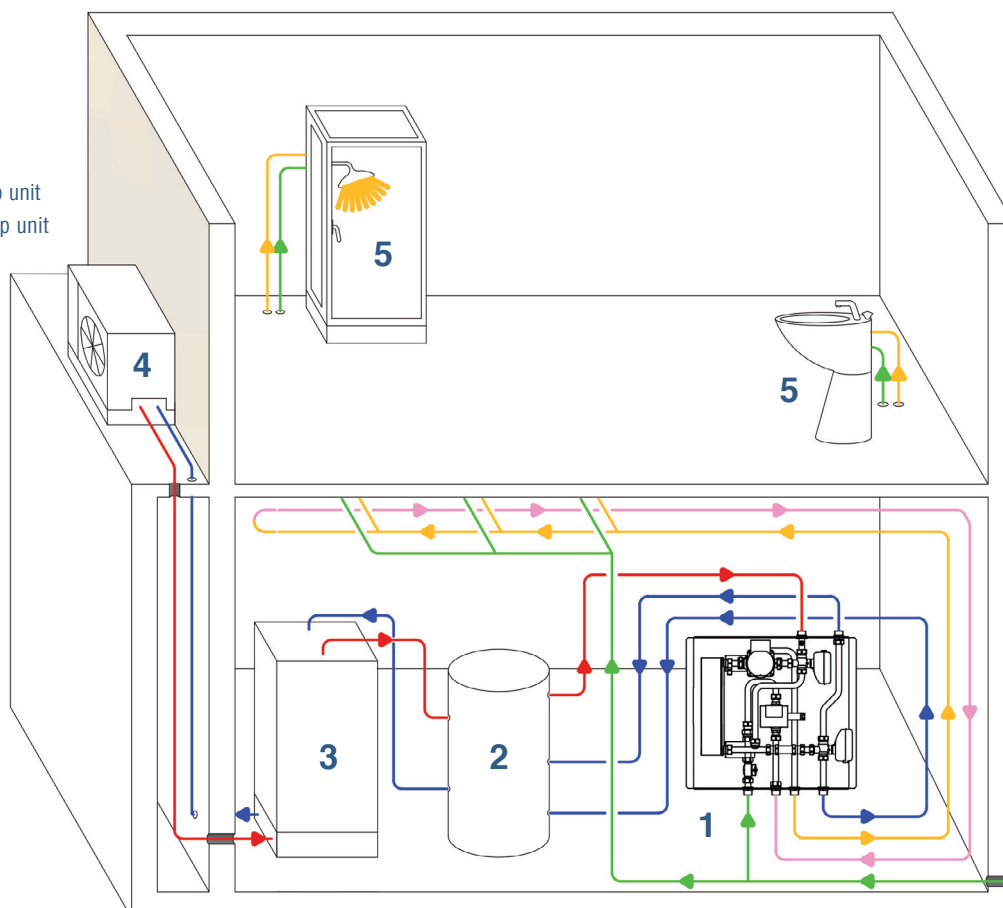


FUNCTIONS

- DHW temperature electronic regulation by modulating the primary flow thanks to a high-efficiency PWM pump
- Primary flow temperature control by using a mixing valve
- DHW recirculation with pump and programmable anti-legionella thermal disinfection cycle
- Primary return diversion by using a 3-way valve for water stratification in the puffer
- Generator activation through immersion probe for puffer
- Direct energy meter
- Modbus-RTU communication protocol for remote management

EXAMPLE OF USE

- 1 : ECOSAN PDC
- 2 : Puffer
- 3 : Internal Heat Pump unit
- 4 : External Heat Pump unit
- 5 : Sanitary utilities

HYDRAULIC
INTERFACES

Ecosan PDC*i***TABLE for code configuration**

| 0 ECOSAN PDC | |
|------------------------------------|---|
| ECOPC | DHW instantaneous production for heat pumps, electronic regulation, Modbus-RTU for remote management by BMS systems |
| 1 NOMINAL POWER | |
| 35 | 35 kW nominal power plate exchanger |
| 50 | 50 kW nominal power plate exchanger |
| 2 PRIMARY FLOW TEMPERATURE CONTROL | |
| 0 | not present |
| 1 | present with 3-way mixing valve |
| 3 EXTRA FUNCTIONS | |
| 0 | not present |
| R | DHW recirculation with pump and anti-legionella thermal disinfection cycle |
| D | primary return diversion with 3-way valve for water stratification in the puffer |
| 3 | generator activation through immersion temperature probe for puffer |
| 4 HEAT METER READY | |
| 0 | not present |
| T | heat meter stub piece 3/4"x110mm |

Accessories

HEAT METER

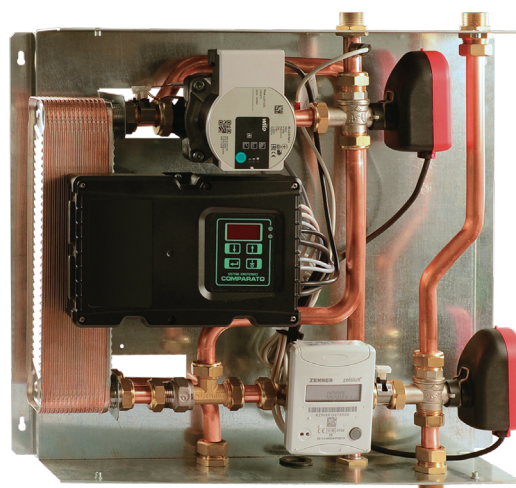
| CODE | DESCRIPTION |
|------------|---|
| CFCENM34B | Mechanical energy meter hot / cold DN15 Qp 1,5 mc/h M-Bus reading |
| CFCENU34B | Ultrasonic energy meter hot / cold DN15 Qp 1,5 mc/h M-Bus reading |
| CFCENU34BW | Ultrasonic energy meter hot / cold DN15 Qp 1,5 mc/h Wireless M-Bus readings |

WHITE COVER

| CODE | DESCRIPTION |
|------|---------------------------|
| CPDC | RAL9010 white solid cover |

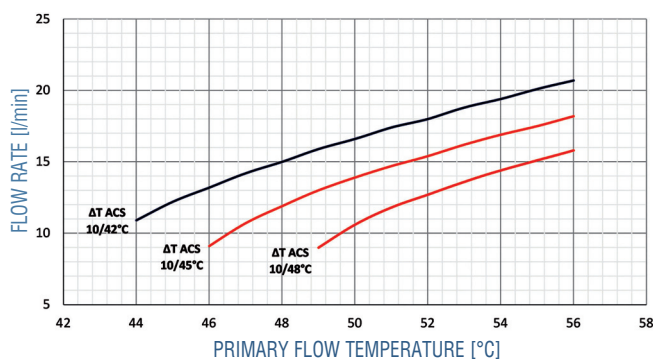
CODE EXAMPLE

| 0 | 1 | 2 | 3 | 4 |
|-------|----|---|---|---|
| ECOPC | 35 | 0 | R | 0 |

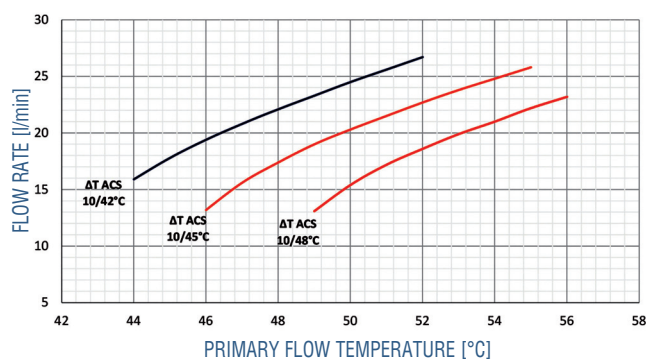


DHW PRODUCTION PERFORMANCE FOCUS

35 kW NOMINAL POWER VERSION



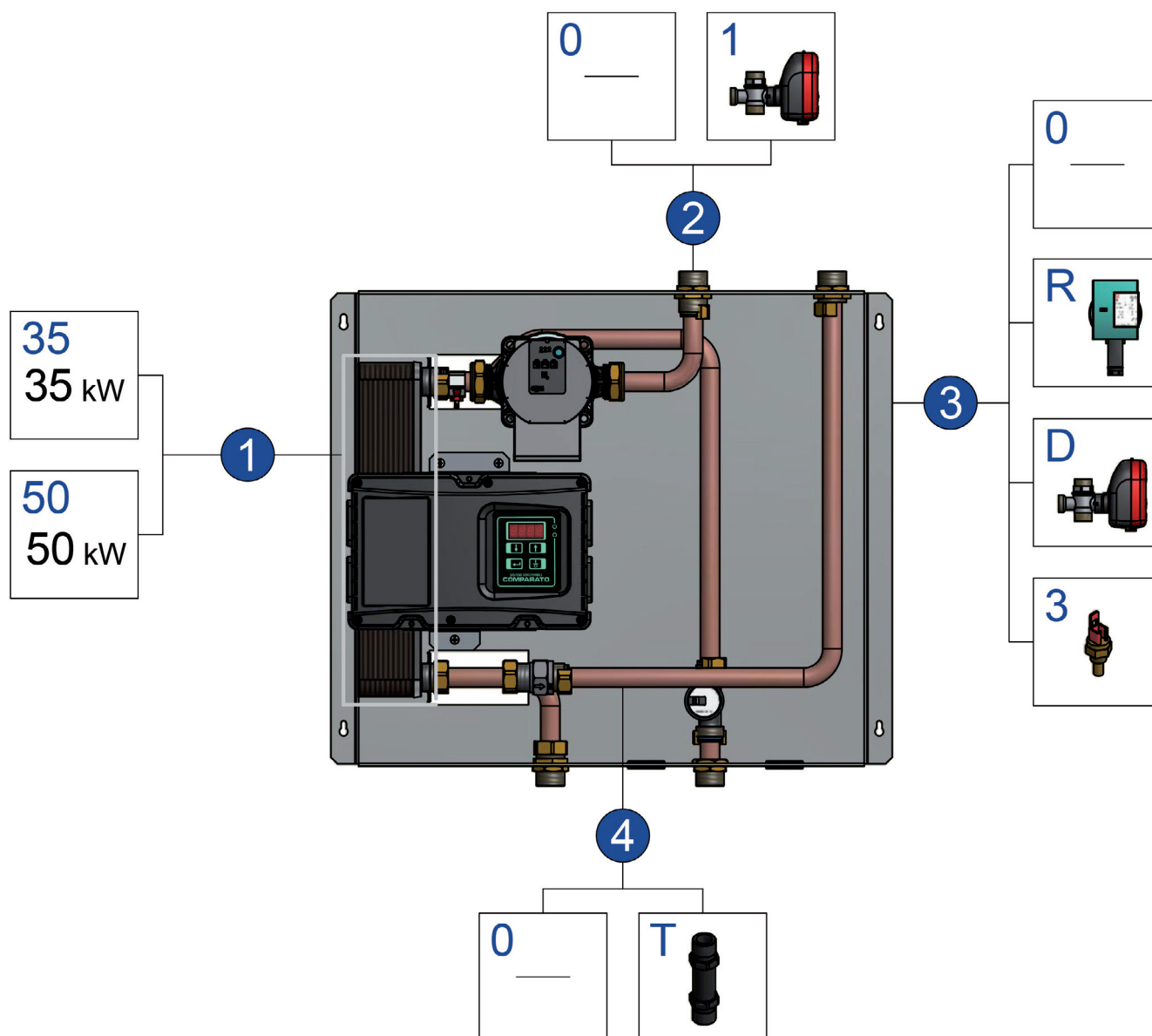
50 kW NOMINAL POWER VERSION



Ecosan PDC



i



Ecosan PDC L

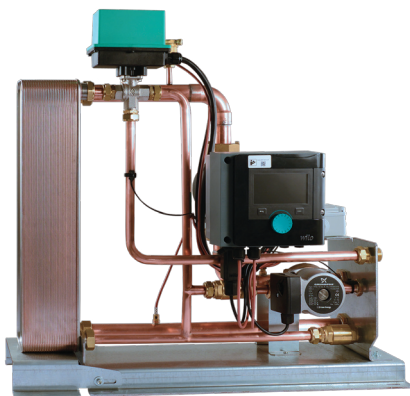


i

Production of domestic hot water



Hydraulic unit for DHW instantaneous production using a plate heat exchanger for systems with **HEAT PUMP**. The electronic mixing valve manages the recirculation pump and the anti-legionella disinfection cycle; it also controls the flow temperature to the DHW distribution line. Thanks to the plate heat exchanger with high thermal exchange surface area, **ECOSAN PDC L** can produce DHW with 50°C technical water of the puffer.



FUNCTIONS

- DHW instantaneous production by using a plate heat exchanger
- DHW mixing by using an electronic mixing valve
- Programmable anti-legionella thermal disinfection
- Storage of the anti-legionella cycles realised
- Comparato LegioTool Software for the communication between PC and mixing valve with data download
- Modbus-RTU communication protocol for remote management
- Recirculation return temperature control by PWM modulation pump
- Recirculation pump with time setting

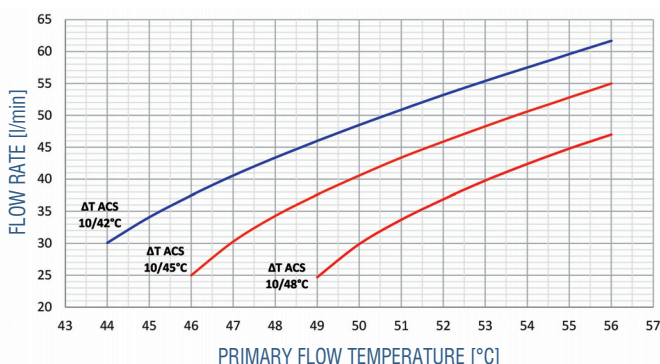
| CODE | DESCRIPTION |
|----------|--|
| ECOSL100 | instantaneous production nominal power, ACS 100 kW |
| ECOSL150 | instantaneous production nominal power, ACS 150 kW |

Accessories

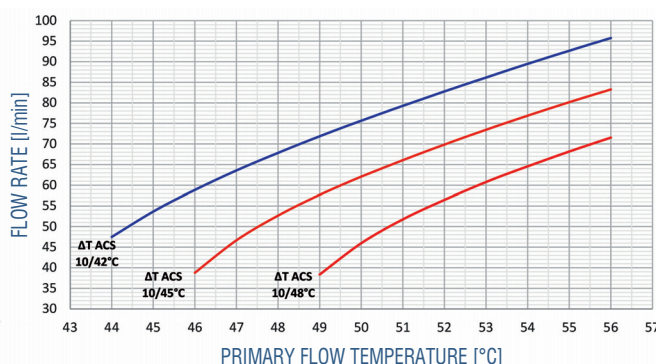
| CODE | DESCRIPTION |
|--------|------------------------|
| CIRPDC | PWM recirculation pump |
| USBMOD | USB-Modbus interface |

DHW PRODUCTION PERFORMANCE FOCUS

100 kW NOMINAL POWER VERSION



150 kW NOMINAL POWER VERSION

HYDRAULIC
INTERFACES

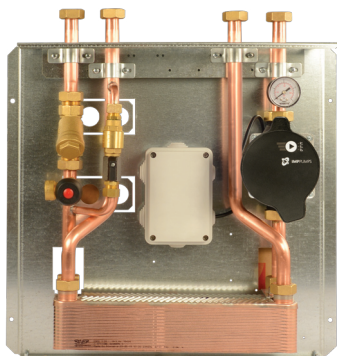
Sep Kit



i

Hydraulic separation unit to preserve the primary plant

- It hydraulically separates the boiler from heating plant to keep the primary circuit clean.



| CODE | DESCRIPTION | |
|----------|---|--|
| ESEP2614 | plate exchanger nominal power 26 kW - boiler / 14 kW - heat pump | |

