

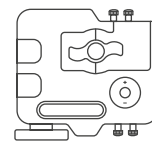


Energy
Management



THE ESSENTIAL DIMENSION OF BALANCING

R280KC



GIACOMINI
WATER E-MOTION

R280KC



The **R280KC** compact kit for terminal units (fan coils) is key not just for its **extremely reduced dimensions** but also for its components, which are essential to seamlessly operate the system.

In less than 20 cm, the **pre-assembled kit** efficiently combines the elements required for **balancing** and **maintenance** of HVAC terminal units, such as fan coils and chilled beams, connecting them to the main distribution line in a **simple, quick and flawless manner**.



Compact



Dual setting



Δp independent

MAIN FEATURES



- **Supply-return reversibility**
- **Less planning and installation errors**
- **Pre-assembled: quick and simple installation**
- **Quick connection: only 4 connections**
- **Controls both heating and cooling**
- **Streamlined maintenance**



Watch video



MAINTENANCE

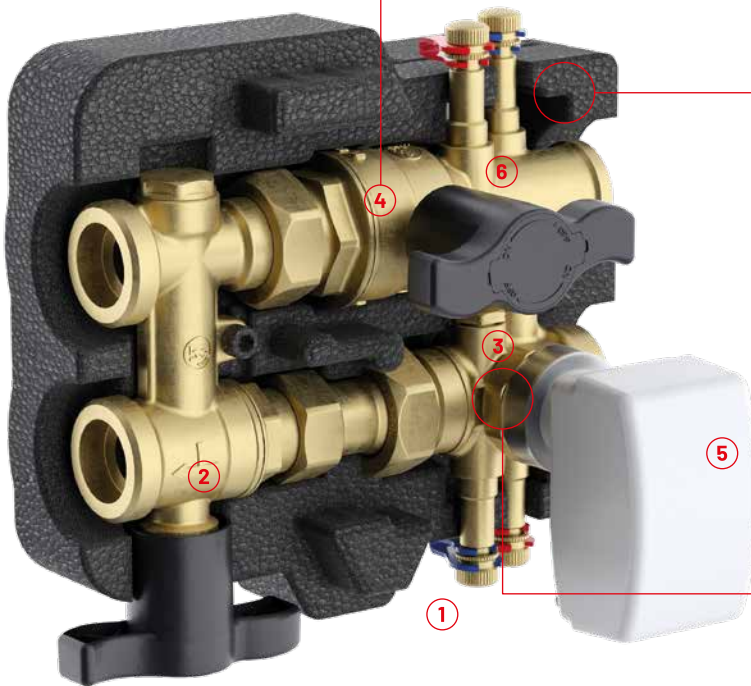
Close the ball valve on the supply and return circuits to clean the filter inside the valve

INSULATION

The polyethylene insulation guarantees the best output and protects the product

**SETTING**

The flow rate can be set also during normal operation of the system



The **R280KC** pre-assembled kit consists of a diverting ball valve to bypass the unit, a full-port ball valve with integrated filter, a pressure independent control valve (PICV), a drain cock and four pressure ports to measure the differential pressure and the flow rate.

With the PICV, **the terminal unit flow rate remains constant** even when the differential pressure of the main circuit changes.

The two ball valves enable to isolate the terminal unit and streamline its maintenance. The ball valve with integrated filter protects the system and the filter can be cleaned without draining the system itself.

COMPONENTS

- ① Probe holder
- ② Diverting ball valve for kit bypass
- ③ Pressure independent control valve (PICV)
- ④ Ball valve with integrated filter
- ⑤ Actuator
- ⑥ Venturi flow measurement
- ⑦ Drain cock



Cutting-edge solutions for comfort and energy efficiency

In today's fast-evolving construction landscape, the pursuit of energy efficiency and superior indoor air quality is paramount. As legislators worldwide strive to push for smarter and greener construction, the role of fan coil applications cannot be understated.

With the growing interest for indoor healthiness experienced in recent years, heating, ventilation and HVAC systems based on fan coil solutions are the favorite go-to option for many large and highly frequented spaces: hospitals, offices, airports, schools and commercial spaces.

These systems must guarantee **regular operation** and **streamlined maintenance**; that is why it is key to offer accessories born to **simplify installation, operation and upkeep**, while enhancing the overall performance of the HVAC system and guaranteeing **indoor air quality along with top-notch comfort**.

