

# Integrated solutions for geothermal heat pumps

Technology & Evolution

## Integrated solutions for geotherma heat

Following a successful history in air-conditioning control, CAREL offers the first complete integrated electronic solution for managing residential geothermal and swimming pool heat pumps, ensuring energy saving and optimising the management of the entire system. The system is made up of:

- an innovative microprocessor controller - µGEO

- an attractive and easy-to-use indoor user interface with built-in temperature and humidity

sensor - µAD

- optionally, the CAREL  $\mathsf{E}^2\mathsf{V}$  electronic expansion valve, which ensures increased efficiency

of the system in all operating conditions.

## Main functions:

- Dynamic heat pump set point for indoor comfort, ideal for underfloor heating
- Outside temperature compensation
- Energy saving
- Residential heating or swimming pool heating and domestic hot water
- High efficiency ensured by the use of the electronic expansion valve
- ON/OFF and ambient set point time band

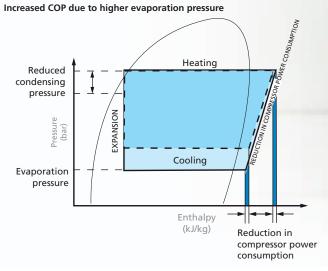
## pumps



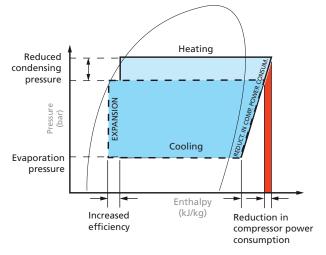
#### μC<sup>2</sup>SE: the evolution

The innovative  $\mu$ C<sup>2</sup>SE, increasingly focused on system control, is used to control the water temperature of heat pumps, especially geothermal appliances, and use alternative heating sources (e.g. boilers), while keeping account of variations in the outside

temperature, guaranteeing comfort and energy saving.



Increased COP due to lower condensing pressure





### μAD: μ Ambient Display

The new  $\mu$ AD room controller, fitted with temperature and humidity probe, optimises the operation of the heat pump by responding to the conditions in the room and the outside temperature trend. Fitted with RTC for managing time bands, and simple and immediate control buttons,  $\mu$ AD is a user interface with an elegant and exclusive design, suitable for use in the home.