Accessories

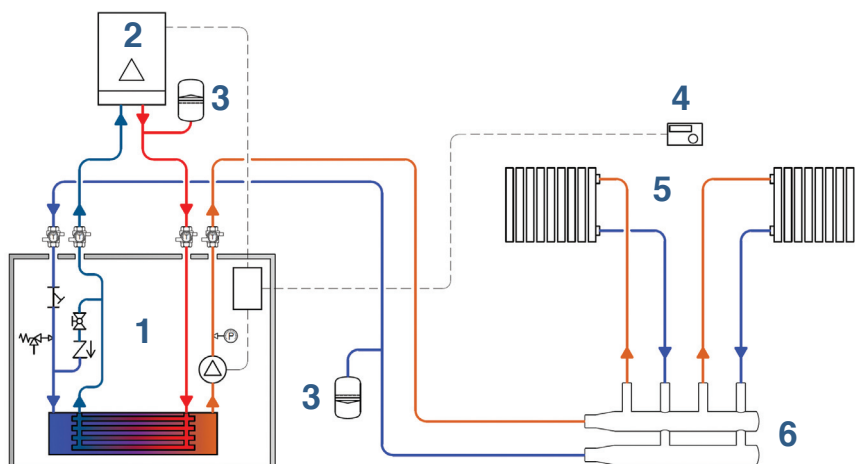
Add the numbers and/or letters listed in the “ID” column corresponding to the selected accessories at the end of the base model code.

| ID | DESCRIPTION | |
|----|--------------------------------------|--|
| V | Interception valves with thermometer | |
| S | Control unit | |

| CODE | DESCRIPTION | |
|------|----------------------|--|
| CEK | RAL 9010 white cover | |

EXAMPLE OF USE

- 1 : SEP KIT
 2 : Boiler
 3 : Expansion vessel
 4 : Room thermostat
 5 : Heating plant
 6 : Distribution manifold

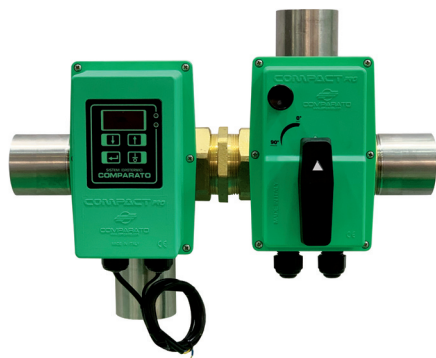


Ecopool



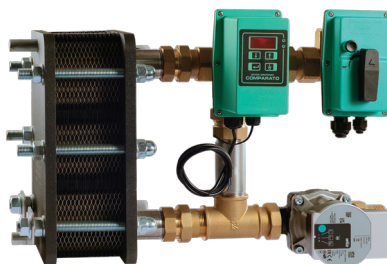
Pool temperature regulation

- Electronic regulation of the supply temperature to the pool.
- Automatic switching between two different energy sources based on the available temperature.
- Remote control capability via RS485 serial port with Modbus-RTU protocol.



| CODE | DESCRIPTION |
|--------|---|
| PK2050 | for pools up to 50 m ³ , 230V AC |
| PK2100 | for pools from 50 to 100 mc, 230V AC |
| PK2200 | for pools from 100 to 200 mc, 230V AC |

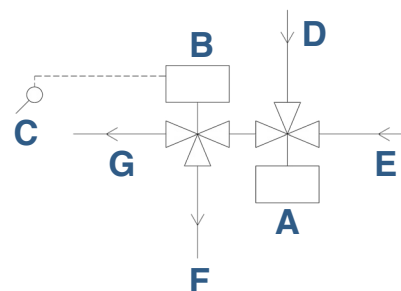
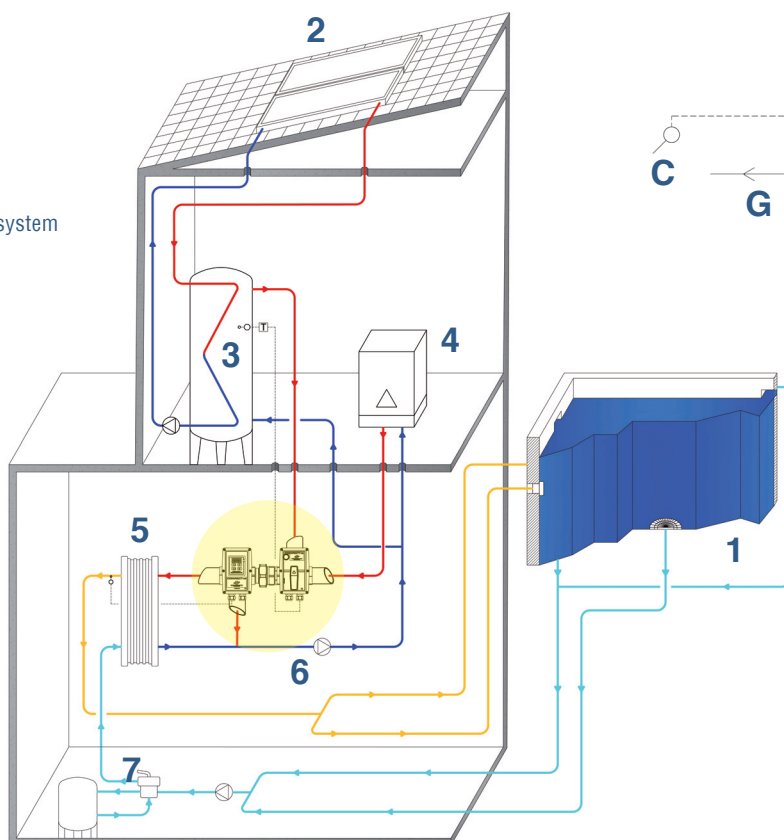
VERSION ON REQUEST



The combination of Compamix mixing valve with Compact PRO diverter valve allows for the automatic management to switch between two different heat sources, such as solar thermal and heat pump, and efficiently controls the temperature of swimming pools.

EXAMPLE OF USE

- 1 : Swimming pool
- 2 : Solar panels
- 3 : Storage tank
- 4 : Boiler
- 5 : Heat exchanger
- 6 : Circulation pump
- 7 : Water treatment system



- A 3-way diverter motorised valve
- B 3-way modulating motorised valve with temperature probe
- C Temperature probe on inlet pool
- D Flow from source 1
- E Flow from source 2
- F Return to sources
- G Flow to pool exchanger

PLUG & PLAY

EXISTING PLANTS UPGRADING

IMMEDIATE REPLACEMENTS













Our skill of producing according to Customer's request both in terms of functions and size, allows us to offer units that are perfectly interchangeable with others, that are already existing, in order to make a quick installation without any hydraulic nor building works, even for reduced quantities and in case of an original not **COMPARATO** product. Our Technical Department takes advantage of highly qualified staff who follows the project from the beginning, providing an advanced advice with high added value.

COMPARATO GRANTS:

- Same hydraulic connections position
- Any hydraulic connections interaxis variation
- Same overall dimensions
- Same fixing type
- Continuity of service (climatisation, DHW and DCW)
in apartments reducing residents' inconveniences

DIRECT METERING

| | | |
|---|-----------------------------|------------|
|  | CONTER S | 168 |
|  | CONTER | 169 |
|  | CONTER R | 175 |
|  | DIATECH S | 179 |
|  | DIATECH LF | 183 |
|  | DIATECH PDC | 187 |
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|  | CUSTOM MADE PROJECTS | 196 |
|  | PLUG&PLAY | 199 |
|  | ACCESSORIES | 200 |



Heating/cooling lines and domestic hot and cold water

Hydraulic Interface Unit for management and direct metering for centralised heating and cooling system with centralised DHW production. Direct metering and management of one energy line and domestic hot and cold water lines. Built-in installation.



PREASSEMBLED

| CODE | DESCRIPTION |
|------------|---|
| Q3IVHT000Y | Heating / cooling line and domestic water lines DN 15 with meter stub piece, DHW and DCW meters (G3/4"x110mm) and 2-WAY ball valve |
| Q3IVHT0J0Y | Heating / cooling line and domestic water lines DN 15 with meter stub piece, DHW and DCW meters (G3/4"x110mm), 2-WAY ball valve, and static balancing valve |

Accessories

| CODE | DESCRIPTION |
|------------|--|
| SR2221U | SINTESI actuator 230V 50Hz, 2-point with auxiliary contact (opening) for zone valve |
| SR2421U | SINTESI actuator 24V 50Hz, 2-point with auxiliary contact (opening) for zone valve |
| RFKITCCAB | mechanical energy meter kit for hot / cold DN15 Qp 1,5 m³/h and 2 M-Bus meters for DHW and DCW |
| QS4CS | frame and door with customised lock |
| RF0IBQS42A | energy line insulation |



Heating/cooling lines and domestic hot and cold water

Hydraulic Interface Unit for direct metering and management of heating and cooling systems equipped with centralised domestic hot water production, with direct metering and management of the energy line. Optional hot and cold domestic water lines. Wall-hanging and built-into-wall installation.

MODULAR



EXAMPLE OF USE

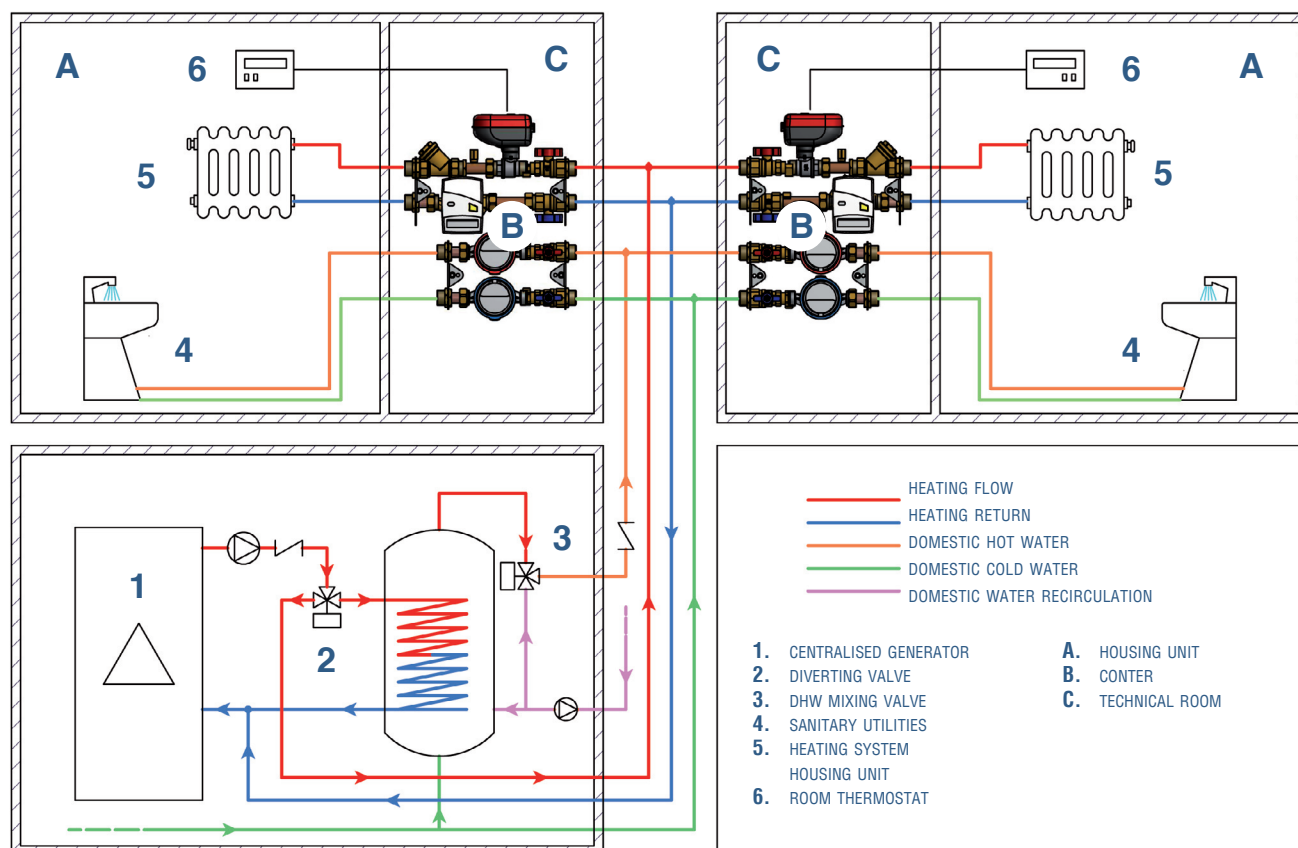




TABLE for code configuration

| 0 METERING LINE CONTER | |
|------------------------|--|
| QK0 | heating / cooling line DN15 with meter stub piece (G3/4"x110mm) and 2-WAY ball valve |
| QK1 | heating / cooling line DN15 with meter stub piece (G3/4"x110mm) and BY-PASS ball valve |
| QK3 | heating / cooling line DN20 with meter stub piece (G1"x130mm) and 2-WAY ball valve |
| QK4 | heating / cooling line DN20 with meter stub piece (G1"x130mm) and BY-PASS ball valve |
| 1 INSULATION | |
| H | energy line |
| S | insulated energy line |
| 2 FLOW REGULATION | |
| 0 | not required |
| J | static balancing valve |
| X | dynamic balancing valve |
| D | differential pressure control valve - DPCV |
| M * | electronic flow regulation - MODFLOW |
| P | electronic pump |
| 3 TYPE OF OUTLET | |
| A | direct |
| B ** | temperature-controlled |

* includes SINTESI modulating actuator, electronic control unit

** option B implies QK0 or QK3 and P in position 2

includes electronic control unit, temperature probe and safety thermostat, hydraulic kit including SINTESI modulating actuator

Accessories

SINTESI ACTUATOR TO BE COMBINED WITH THE ZONE VALVE

| CODE | DESCRIPTION | | |
|----------------|---|--|--|
| SR2221U | SINTESI actuator 230V 50Hz, 2-point with auxiliary contact (opening) for zone valve | | |
| SR2421U | SINTESI actuator 24V 50Hz, 2-point with auxiliary contact (opening) for zone valve | | |
| CGQKHT | SINTESI actuator 230V 50Hz with electromechanical control board for zone valve | | |

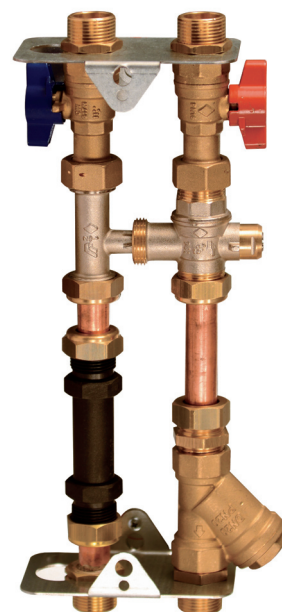
ADDITIONAL SHUT-OFF VALVES

| CODE | DESCRIPTION | | |
|----------------|--|--|--|
| KIVMG34 | pair of additional shut-off ball valves (supplied loose) Ø3/4" | | |
| KIVMG01 | pair of additional shut-off ball valves (supplied loose) Ø1" | | |

DHW AND RECIRCULATION LINES

| CODE | DESCRIPTION | | |
|----------------|--|--|--|
| KCACST | DHW line with meter stub piece (G3/4"x110mm) • DN15 | | |
| KCAFST | DCW line with meter stub piece (G3/4"x110mm) • DN15 | | |
| KCACST1 | DHW line with meter stub piece (G1"x130mm) • DN20 | | |
| KCAFST1 | DCW line with meter stub piece (G1"x130mm) • DN20 | | |
| KCAT | DHW and DCW lines with replacement fittings for meters (G3/4"x110mm) • DN15 | | |
| KCAT1 | DHW and DCW lines with replacement fittings for meters (G1"x130mm) • DN20 | | |
| KRICO | DHW line with localised recirculation system and meter stub piece (G3/4"x110mm) • DN15 | | |

| CODE EXAMPLE | | | |
|--------------|---|---|---|
| 0 | 1 | 2 | 3 |
| QK0 | H | 0 | A |



Accessories

MID ENERGY METERS

| CODE | DESCRIPTION | | | |
|-------------------|-------------------------|----------|------|------------------------------------|
| CFCENM34B | mechanical energy meter | hot/cold | DN15 | Qp=1.5 m³/h M-Bus reading |
| CFCENU34B | ultrasonic energy meter | hot/cold | DN15 | Qp=1.5 m³/h M-Bus reading |
| CFCENU34BW | ultrasonic energy meter | hot/cold | DN15 | Qp=1.5 m³/h M-Bus reading |
| CFCENM01B | mechanical energy meter | hot/cold | DN20 | Qp=2.5 m³/h M-Bus reading |
| CFCENU01B | ultrasonic energy meter | hot/cold | DN20 | Qp=2.5 m³/h M-Bus reading |
| CFCENU01BW | ultrasonic energy meter | hot/cold | DN20 | Qp=2.5 m³/h Wireless M-Bus reading |