For this type of applications Giacomini provides solutions aimed at creating **comfortable, healthy and efficient HVAC systems**, cutting down **planning errors** and streamlining installation.

Integration of elements such as the **R280KC compact kit for terminal units** is key, as it enables to safely connect in an easy fashion fan coils, chilled beams and other types of terminal units to the main distribution line and simplify maintenance operations. In addition to extending the useful life of the system, installing this component will enhance its energy efficiency performance.

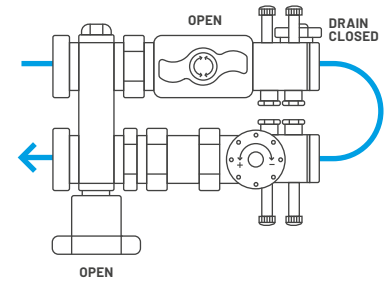
PRODUCT CODE	CONNECTIONS	CENTER DISTANCE SUPPLY-RETURN [mm]	DN	PICV			
				WORKING FLOW RATE RANGE [l/h]		WORKING DIFFERENTIAL PRESSURE RANGE [kPa]	
				L (LOW)	H (HIGH)	WITH R473/R473M	WITH K281 OR NO ACTUATOR
R280KCY000	1-1/2"UNS-M x G 1"M	60	15	35÷520 (single range)		25÷400	25÷800
R280KCY001	1-1/2"UNS-M x G 1"M	60	15	150÷380	180÷630	25÷400	25÷800
R280KCY002	1-1/2"UNS-M x G 1"M	60	20	290÷1000	860÷1500	25÷400	25÷800
R280KCY003	G 1-1/2"M x G 1"M	80	25	600÷3500 (single range)		n.d.	25÷400



Operation

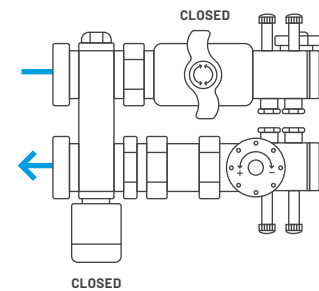
NORMAL OPERATION

All ball valves open and drain cock closed.



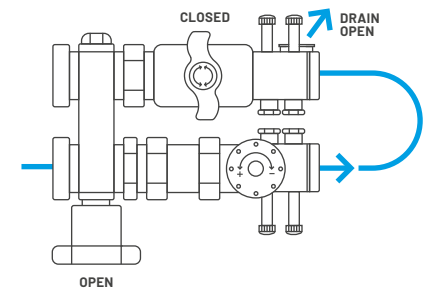
SYSTEM FLUSHING / MAINTENANCE

Both ball valves closed. In this mode, the fan coil is completely isolated and the operator can flush the system while preventing debris from entering the fan coil and the PICV.



FLUSHING THE FAN COIL WITH THE RETURN FLOW

Ball valve open on the return circuit, ball valve with integrated filter on the supply circuit closed and drain cock open.



Flow rate setting

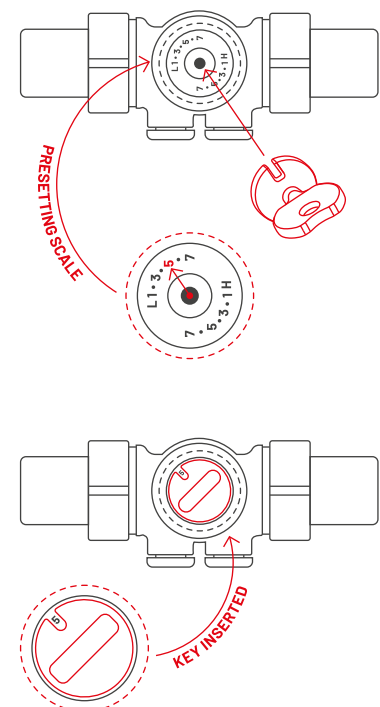
The pressure independent control valve (PICV) presents a flow-rate dual-scale setting:

- **L (LOW):** for low flow rates
- **H (HIGH):** for high flow rates

To set the valve on the desired flow rate, turn the valve stem clockwise or counterclockwise using the R73PY010 key (included in the kit) till reaching the corresponding value printed on the bonnet plastic disk.

Change over from one setting scale to the other can be implemented at any time, even when the system is on; this enables to select the desired flow rate without replacing the valve.

The dual scale guarantees a more accurate regulation as the controlled flow rate range is narrowed down and does not require cartridges with different characteristics.





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