

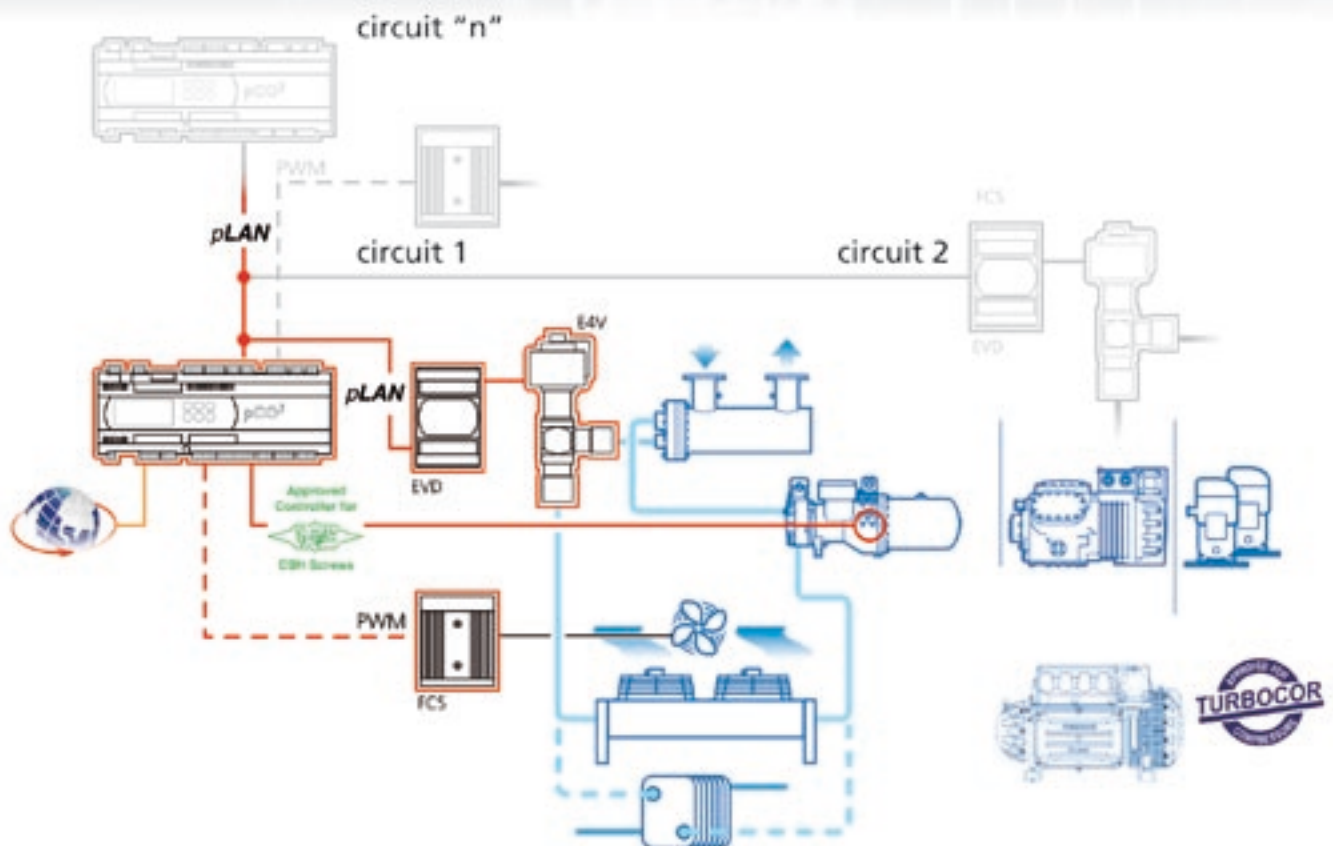


CAREL

# Integrated solutions for large chillers/heat pumps

T e c h n o l o g y   &   E v o l u t i o n

# Integrated solutions for large chillers/heat pumps



## pCO sistema for large chillers and HPs

pCO sistema is the result of CAREL's long experience in the design and manufacturer of programmable controllers for HVAC units.

pCO sistema consists of programmable controllers, user interfaces, software development tools, communication interfaces and remote management systems.

pCO sistema is powerful yet flexible, and can be easily interfaced with the more widely used Building Management and proprietary supervisory systems.

pCO sistema is a unique "family" of controllers, designed to be reliable, flexible, and provide the functionality required by today's OEMs.

A wide range of software applications can be

customised using EasyTools or uploaded directly to the pCO, setting the parameters for the appropriate configuration of chillers, heat pumps and condensing units:

- water cooled
- air cooled
- up to 4 circuits
- up to 8 compressors.

The standard application programs have been designed to make a modular solution according to needs. This means that a series of pCO platform controllers can be connected together via a pLAN network of up to 8 units.

Sophisticated algorithms have been developed to offer

customers the most advanced solutions for screw compressors, semi-hermetic and scroll compressors.

Specifically for Bitzer Screw Compressors and Turbocor centrifugal compressors, CAREL provides a Driver that optimises performance and protects against dangerous suction and discharge pressure conditions.

Moreover, all the controllers can be fitted with accessories that ensure the maximum performance and energy savings, such as the electronic expansion valve, the 4 to 20 mA or ratiometric pressure transducers.

### Datalogging

The high memory capacity and real time clock allow pCO to act as a true black box recorder, saving all the alarm situations, the values of the sensors, and the status of the controlled devices. The black box data recorded can be transferred to the programming key or to a PC, including via modem.

### Communication

pCO controllers can interface to various communication standards, such as BacNet™, TCP/IP, SNMP, LonWorks®, Modbus®, TREND.

The pCO controllers can also be connected directly to a PSTN or GSM modem for communication with a remote supervisor. Interfacing is also possible to intranet/internet networks, by using a specific serial card that converts the CAREL protocol to 10 Mb/s TCP/IP Ethernet™.

To ensure greater reliability and simpler maintenance of the air-conditioning and refrigeration systems, the pCO sistema controllers are able to send and receive SMS messages using a simple GSM modem.

### User display

The structure and the modularity of the pGD family displays always ensure the right solution for different requirements in terms of performance, cost and appearance.

pGD series is suitable for several needs: from the high level applications that require touch screen technology combined with an elegant design, to the applications that require a good compromise between performance, competitiveness and appearance, and up to the more competitive solutions that integrate the innovative pGD display without having to modify the general layout of the terminal.



#### pCO sistema

wide range of controller sizes

Up to 10 AI

Up to 18 DI

Up to 18 DO

Up to 6 AO.



#### User terminal

pGD terminals are available in panel or wall-mounted versions, with LED, alphanumeric and graphic LCD displays, allowing the messages to also be shown in Chinese, Cyrillic, Arabic, Japanese, ...



#### Accessories

A wide range of accessories allows for condenser fan speed control, data management, E<sup>2</sup>V management, connection to BMS through the most common protocols, ...

## Headquarters

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