MID DOMESTIC WATER METERS

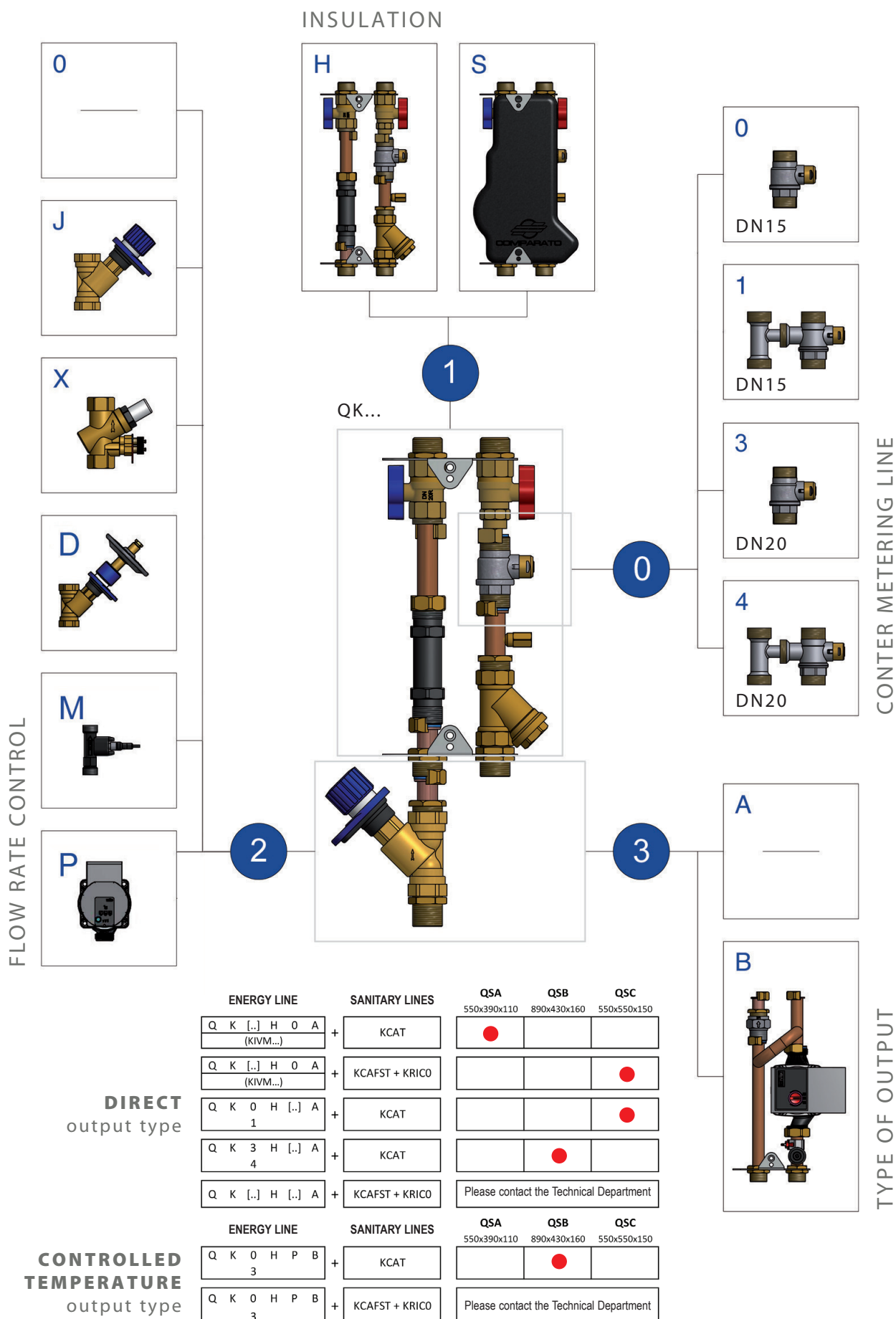
| CODE | DESCRIPTION | | | |
|--------------------|-------------|------|-------------|-------------------|
| CFCACSI15 | DHW meter | DN15 | Q3=2,5 m³/h | with pulse output |
| CFCAFSI15 | DCW meter | DN15 | Q3=2,5 m³/h | with pulse output |
| RFCACSI15ZM | DHW meter | DN15 | Q3=2,5 m³/h | with M-Bus output |
| RFCAFSI15ZM | DCW meter | DN15 | Q3=2,5 m³/h | with M-Bus output |
| CFCACSI20 | DHW meter | DN20 | Q3=4,0 m³/h | with pulse output |
| CFCAFSI20 | DCW meter | DN20 | Q3=4,0 m³/h | with pulse output |

RECESSED METAL ENCLOSURES

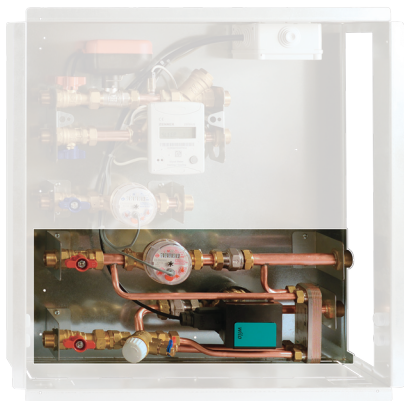
| CODE | DESCRIPTION | |
|------------|-----------------------|---------------|
| QSA | sheet metal sheet box | 550x390x110mm |
| QSB | sheet metal sheet box | 890x430x160mm |
| QSC | sheet metal sheet box | 550x550x150mm |

FRAMES AND SHUTTERS

| CODE | DESCRIPTION | |
|--------------|--|-----|
| QSACS | frame and small door with a customised lock for box code | QSA |
| QSBGS | frame and small door with a customised lock for box code | QSB |
| QSCCS | frame and small door with a customised lock for box code | QSC |



LOCALISED DHW RECIRCULATION SYSTEM



Code KRICO - DHW line with localised recirculation system and replacement stub piece for meter • DN15



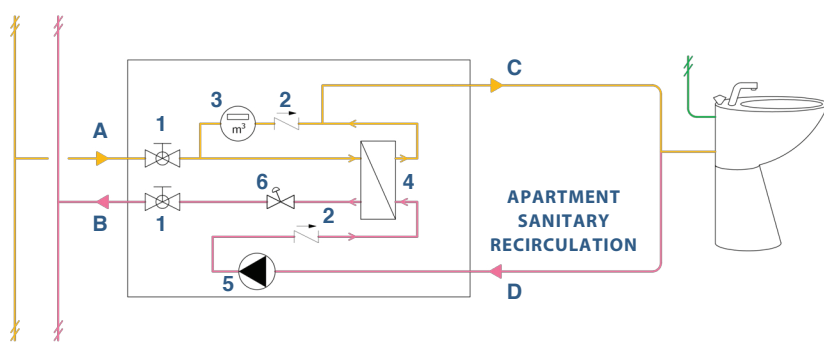
MID COMPLIANCE



HYGIENE AND SAFETY



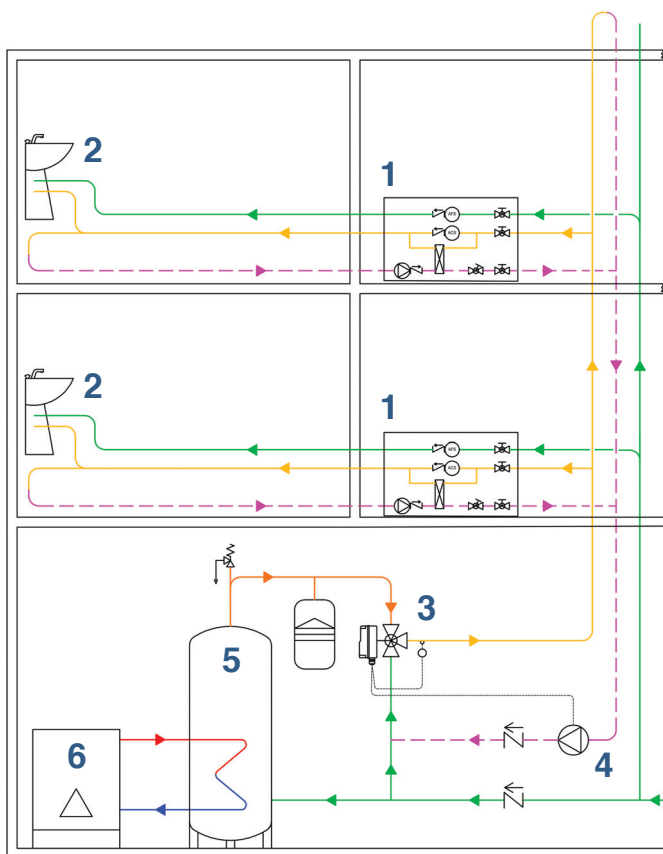
EFFICIENCY AND ENERGY SAVINGS



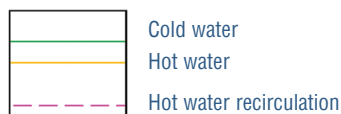
CENTRALISED SANITARY RECIRCULATION

- A : Hot water inlet from centralised system
- B : Return to centralised recirculation
- C : Hot water supply to apartment
- D : Recirculation return from apartment

- 1 : Shut-off valve
- 2 : Check valve
- 3 : Domestic hot water volumetric meter
- 4 : Plate heat exchanger
- 5 : Recirculation pump
- 6 : Flow limiter



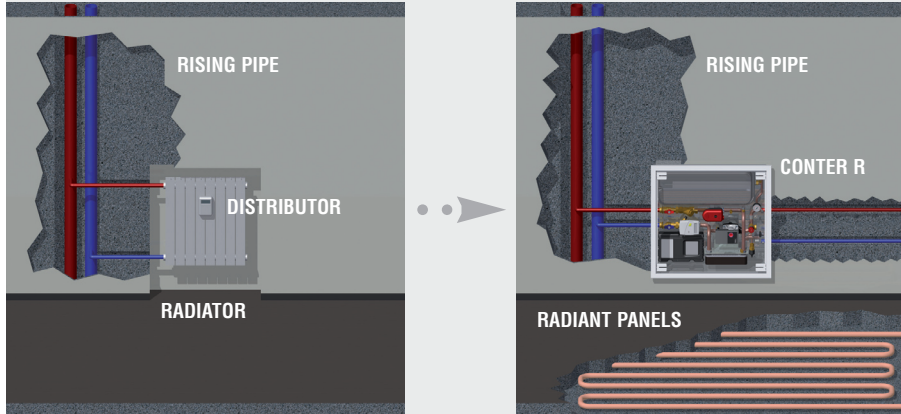
In centralised systems with direct billing of energy and domestic hot water, the standard requires that the hot water delivery time must be kept below 30 seconds, bringing, if necessary, the DHW recirculation line inside the apartment. Comparato localised recirculation system is the functional, reliable, and safe solution that resolves the issue of correct billing for domestic hot water: the system creates, for each individual apartment, an independent localised recirculation loop, separate from the centralised recirculation network. The flow in the apartment's recirculation is ensured by a very low consumption pump, and temperature maintenance is guaranteed by the plate heat exchanger, which transfers heat directly from the main DHW distribution loop.



- 1 : **CONTER RECIRCULATION**
- 2 : Sanitary utilities apartment
- 3 : DHW mixing valve
- 4 : Centralised recirculation pump
- 5 : Centralised DHW boiler
- 6 : Generator

CONTER R

EXAMPLE OF INSTALLATION in place of radiator



CONTER R is designed to transform a system with radiators and cost allocators into a new underfloor heating system with direct energy metering.

Main features are:

- Direct metering
- Hydraulic separation between rising main and house plant
- Temperature regulation and control
- Integration with the centralised system to allocate costs

CONSUMPTION DATA COLLECTION

Thanks to the direct energy meter with M-Bus wireless data transmission capabilities, it is possible to complete the reading with the heat distribution data, with no need to change the system architecture.



M-Bus
wireless

Conter R

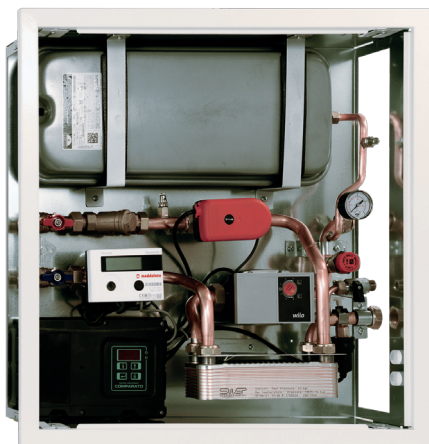


i

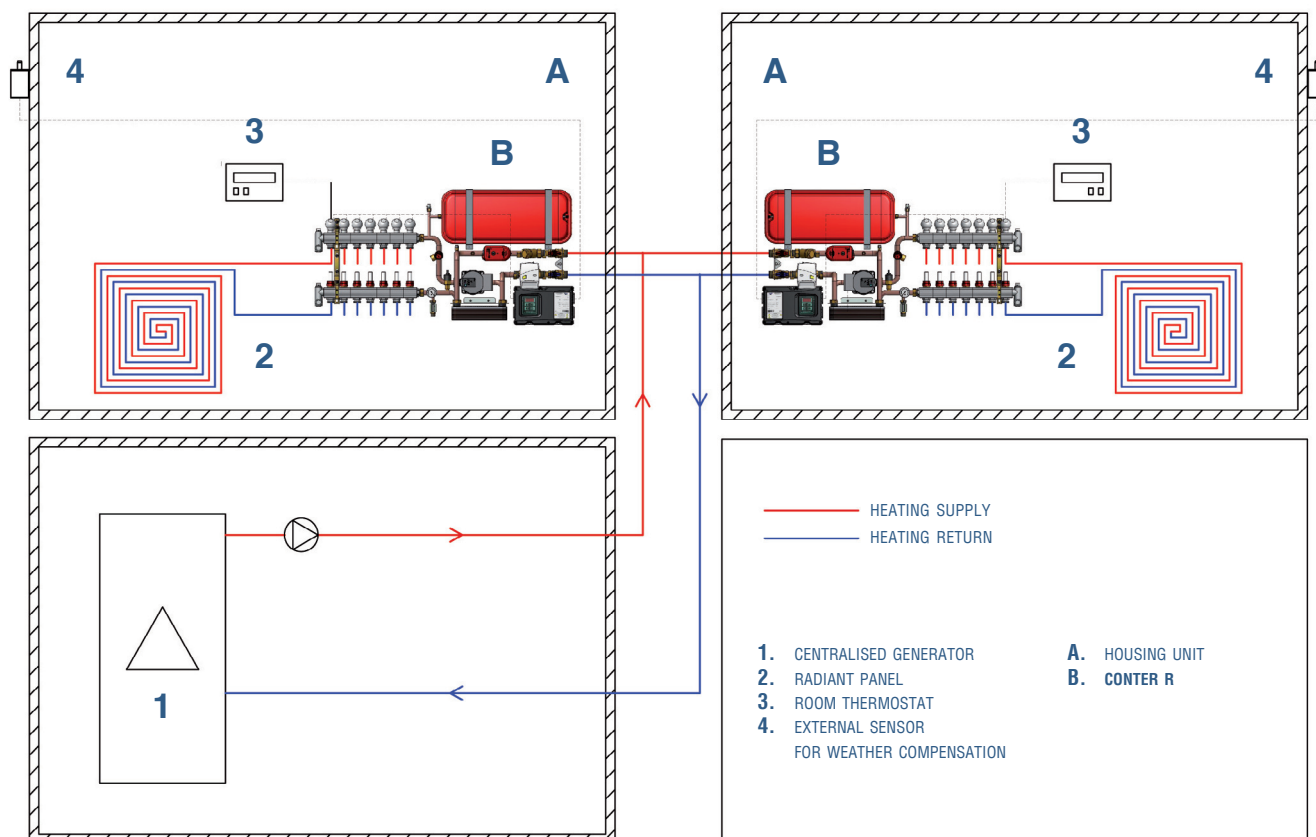
Designed for those who want to replace radiators with radiant panels in a centralised system

IT HAS EVERYTHING YOU NEED TO MANAGE THE NEW RADIANT PANEL SYSTEM.

