

**Integrated solutions
for rooftop units**

Solutions for small and medium size rooftop units



The CAREL solution is based on the $\mu\text{C}^2\text{SE}$ complete with electronic expansion valve and fan speed controller.

This solution makes it possible to manage:

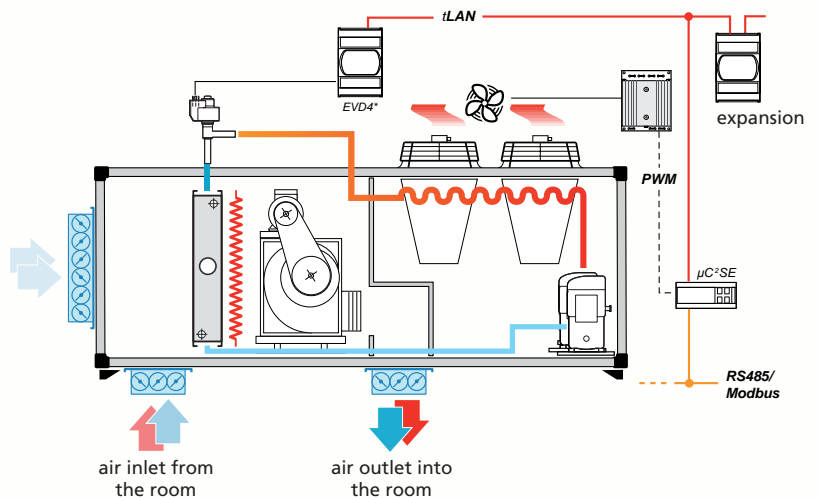
small rooftop units:

- 1 circuit;
- up to 2 compressors;
- configuration in cooling only or heat pump;

small/medium rooftop units

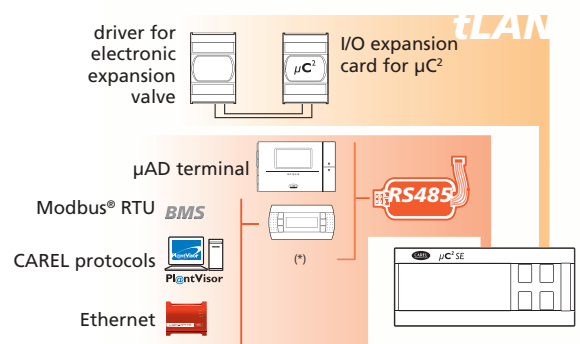
- 2 circuits: with the I/O expansion card;
- up to 2 compressors per circuit;
- cooling only or heat pump.

The room controller can be used for managing humidification, dehumidification, and automatic change-over. Free-cooling and free-heating by temperature can also be managed via three-point control.



Connectivity

This $\mu\text{C}^2\text{SE}$ platform is compatible with the CAREL protocol (towards PlantVisor) and Modbus® RTU, for connection to a third party BMS system. It is also possible to interface with internet/intranet networks using the WebGATE with Ethernet™ 10 Mb/s Gateway interface.



Solutions for medium and large size rooftop units



The CAREL solution is based on the **pCO sistema**, the result of years of experience in the development and production of programmable controllers for HVAC units.

Exploiting the wide range of controls of the pCO family, this solution makes it possible to control medium and large rooftop units up to:

- 2 circuits;
- 3 compressors per circuit;
- cooling only or heat pump;
- zone management via CLIMA control.

Software

The hardware is accompanied by a complete and flexible software that satisfies all the functions of a rooftop unit as well as enabling optimised functions such as the intelligent rotation of the compressors, time and seasonal management with inclusion of annual holiday breaks, and Lead-Lag control of multiple rooftop units in a local network.

At the same time, the high connectivity enables management of the VFD inverter via Modbus® Master.

Connectivity

Easily interfaced with the most widely used BMS and proprietary supervisory systems based on protocols such as BACnet™, Johnson Metasys®, TCP/IP, SNMP, LonWorks®, Modbus®, and TREND.