Hydraulic Interface Unit for direct billing designed for apartment renovations in buildings with a centralised system and heat billing via heat cost allocators. **CONTER R** connects to the distribution system, replacing radiators, and directly measures the energy drawn from the centralised network. It hydraulically separates the housing unit from the centralised system and regulates the supply temperature to the radiant panels.



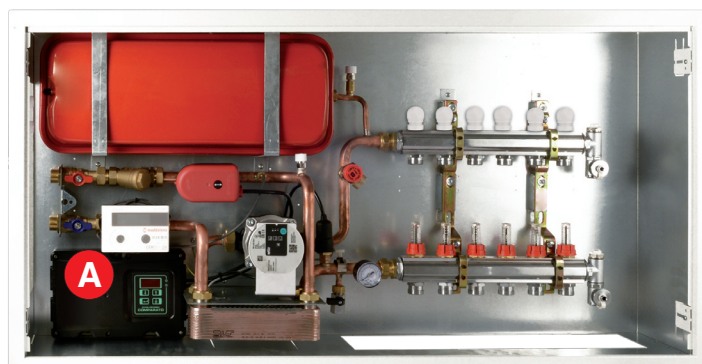
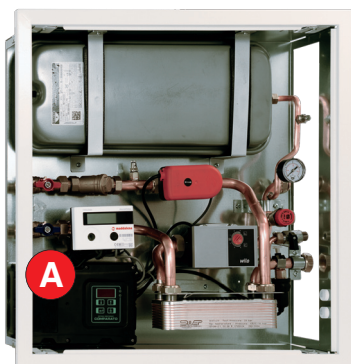
EXAMPLE OF USE





Designed for those who want to replace radiators with radiant panels in a centralised system

- IT HAS EVERYTHING YOU NEED TO MANAGE THE NEW RADIANT PANEL SYSTEM.



- Direct metering
- Hydraulic separation
- Temperature regulation and control

A : Heat meter

WITHOUT MANIFOLD VERSION

with replacement energy meter stub piece

| CODE | DESCRIPTION |
|--------|---------------|
| QR00PR | single outlet |

WITH MANIFOLD VERSION

with energy meter stub piece

| CODE | MANIFOLD TYPE | ZONES |
|--------|---------------------------------|-------|
| QRC3PR | simple | 3 |
| QRT3PR | preset for electrothermal heads | 3 |
| QRC4PR | simple | 4 |
| QRT4PR | preset for electrothermal heads | 4 |
| QRC5PR | simple | 5 |
| QRT5PR | preset for electrothermal heads | 5 |
| QRC6PR | simple | 6 |
| QRT6PR | preset for electrothermal heads | 6 |
| QRC7PR | simple | 7 |
| QRT7PR | preset for electrothermal heads | 7 |
| QRC8PR | simple | 8 |
| QRT8PR | preset for electrothermal heads | 8 |

Accessories

Add the numbers and/or letters listed in the "ID" column corresponding to the selected accessories at the end of the base model code.

| ID | DESCRIPTION |
|----|------------------------|
| J | static balancing valve |

Accessories

| CODE | DESCRIPTION |
|-------------------|--|
| QSCCS | frame and cover, without manifold |
| QDCS | frame and cover, with manifold |
| RFSONDAE | external temperature probe for weather compensation function |
| CFCENM34B | mechanical hot/cold energy meter DN15 Qp 1,5 m³/h M-Bus |
| CFCENU34B | ultrasonic hot/cold energy meter DN15 Qp 1,5 m³/h M-Bus |
| CFCENU34BW | ultrasonic hot/cold energy meter DN15 Qp 1,5 m³/h Wireless M-bus |

Instantaneous DHW Production

Diatech S

Rated power 41 kW • primary temperature > 65°C



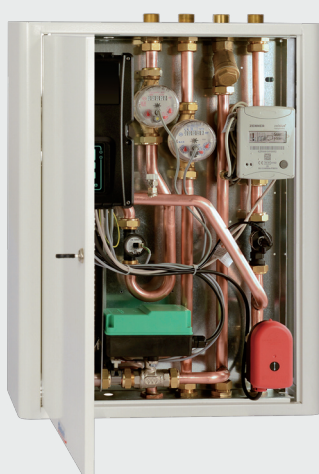
Diatech LF

Rated power 50 kW • primary temperature > 55°C



Diatech PDC

Rated power 36 kW • primary temperature = 50°C





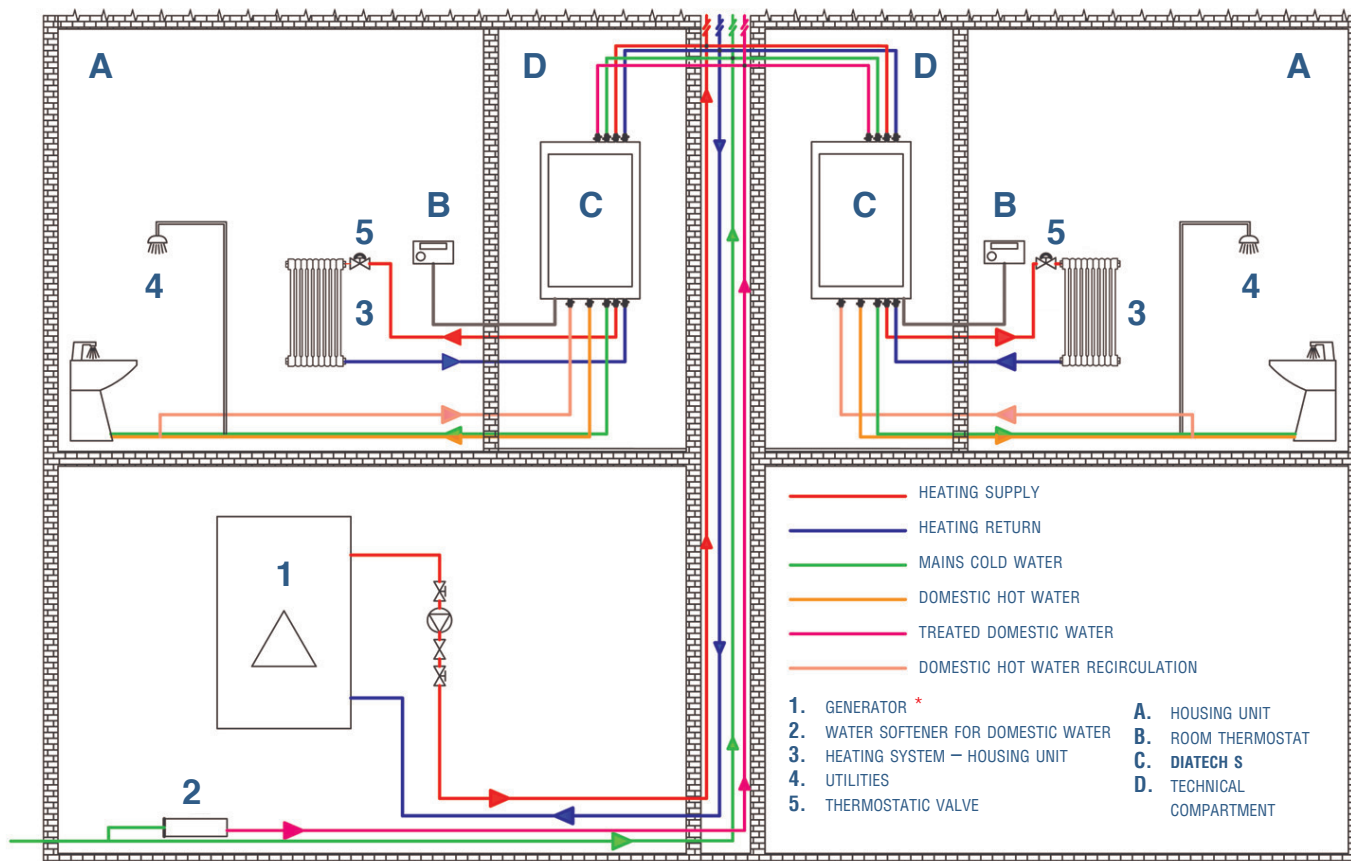
Rated power 41 kW • primary temperature > 65°C

• HEATING AND INSTANT DOMESTIC HOT WATER PRODUCTION

Unit for centralised heating plants with direct metering and heating line management, DCW line and DHW production.



EXAMPLE OF USE



* FOR SYSTEMS WITH CONDENSING BOILERS, PLEASE SEE DIATECH LF P. 183



TABLE for code configuration

| 0 | DIATECH S |
|----|---|
| DS | direct heating line and instant production of DHW with energy meter stub piece and DCW meter - rated power 41 kW |
| 1 | KIND OF INSTALLATION |
| B | basic, template box optional |
| W | wall hanging with white casing |
| 2 | PUMP |
| 0 | not requested |
| P | pump on primary circuit |
| 8 | recirculation on primary circuit |
| 9 | pump on primary circuit and sanitary recirculation |
| 3 | FLOW REGULATION |
| 0 | not requested |
| J | static balancing valve |
| X | dynamic balancing valve |
| D | DPCV - differential pressure control valve |
| M | Modflow - electronic flow control |
| 4 | TREATED and PRE-HEATED DOMESTIC WATER LINE |
| 0 | not requested |
| T | treated water meter replacement stub piece (G3/4"x110mm) |

Accessories

| CODE | DESCRIPTION |
|---------|--|
| DIMA7D | template box - basic model |
| DIMA8D | template case + treated water line (option 4) |
| DIMA8DR | template box + sanitary recirculation (option 2) |
| DIMA9DR | template case + domestic recirculation + treated water line (option 2-4) |
| DSCS | frame and door with customised lock |

MECHANICAL ENERGY METER

| CODE | DESCRIPTION |
|------------|--|
| CFCENM34B | mechanical hot/cold energy meter DN15 Qp 1,5 m³/h M-Bus reading |
| CFCENU34B | ultrasonic hot/cold energy meter DN15 Qp 1,5 m³/h M-Bus reading |
| CFCENU34BW | ultrasonic hot/cold energy meter DN15 Qp 1,5 m³/h Wireless M-Bus reading |

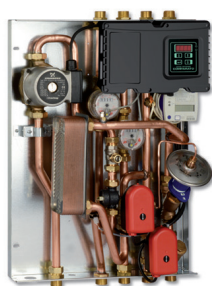
METERS FOR DOMESTIC WATER

| CODE | DESCRIPTION |
|-----------|---|
| CFCACSI15 | DHW meter DN15 Qn 2,5 m³/h with pulse outputs |
| CFCAFSI15 | DCW meter DN15 Qn 2,5 m³/h with pulse outputs |

| CODE EXAMPLE | | | | |
|--------------|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 |
| DS | B | 8 | D | T |



INSTALLATION FOCUS



A



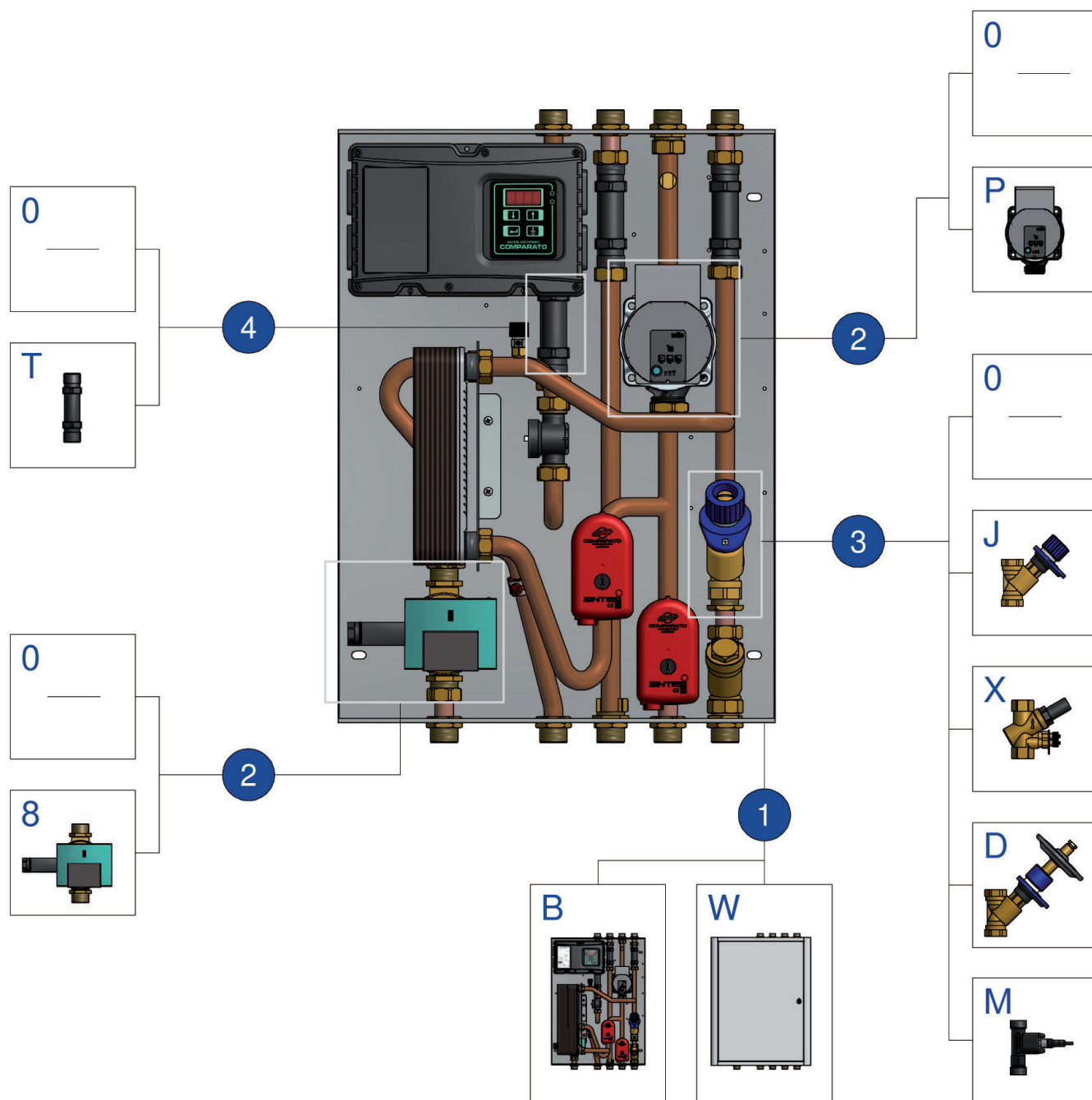
B



C



A basic model **WITHOUT EXTERNAL CASING** option (A) can be provided with extra options according to plant requirements. The **BUILT-INTO-WALL** option (B) and the elegant **WALL HANGING** option (C), with painted casing, are solutions designed for the apartments.



| DIMA7D | DIMA8D | DIMA8DR | DIMA9DR | DSCS |
|--------|--------|---------|---------|------|
| | | | | |



Rated power 50 kW • primary temperature > 55°C

• HEATING AND INSTANT DOMESTIC HOT WATER PRODUCTION

HIU for centralised heating systems with **CONDENSING BOILERS**, with direct metering and heating line management, DCW line and DHW production.



EXAMPLE OF USE

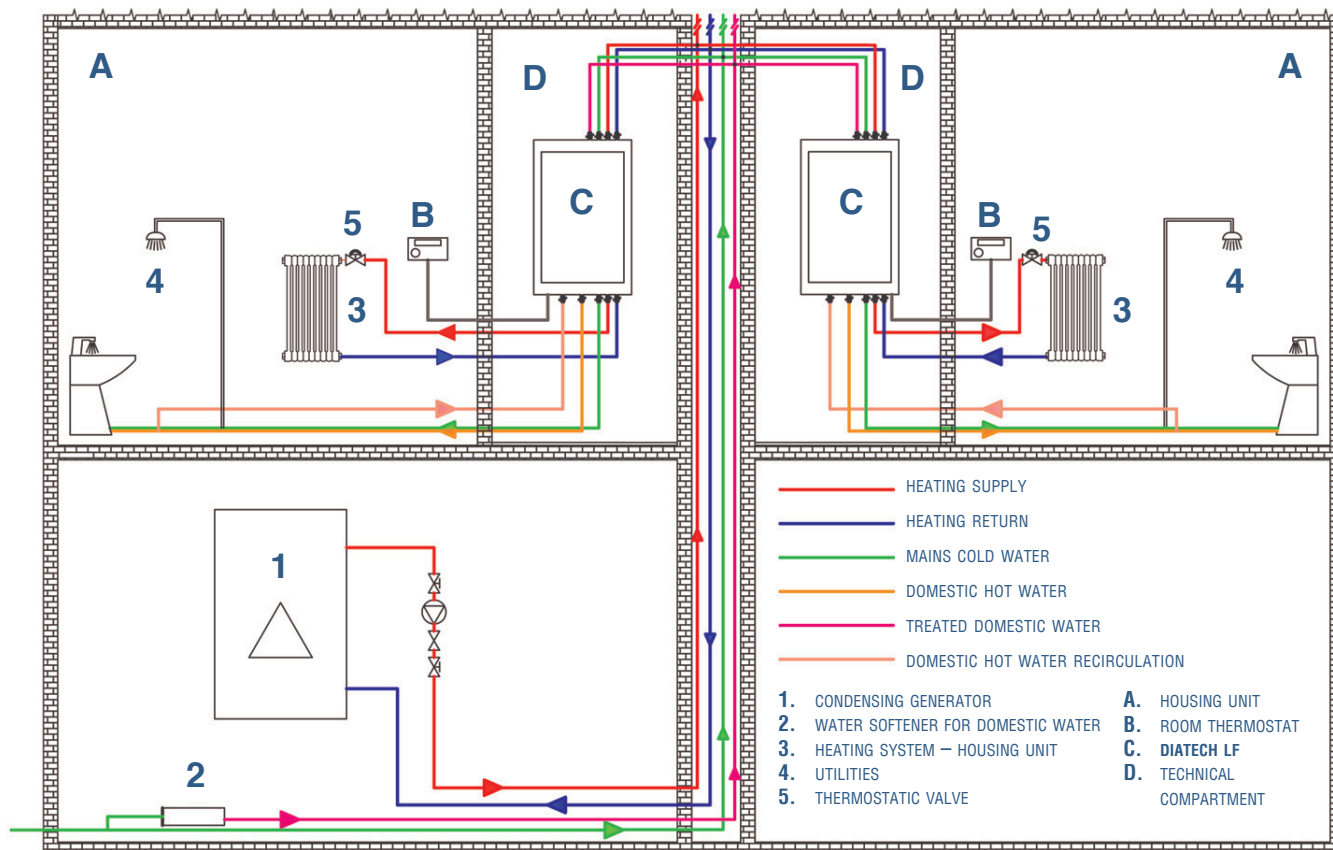




TABLE for code configuration

| | | |
|-----------|--|--|
| 0 | DIATECH LF | |
| LF | direct heating line and instant production of DHW with energy meter stub piece and DCW meter (G3/4"x110mm) - rated power 50 kW | |
| 1 | KIND OF INSTALLATION | |
| B | basic, plate box optional | |
| W | wall hanging with white casing | |
| 2 | PUMP | |
| 0 | not requested | |
| P | pump on primary circuit | |
| 8 | recirculation on primary circuit | |
| 3 | FLOW REGULATION | |
| 0 | not requested | |
| J | static balancing valve | |
| X | dynamic balancing valve | |
| D | DPCV - differential pressure control valve | |
| M | Modflow – electronic flow control | |
| 4 | TREATED and PRE-HEATED DOMESTIC WATER LINE | |
| 0 | not requested | |
| T | treated water meter stub piece (G3/4"x110mm) | |

Accessories

| CODE | DESCRIPTION |
|----------------|--|
| DIMA7D | template box - basic model |
| DIMA8D | template case + treated water line (option 4) |
| DIMA8DR | template box + sanitary recirculation (option 2) |
| DIMA9DR | template case + domestic recirculation + treated water line (option 2-4) |
| DSCS | frame and door with customised lock |

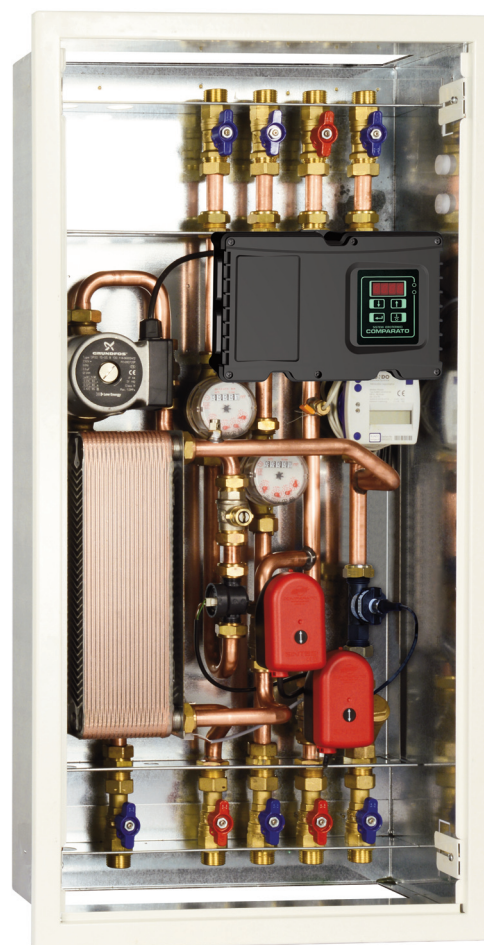
MECHANICAL ENERGY METER

| CODE | DESCRIPTION |
|-------------------|--|
| CFCENM34B | mechanical hot/cold energy meter DN15 Qp 1,5 m³/h M-Bus reading |
| CFCENU34B | ultrasonic hot/cold energy meter DN15 Qp 1,5 m³/h M-Bus reading |
| CFCENU34BW | ultrasonic hot/cold energy meter DN15 Qp 1,5 m³/h Wireless M-Bus reading |

METERS FOR DOMESTIC WATER

| CODE | DESCRIPTION |
|------------------|---|
| CFCACSI15 | DHW meter DN15 Qn 2,5 m³/h with pulse outputs |
| CFCAFSI15 | DCW meter DN15 Qn 2,5 m³/h with pulse outputs |

| CODE EXAMPLE | | | | |
|--------------|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 |
| LF | B | 8 | M | T |



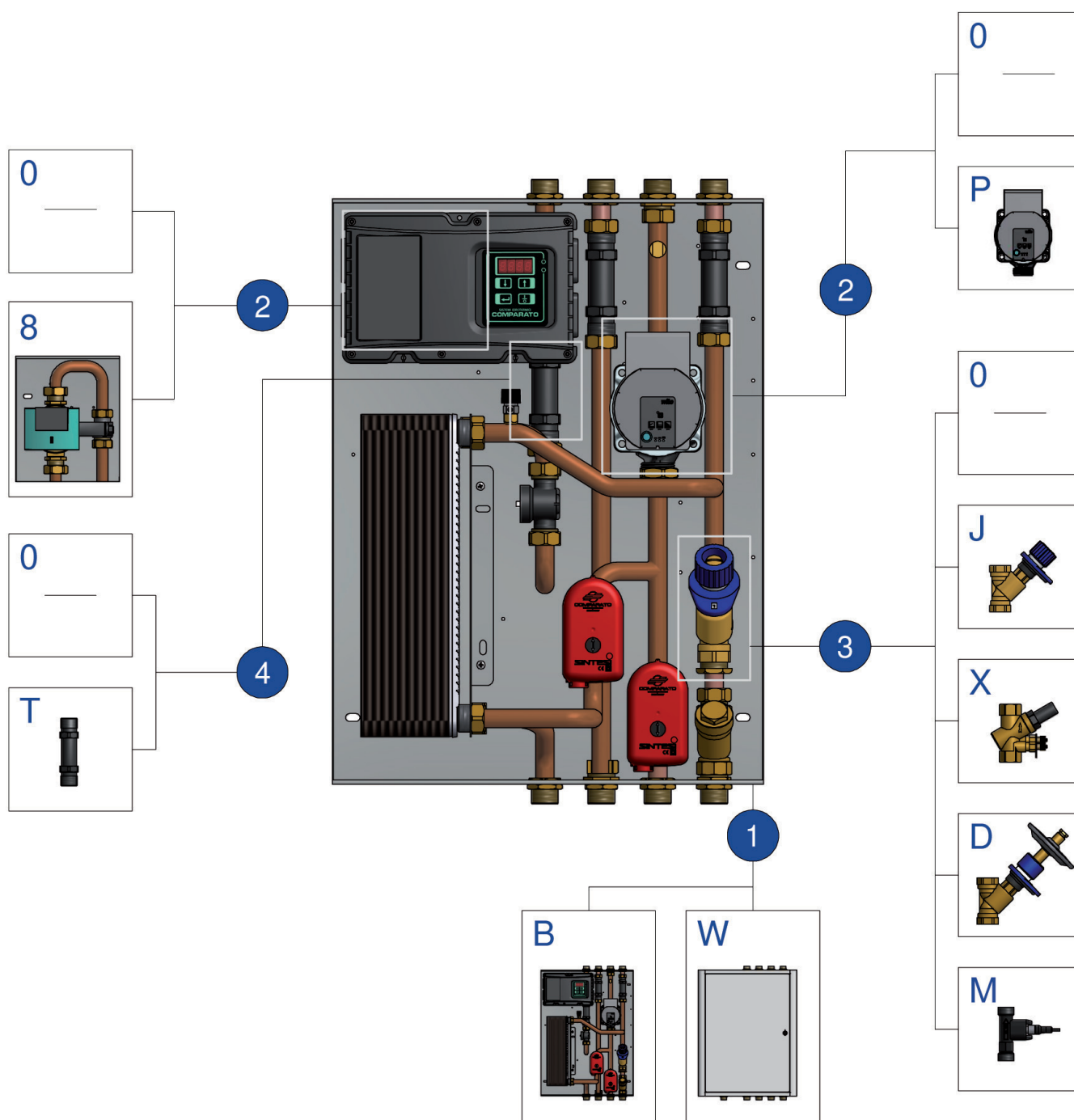
INSTALLATION FOCUS



A basic model **WITHOUT EXTERNAL CASING** option (A) can be provided with extra options according to plant requirements. The **BUILT-INTO-WALL** option (B) and the elegant **WALL HANGING** option (C), with painted casing, are solutions designed for the apartments.



i



| DIMA7D | DIMA8D | DIMA8DR | DIMA9DR | DSCS |
|--------|--------|---------|---------|------|
| | | | | |



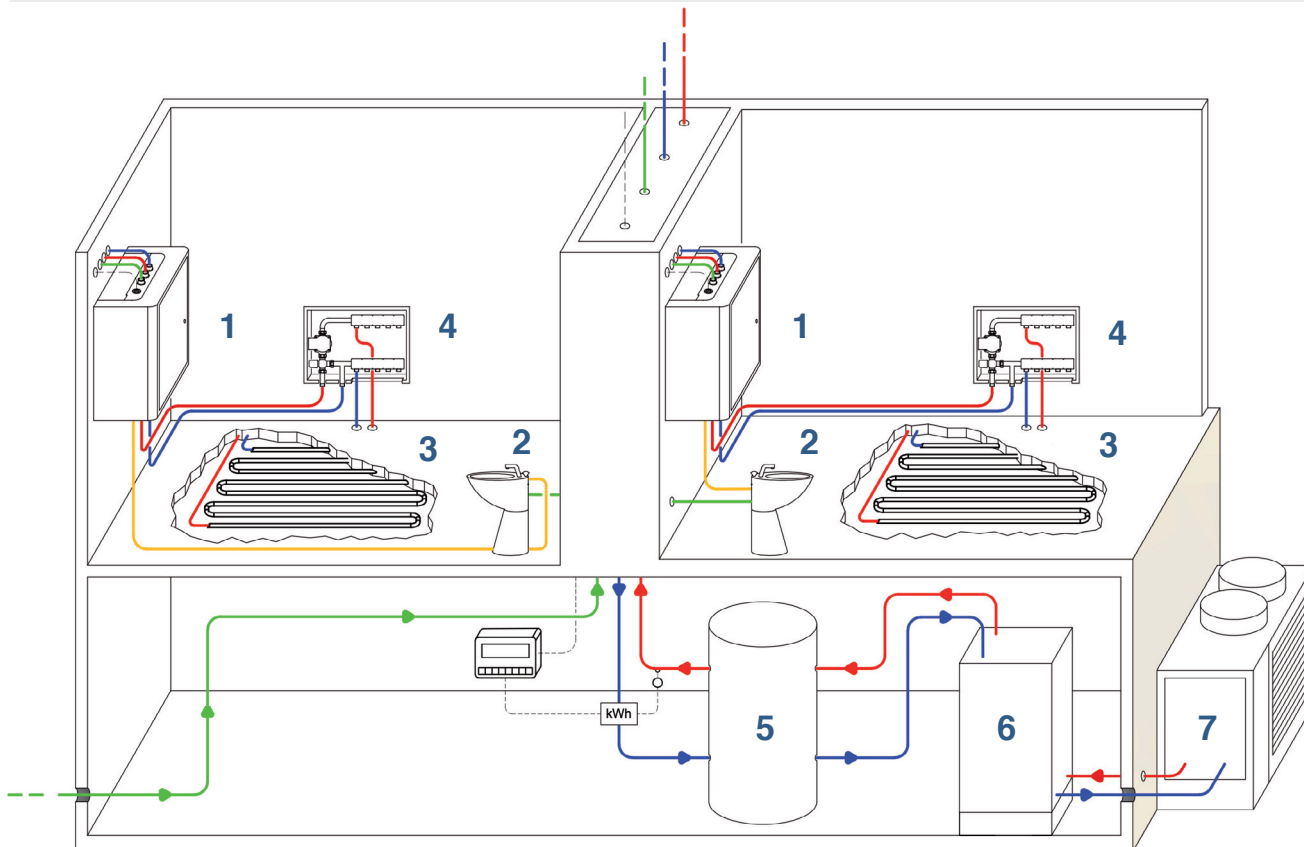
Rated power 36 kW • primary temperature = 50°C

• **HEATING AND INSTANTANEOUS DOMESTIC HOT WATER PRODUCTION**

HIU for central heating systems with **HEAT PUMPS** provided with direct meter, instantaneous DHW production and management of one heating line with controlled temperature. Thanks to the plate heat exchanger with high thermal exchange surface area, the unit can produce instantaneously 15l/min of DHW (thermal drop 10/45°C) with a distribution network temperature of 50°C.



EXAMPLE OF USE



- 1 : DIATECH PDC
2 : Users
3 : Radiant panel
4 : Mixing unit

- 5 : Puffer
6 : HP indoor unit
7 : HP outdoor unit



TABLE for code configuration

| 0 | DIATECH PDC |
|----|--|
| PC | mixed heating line with DHW instantaneous production for heat pumps with stub pieces for energy and DCW meters (G3/4"x110mm) - rated power 36 kW |
| 1 | KIND OF INSTALLATION |
| B0 | basic |
| I0 | built-into-wall (with temporary door) |
| 2 | FLOW REGULATION |
| 0 | not provided |
| J | static balancing valve |
| D | DPCV - differential pressure control valve |
| M | Modflow – electronic flow control |
| 3 | TREATED and/or PRE-HEATED SANITARY WATER LINE |
| 0 | not provided |
| T | stub piece for treated water meter (G3/4"x110mm) |

Accessories

| CODE | DESCRIPTION |
|------|--|
| DSM | white cover for wall-hanging version |
| DSCS | white frame and door for built-into-wall version |

MECHANICAL ENERGY METER

| CODE | DESCRIPTION |
|------------|--|
| CFCENM34B | mechanical hot/cold energy meter DN15 Qp 1,5 m³/h M-Bus reading |
| CFCENU34B | ultrasonic hot/cold energy meter DN15 Qp 1,5 m³/h M-Bus reading |
| CFCENU34BW | ultrasonic hot/cold energy meter DN15 Qp 1,5 m³/h Wireless M-Bus reading |

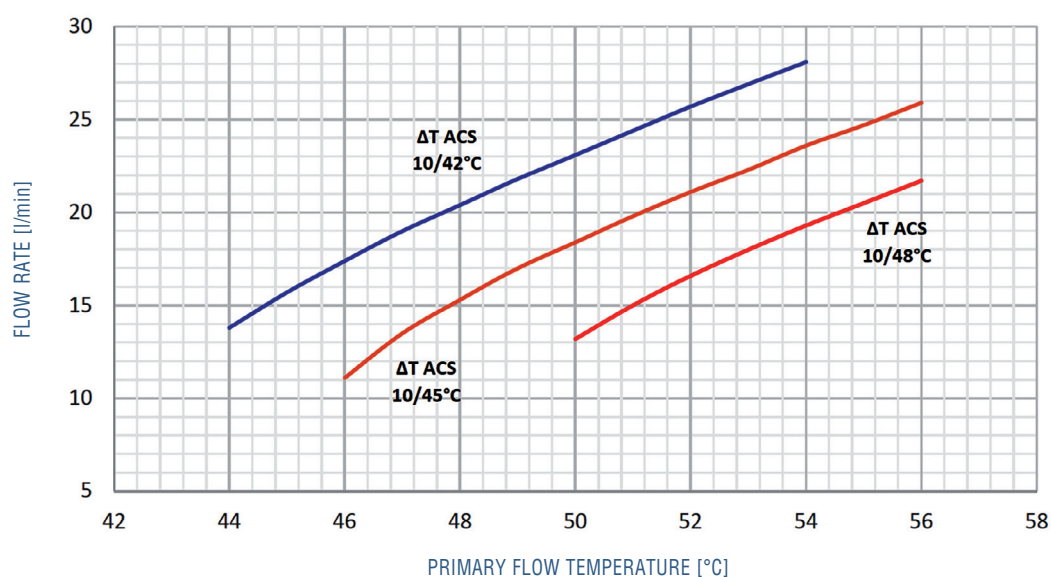
METERS FOR DOMESTIC WATER

| CODE | DESCRIPTION |
|-----------|---|
| CFCACSI15 | DHW meter DN15 Qn 2,5 m³/h with pulse outputs |
| CFCAFSI15 | DCW meter DN15 Qn 2,5 m³/h with pulse outputs |

| CODE EXAMPLE | | | |
|--------------|----|---|---|
| 0 | 1 | 2 | 3 |
| PC | IO | 0 | T |

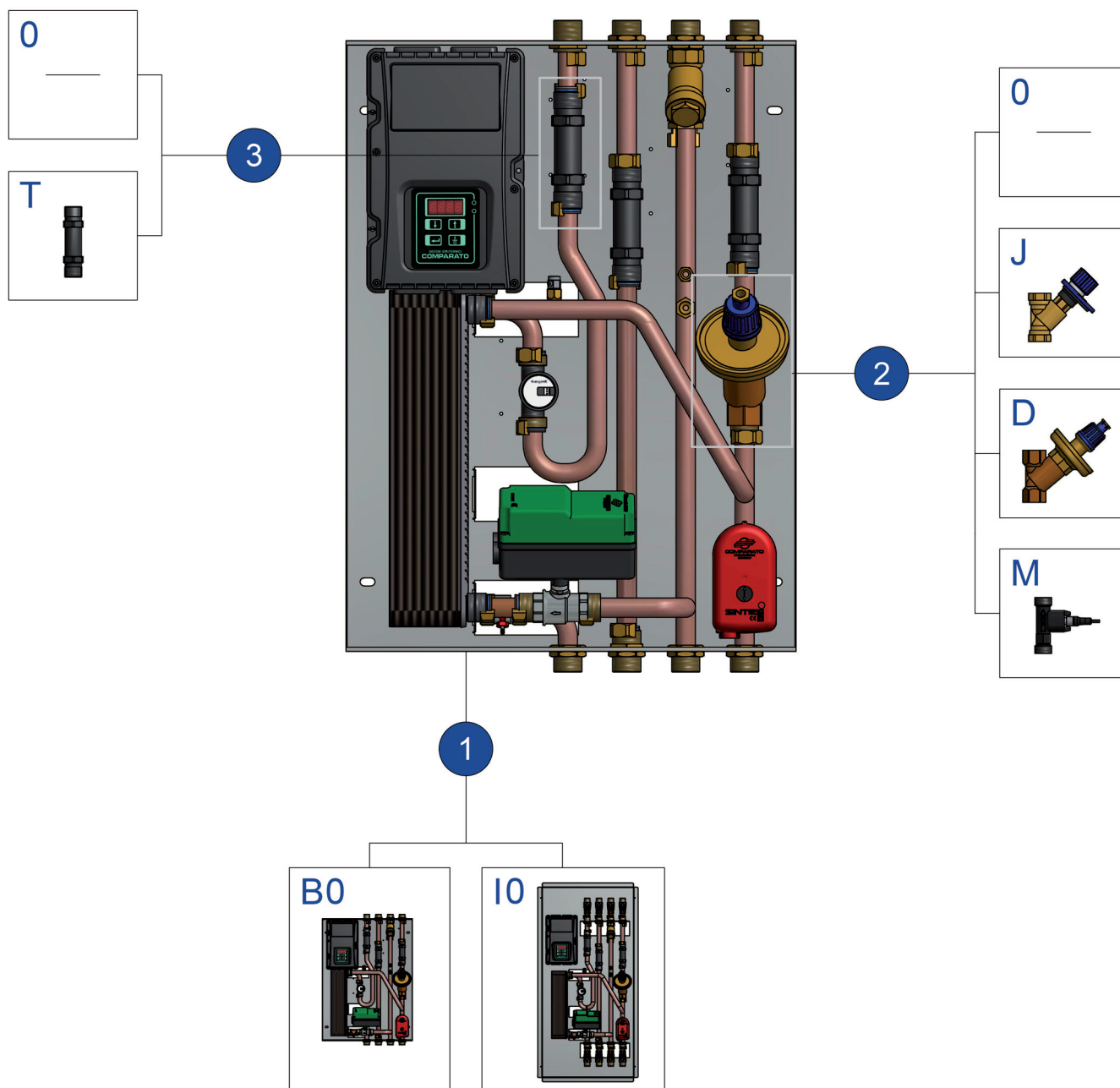


DHW PRODUCTION PERFORMANCE FOCUS





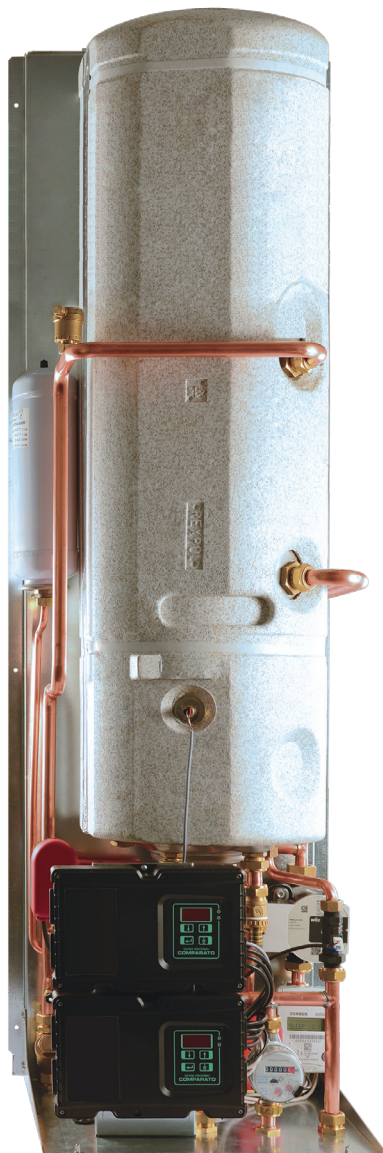
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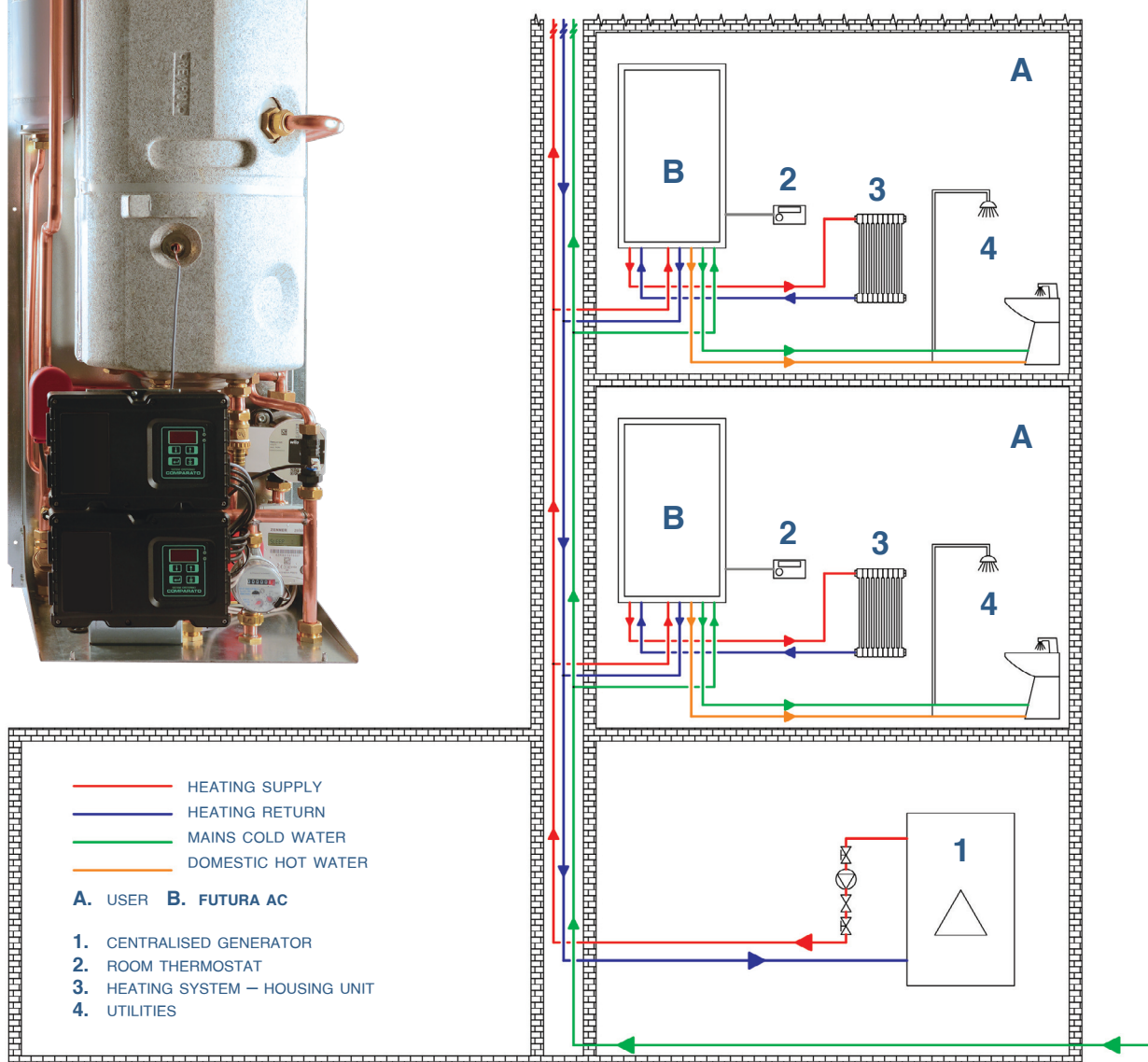


Heating and localised domestic hot water production with 50L or 70L accumulative exchanger

HIU for management and direct metering centralised heating systems **WITH DHW TANK** for the localised production of domestic hot water. Direct metering and heating and cooling system management, domestic hot and cold water lines.



EXAMPLE OF USE



Futura AC 50



i

TABLE for code configuration

| 0 FUTURA AC • 50 litre | |
|------------------------|--|
| FAC | direct heating line and localised DHW production with 50-litre accumulation with energy meter stub piece (G3/4"x110mm) |
| 1 SANITARY WATER METER | |
| 0 | not request |
| T | replacement stub piece |
| 2 MIXER ON DHW OUTLET | |
| 0 | not requested |
| M | thermostatic |
| 3 PLANT PUMP | |
| 0 | not requested |
| P | pump on primary circuit |
| 4 HEATING OUTLET | |
| HTN | high temperature |
| BTN * | low temperature |
| HBN * | high temperature + low temperature |

* low temperature outlets are equipped with a pump

Accessories

| CODE | DESCRIPTION |
|-----------------|--|
| RFSONDAE | external temperature probe for weather compensation - low temperature heating outlet |

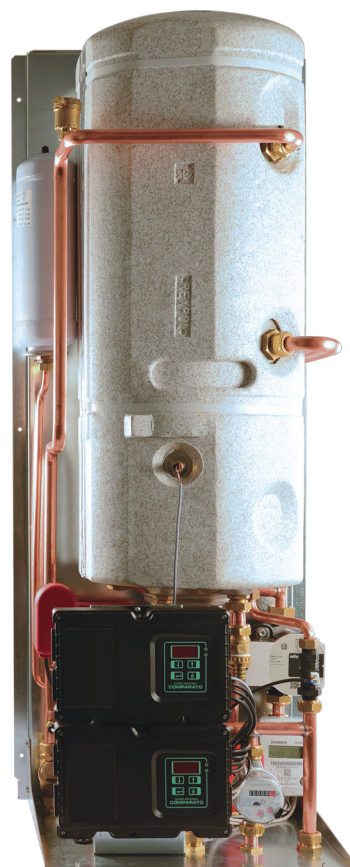
MECHANICAL ENERGY METER

| CODE | DESCRIPTION |
|-------------------|---|
| CFCENM34B | mechanical hot/cold energy meter DN15 Qp 1,5 m³/h with M-Bus reading |
| CFCENU34B | ultrasonic hot/cold energy meter DN15 Qp 1,5 m³/h with M-Bus reading |
| CFCENU34BW | ultrasonic hot/cold energy meter DN15 Qp 1,5 m³/h with Wireless M-Bus |

METERS FOR DOMESTIC WATER

| CODE | DESCRIPTION |
|------------------|--|
| CFCAFSI15 | DCW meter Qn 2,5 m³/h with pulse outputs |

| CODE EXAMPLE | | | | |
|--------------|---|---|---|-----|
| 0 | 1 | 2 | 3 | 4 |
| FAC | T | M | 0 | HTN |



Futura AC 70



i

TABLE for code configuration

| 0 FUTURA AC 70 • 70 litre | | |
|---------------------------|---|----------|
| FAC70 | direct heating line and localised DHW production with 70-litre accumulation with energy meter stub piece (G3/4"x110mm). | 3.902,00 |
| 1 SANITARY WATER METER | | |
| 0 | not request | 00,00 |
| T | replacement stub piece | 16,00 |
| 2 MIXER ON DHW OUTLET | | |
| 0 | not request | 000,00 |
| M | thermostatic | 124,30 |
| 3 PLANT PUMP | | |
| 0 | not request | 000,00 |
| P | pump on primary circuit | 278,70 |
| 4 HEATING OUTLET | | |
| HTN | high temperature | 000,00 |
| BTN * | low temperature | 339,30 |
| HBN * | high temperature + low temperature | 499,50 |

* low temperature outlets are equipped with a pump

Accessories

Add the numbers and/or letters listed in the "ID" column corresponding to the selected accessories at the end of the base model code.

ELECTRICAL RESISTANCE

| ID | DESCRIPTION |
|----------|---|
| R | 1500W electric heating element for DHW boiler |

| CODE | DESCRIPTION |
|-----------------|--|
| RFSONDAE | external temperature probe for weather compensation - low temperature heating outlet |

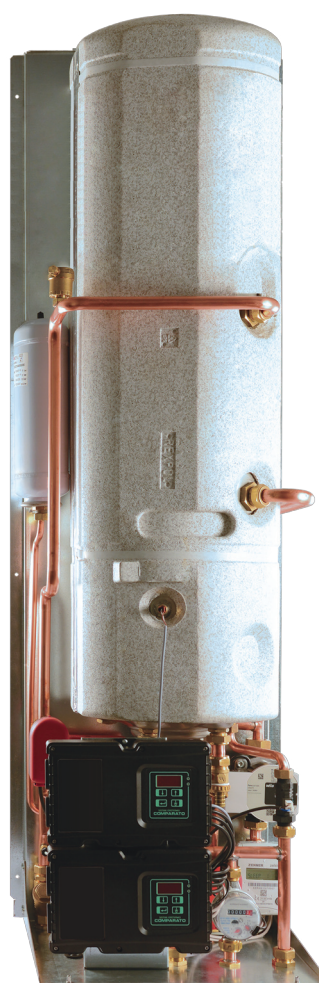
MECHANICAL ENERGY METER

| CODE | DESCRIPTION |
|-------------------|---|
| CFCENM34B | mechanical hot/cold energy meter DN15 Qp 1,5 m³/h with M-Bus reading |
| CFCENU34B | ultrasonic hot/cold energy meter DN15 Qp 1,5 m³/h with M-Bus reading |
| CFCENU34BW | ultrasonic hot/cold energy meter DN15 Qp 1,5 m³/h with Wireless M-Bus |

METERS FOR DOMESTIC WATER

| CODE | DESCRIPTION |
|------------------|--|
| CFCAFSI15 | DCW meter Qn 2,5 m³/h with pulse outputs |

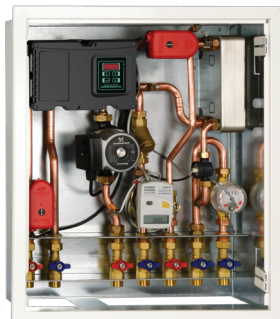
| CODE EXAMPLE | | | | |
|--------------|---|---|---|-----|
| 0 | 1 | 2 | 3 | 4 |
| FAC70 | T | M | 0 | HTN |



Custom-made projects • QUOTATION ON REQUEST

Diatech L

- METERING, HEATING AND PRODUCTION OF DOMESTIC HOT WATER LINE CONNECTIONS



DIATECH L is a Hydraulic Interface Unit for direct metering and management in centralised heating plants with instant production of DHW inside the unit with plated heat exchanger. Built-into-wall installation with template box, in-line connection on the inferior side of the unit, both to the centralised plant and to the apartment. **DIATECH L** can be used with pre-heated water from a solar thermal panels supplying instantaneously the required energy.

Bitherm

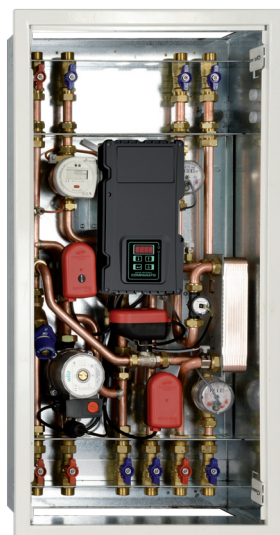
- METERING, DHW INSTANT PRODUCTION AND COMPLETE HYDRAULIC SEPARATION ON HEATING CIRCUIT WITH TEMPERATURE CONTROL



BITHERM is a unit with direct metering and management for centralised heating plants with DHW instant production inside the unit itself with plated exchangers, circulation pump (optional) on sanitary circuit is possible. Living unit heating circuit is supplied with the complete hydraulic separation with plate exchanger with the possibility of temperature control (i.g. for radiant panels). Secondary circuit is provided with filling system, pressure gauge, expansion vessel, safety valve and pump. **BITHERM** can be also used as district heating sub-centre in case for instance of one-family or terraced houses. The installation is wall hanging with centralised plant connections on top and living unit ones on bottom. The supply includes cover and door with customised key.

Diatech BT

- METERING, HIGH AND LOW TEMPERATURE HEATING AND DHW PRODUCTION



DIATECH BT is a Hydraulic Interface Unit for direct metering and management in centralised heating systems operating at both high and low temperatures, with instantaneous domestic hot water production inside the module itself via a plate heat exchanger. The unit is designed for recessed installation with a template box; system connections are positioned opposite each other: upper connections for the centralised system and lower connections for the housing unit. **DIATECH BT** is available in different power ratings for DHW production.

Custom-made projects • QUOTATION ON REQUEST

Diatech SR

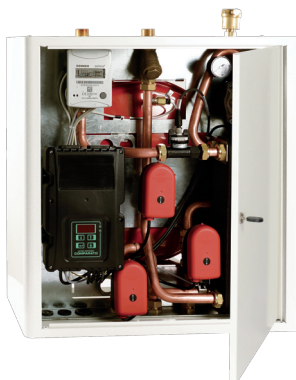
- METERING, HEATING, COOLING AND DHW PRODUCTION



DIATECH SR is a Hydraulic Interface Unit for direct metering and management in heating and cooling centralised plant with DHW instant production with a plated heat exchanger. Built-into-wall installation with template box, opposite connection to the plant: superior side to centralised system and inferior side to apartment. **DIATECH SR** can be used with pre-heated water from a solar thermal panels supplying instantaneously the required energy.

Dual System

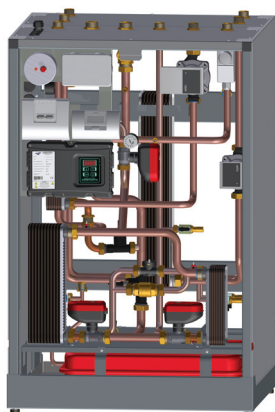
- METERING, EXTERNAL DHW BOILER SUPPLY, AND COMPLETE HYDRAULIC SEPARATION ON THE HEATING CIRCUIT



DUAL SYSTEM is a Hydraulic Interface Unit for direct metering and management in centralised heating systems, with domestic hot water production via an external boiler and complete hydraulic separation of the apartment's heating system thanks to the plate heat exchanger. **DUAL SYSTEM** controls the delivery temperature to the heating system (e.g., for radiant panels), and the secondary circuit is equipped with a filling system, pressure gauge, expansion tank, safety valve, and pump. The installation is wall-mounted, and the supply includes the casing with a door, complete with a customised lock.

Dual stage combined

- METERING, HIGH INSTANTANEOUS DOMESTIC HOT WATER PRODUCTION, COMPLETE HYDRAULIC SEPARATION ON THE HEATING CIRCUIT AND COOLING CIRCUIT

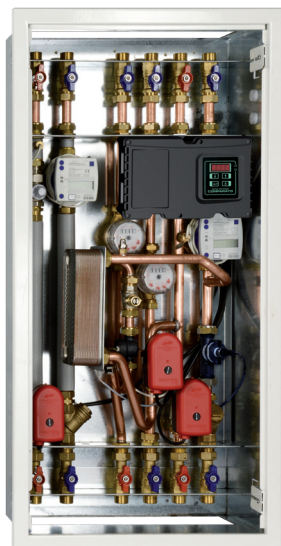


DUAL STAGE COMBINED is a Hydraulic Interface Unit for direct metering and management with a floor-mounted installation, designed to serve high-end apartments. It provides large volumes of domestic hot water (up to 150 kW) with dual-stage instantaneous production and high power for heating and cooling, with hydraulic separation through plate heat exchangers.

Custom-made projects • QUOTATION ON REQUEST

Lowtherm

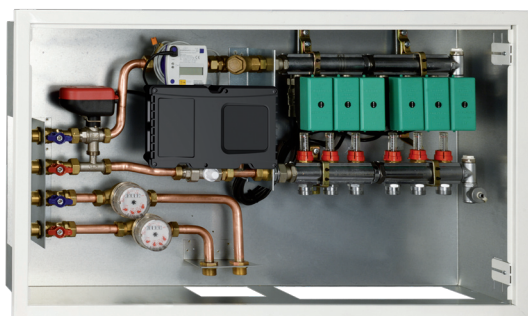
- METERING, HIGH AND LOW TEMPERATURE HEATING PLANT WITH DOMESTIC HOT AND /OR COLD LINE



LOWTHERM is an Interface Unit for the direct metering and for the management of heating and cooling plants in high and low temperature, characterised by domestic hot water production. Built-into-the-wall installation with template, opposed hydraulic connection (centralised plant side – superior, living unit side – inferior).

Conter D

- METERING, HEATING WITH DISTRIBUTION MANIFOLDS AND HOT AND COLD WATER LINES

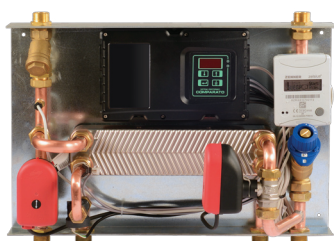
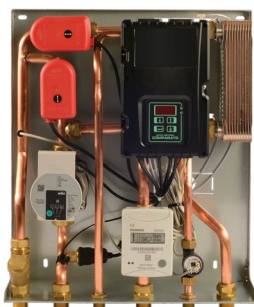


CONTER D is an Interface Unit for the direct metering and for the management of heating and cooling plants with centralised domestic hot water production, with manifolds included. Built-into-the-wall installation. Opposed hydraulic connection (centralised plant side – superior, living unit side – inferior). **CONTER D** is supplied with Sintesi Zone Valves, and can be integrated with a thermostatic mixer for domestic water and motorised zone valves Microdiam on manifold.

PLUG&PLAY

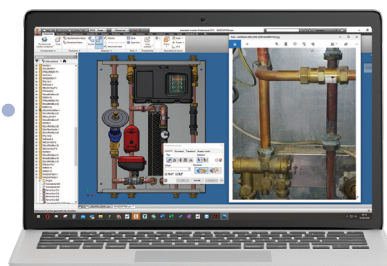
Plug&Play • for IMMEDIATE REPLACEMENTS

- CENTRALISED HEATING/COOLING SYSTEMS WITH DIRECT ENERGY METERING, WITH OR WITHOUT DOMESTIC HOT WATER PRODUCTION



In addition to standard production, Comparato designs and manufactures Hydraulic Interface Units (HIUs) for direct metering according to the specific requests of the customer in terms of functionality and dimensions. This service allows for the provision of HIUs that are fully interchangeable with existing ones, enabling fast installation without the need for plumbing and masonry work, even for small quantities and in cases where the original product is not Comparato.

The Technical Department is supported by highly specialised professionals who follow the project from the earliest stages, providing advanced consulting with high added value. The process begins with the receipt of a request that can come from a distributor, a Comparato agent, a thermotechnical designer, a property manager, or even an apartment owner.



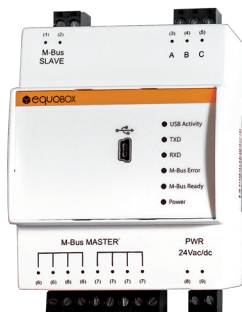
The subsequent feasibility analysis involves gathering all the technical information about the system, which is useful for creating the new satellite module that is not only interchangeable but also more efficient and with better performance than the existing one. If necessary, Comparato technicians carry out an on-site inspection, consulting with the installer to find the best solutions.

Thanks to 3D design, full dimensional compatibility with the existing system is always guaranteed, without any unpleasant surprises during installation. Additionally, Comparato HIUs are designed with ease of disassembly and reassembly of all components in mind, and they stand out for their simplicity and quick maintenance. All components and materials used today are the result of years of selection, ensuring maximum reliability and long-lasting durability.

Once the material is shipped, the work doesn't stop: the commissioning of the new HIUs is a crucial operation to achieve the best results, and once again, Comparato provides highly qualified support and assistance.

Accessories

LEVEL CONVERTER 60 SIGNALS • WIRED M-Bus



M-Bus level converter for managing up to 60 devices. Stand-alone field module for data acquisition from M-Bus meters to a PC via USB connection. M-Bus slave interface for use as a repeater to extend the M-Bus network by an additional 60 devices.

Power supply: 24V AC/DC, maximum power consumption: 7W.

| CODE | DESCRIPTION |
|---------|-----------------------------|
| MBUSLC1 | Level converter, 60 devices |

LEVEL CONVERTER 250 SIGNALS • WIRED M-Bus

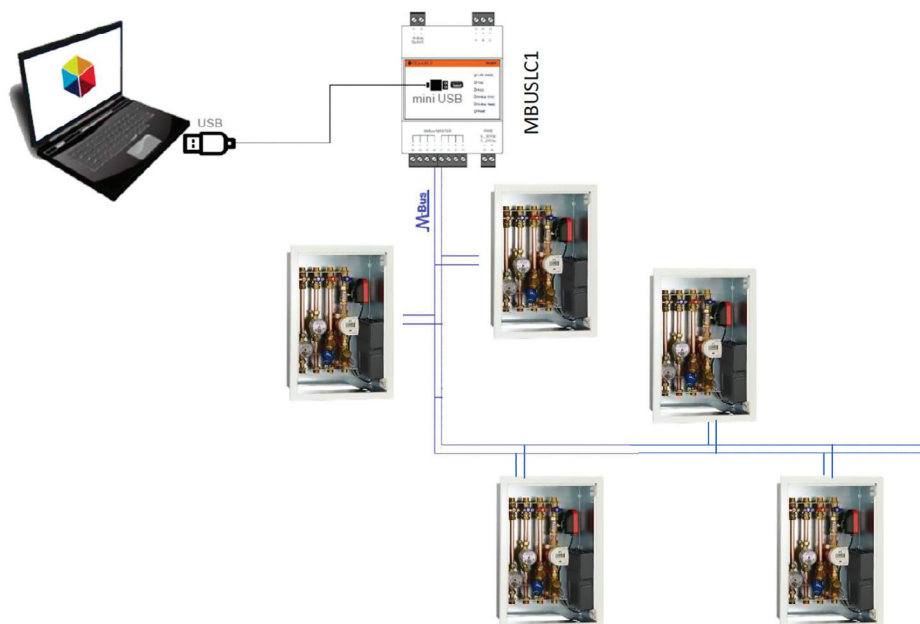


M-Bus Level Converter for managing up to 250 devices. Stand-alone field module for reading data from M-Bus meters via RS232 or RS485 ports (exclusive use). M-Bus slave interface for use as a repeater to extend the M-Bus network by an additional 250 devices.

Power supply: 230V AC (power supply included).

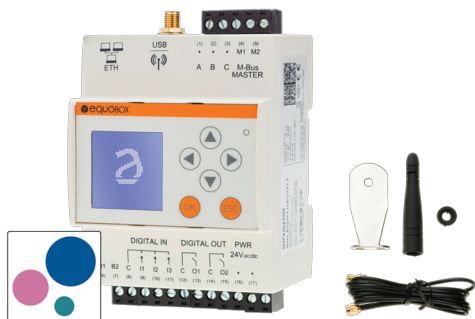
| CODE | DESCRIPTION |
|-----------|------------------------------|
| MBUSLC250 | Level converter, 250 devices |

EXAMPLE OF USE – WIRED M-BUS



Accessories

DATA LOGGER 20 SIGNALS • WIRED / WIRELESS M-Bus



M-Bus datalogger for managing up to 20 wired devices and 2,500 wireless M-Bus devices with Multi-Hop functionality via concentrators. Data reading via WEB interface. Integrated display for setup and data reading, expandable up to 250 meters through level converter modules. Power supply: 24V AC/DC, maximum consumption 14.5W..

| CODE | DESCRIPTION |
|-------------|-----------------------------------|
| MBWRTUEVO2T | Datalogger M-Bus Wired / Wireless |

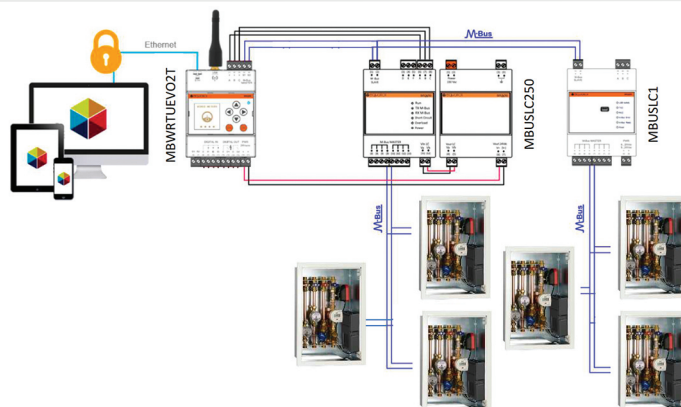
MULTI-HOP CONCENTRATOR • WIRELESS M-Bus



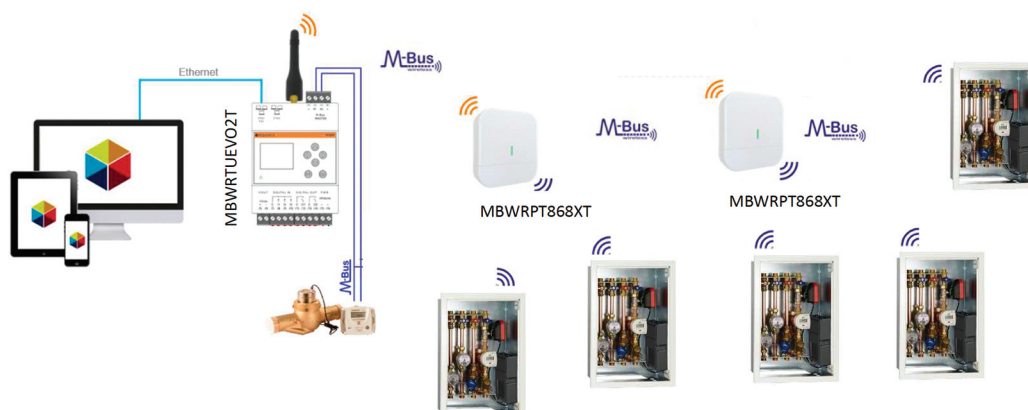
Multi-Hop support that enables range extension between wireless M-Bus devices and the data-logger using Mesh Network technology. Supports up to 500 devices. Wall-mounted installation. Power supply: 230V 50 Hz.

| CODE | DESCRIPTION |
|-------------|----------------------------------|
| MBWRPT868XT | Wireless M-Bus Multi-Hop Support |

EXAMPLE OF USE – WIRED M-BUS



EXAMPLE OF USE – M-BUS WIRELESS



Accessories

SMART GATEWAY CONCENTRATOR • WIRELESS M-Bus



Data concentrator that allows the acquisition of signals from wireless M-Bus devices, equipped with an integrated GPRS modem. It can manage up to 200 devices and various transmission frequencies (weekly, daily, hourly, every quarter-hour). Supplied with an integrated SIM card and one year of data traffic with weekly reports. The coverage range can be extended via unidirectional repeaters (MBWRPT).

Power supply: 230V 50Hz.

| CODE | DESCRIPTION |
|-------|---|
| MBWSG | Smart Gateway Wireless M-Bus 200 devices - weekly transmission |

UNIDIRECTIONAL REPEATERS • WIRELESS M-Bus



Single-Hop unidirectional support. Wall-mounted installation.

Power supply: 230V 50Hz.

| CODE | DESCRIPTION |
|--------|-----------------------------------|
| MBWRPT | Single-Hop Wireless M-Bus Support |

EXAMPLE OF USE – M-BUS WIRELESS



Accessories

Optional



Compact 4G router with Ethernet and Wireless interface. The device provides secure and stable Internet connectivity for applications using RutOS software and security functions such as OpenVPN, IPsec, Firewall, Hotspot, SMS control, and RMS support.

Power supply, GSM antenna, and Wi-Fi antenna included in the package.

Preconfigured with Vodafone APN.

| CODE | DESCRIPTION |
|-----------|--|
| MBRUT240V | Preconfigured 4G Router with Vodafone APN |

24V DC 12W DIN rail power supply (occupies one module) Iout = 500 mA

Note: Supports 1 Level converter + 1 RTU Datalogger.



| CODE | DESCRIPTION |
|---------|--------------|
| AL24VDC | Power supply |

M-Bus Mechanical Energy Meters

- OTHER VERSIONS AVAILABLE UPON REQUEST



| CODE | DN | Qp | TYPE |
|-----------|----|----------|--------------------------|
| CMF00135B | 25 | 3,5 m³/h | Hot / Cold M-bus reading |
| CMF01146B | 32 | 6 m³/h | Hot / Cold M-bus reading |
| CMF11210B | 40 | 10 m³/h | Hot / Cold M-bus reading |
| CMF05015B | 50 | 15 m³/h | Hot / Cold M-bus reading |

Accessories

Room thermostats



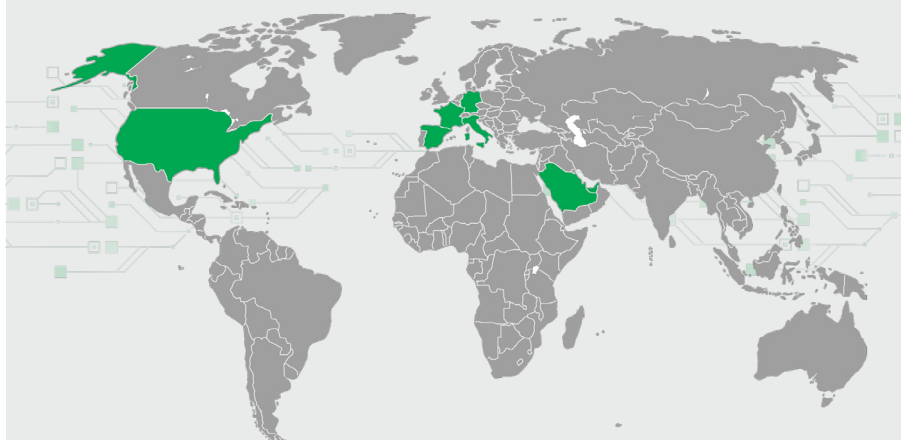
TRMPTC



TRMPWF

| CODE | DESCRIPTION |
|--------|--|
| TRMPTC | WHITE CRONO TOUCH-SLIDE wall mounted room thermostat |
| TRMPWF | Wi-Fi wall mounted room thermostat |

EXHIBITIONS



General supply and sale conditions

- 1 All commissions, orders and sales are subject to approval by the head offices in Cairo Montenotte (SV).
- 2 Goods are supplied EX WORKS and travel at the buyer's own risk, even if sold carriage-free.
Complaints concerning damages during the transport must be laid at the delivery.
- 3 Warranty refers to the product and it does not cover in any way replacement / maintenance costs and /or any other indirect cost.
- 4 Products are insured by Allianz S.p.A. Company according to effective rules on the subject of Producer responsibility for any damage arising from defective products.
- 5 In case of returned goods, they must always be previously authorised by the Headquarter in Cairo Montenotte (SV) and must be sent back free of charge. All verified goods that turn out to be "out of warranty" and all "returned goods for refund" will be charged of all costs including product's test, check and packaging. Due to the warranty printed on the product, all returned goods for refund must be sent back within the same financial year in which they were invoiced.
- 6 Any complaint concerning the quantity or quality of goods will not be accepted after 8 days from their receipt.
- 7 The specifically agreed delivery terms are indicative and may vary due to circumstances beyond our control.
- 8 This price catalogue cancels the previous ones; the indicated prices may be subject to variations without any notice except for what already stated in the order confirmation.
- 9 The current Vat rate will be applied to the quoted prices.
- 10 Standard packaging with cardboard boxes or similar is free of charge; special packaging requested by Clients will be invoiced at cost.
- 11 In case of any controversy concerning the application, interpretation or execution of our orders or relative to them, the court of jurisdiction will be that of Savona.
- 12 All the conditions indicated in this price list, even if not specifically stated in the order or invoice, will be considered as having been accepted by the Client when completing the relative order.
- 13 Comparato Nello S.r.l. reserves the right to modify technical details, drawings, graphs, and photographs of this price list at any time and without prior notice. Images and pictures are for illustration purposes only and are not contractually binding.
- 14 Goods are dispatched in accordance with the general sale conditions as specified in this price list. Any clause in the general sales conditions of the buyer is valid only if confirmed in writing by Comparato Nello S.r.l.

General supply conditions • Hydraulic Interface Units

We thank you for your choice : you selected a product that is the result of studies, researches and long- time experience in hydrothermal plant design. In order to let you fully benefit of our product performances, we invite you to carefully read the Maintenance & Operational Handbook supplied with the unit and warranty conditions.

WARRANTY CONDITIONS FOR UNITS WITH HEAT METERING DEVICES

The warranty becomes effect from start-up test date and lasts 24 months.

The start-up test must be carried out by our Authorized Maintenance and Service Centre within 12 months starting from delivery date indicated on warranty certificate. Unit activation ,in general, and in particular:

- electrical supply • electrical supply of M-bus digital master (if provided) • hydraulic primary and secondary circuit

must be activated at start-up test, except in case of different agreements with our Authorized Maintenance and Service Centre and anyway, in this case, we do not respond for damages produced before start-up test.

The Installer, on final Customer's behalf, has to demand for the start-up test to our Authorized Maintenance and Service Centre and arrange the plant in general and that all installed units are indeed available for start-up test on the established date: possible further intervention of Authorized Maintenance and Service Centre caused by the impossibility of completing the start-up test will be charged to the Installer by Authorized Maintenance and Service Centre itself. For the start-up test one day only is expected for up to 50 unit installation. We replace components that will be returned to us and that will be found to be originally defective after checking. Never is the whole product replaced. Possible component replacements do not modify warranty validity nor its duration. In no event shall Comparato Nello S.r.l. be responsible for damages to people, animals or things caused by defective materials or improper installations not compliant with what expressed in M&O hand-book.

For information please contact our Authorized Maintenance and Service Centre only.

WARRANTY CONDITIONS FOR UNIT AND KIT WITHOUT HEAT METERING

Units and kit with no heat metering devices do not required the start-up test.

The warranty start for purchase date and lasts 24 months.

For any information please contact our Offices.

EXCLUSIONS

This warranty does not provide any coverage for damaged components due to bad transport, wrong installation and/or maintenance and, in general, to problems caused by in-observance of Builder indications, anomalies in electrical and hydraulic plant the unit is connected to, stray currents, excessive water hardness (over 20° French degrees), ice, on-going water addition and, generally speaking, for causes that cannot be traced back to production defects.

EXCLUSIONS

This warranty does not provide any coverage for damaged components due to bad transport, wrong installation and/or maintenance and, in general, to problems caused by in-observance of Builder indications, anomalies in electrical and hydraulic plant the unit is connected to, stray currents, excessive water hardness (over 20° French degrees), ice, on-going water addition and, generally speaking, for causes that cannot be traced back to production defects.

ADVANCED WARRANTY EXPIRATION

The warranty is not valid when:

- The start-up test, that must be carried out by our Authorized Maintenance and Service Centre, has not been carried out within 12 months from delivery date;
- On the start-up test date , the product results to be already operative (see what indicated for warranty conditions) without any formal agreements with our Authorized Maintenance and Service Centre;
- The product is not properly installed, neither in compliance with Laws and/or effective rules nor with Producer's Instructions;
- The product has been tampered or not original spare parts have been used;
- The warranty certificate is incomplete and/ or filled in improperly and/or it has not been sent back to Comparato Nello S.r.l.

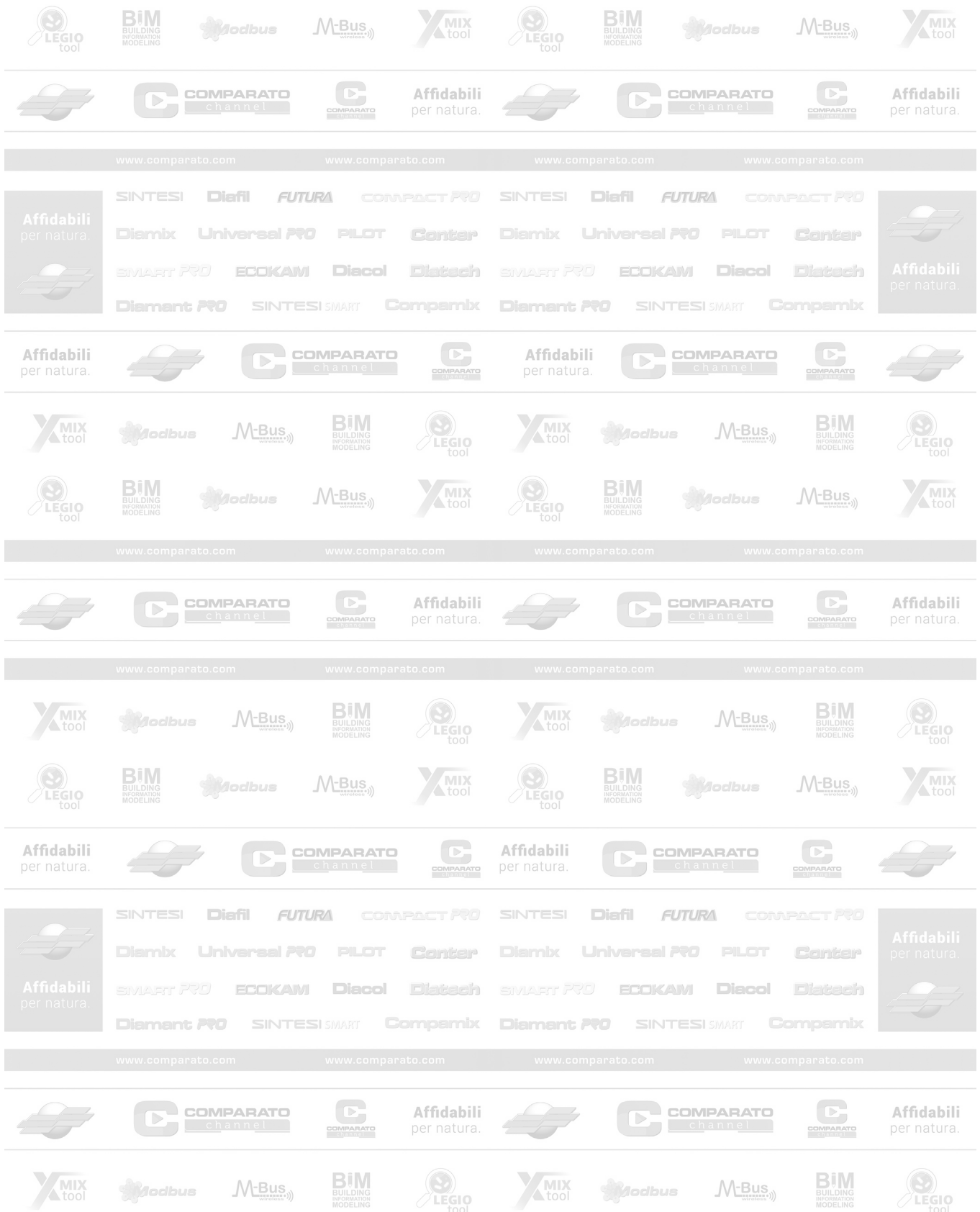
RESPONSIBILITIES

Except for what already clearly stated, Comparato Nello S.r.l. is not responsible for product installation and any possible damage deriving from it, service interruption included. The installation must be carried out in compliance with effective rule, according to Builder's instructions and qualified subjects (Lg. 5 March 1990 No. 45 art.2). Nobody has the faculty to change these warranty conditions nor giving other written and/or verbal warranties.

ADVANCED WARRANTY EXPIRATION

- Arrange for start-up test to be carried out by our Authorized Maintenance and Service Centre according to what previously indicated (see warranty conditions);
- Warranty certificate must be filled in all parts;
- The User has to keep his coupon in order to exhibit it if necessary;
- Authorized Maintenance and Service Centre coupon must be filled in all parts and kept for future product identification;
- Comparato Nello S.r.l. coupon must be filled in by Authorized Maintenance and Service Centre and sent to the Company within 10 days after start-up test date.

Exclusively and absolutely competent court: Savona.



Reliable by nature.



Hydrothermal Systems

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Hydrothermal Systems **COMPARATO®**

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