



pCO^{XS}

pCO^{XS}: compactness and reliability

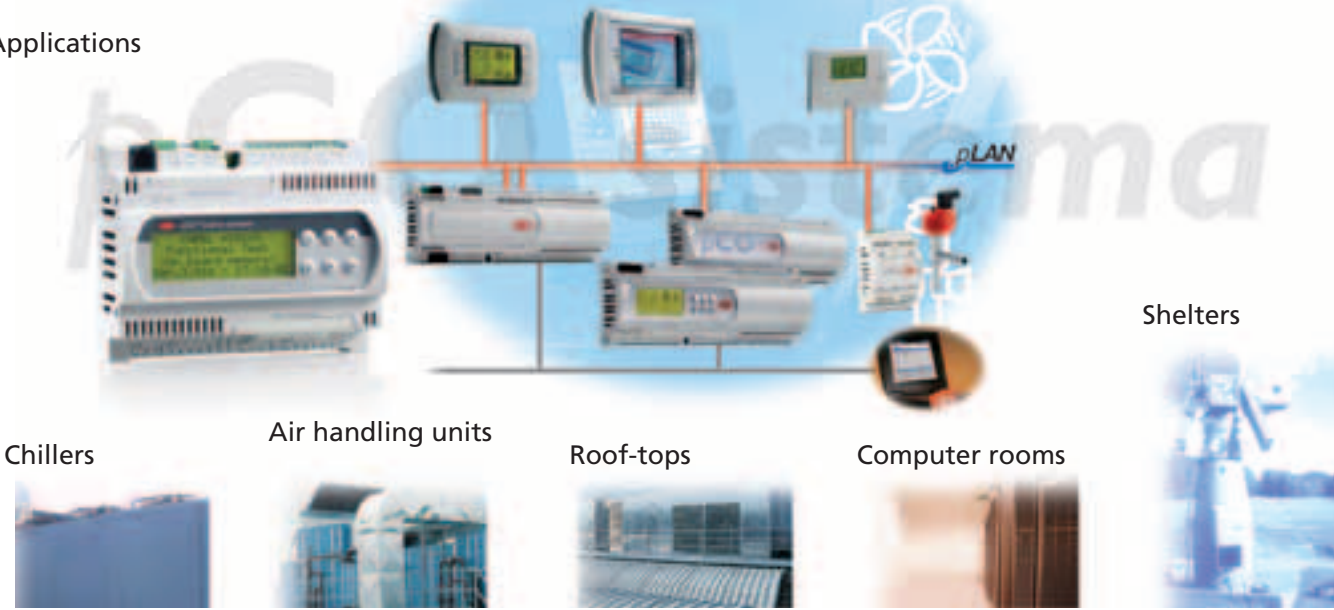
pCO^{XS} has been designed specifically to provide the functions of the pCO sistema family programmable controllers to all those applications that are covered only by parametric controllers. Thanks to this new controller, the control software for single-circuit chillers and heat pumps, small roof-top units and precision air conditioners can be quickly customised based on each manufacturer's requirements.

The characteristics of the **pCO^{XS}** perfectly suit the requirements of the manufacturers of air-handling units. Indeed, a dedicated version with Belimo MP-Bus protocol is now available, which allows all the servo controls on the unit to be connected directly to the controller via a simple 3-wire cable.

Furthermore, the **pCO^{XS}** ensures complete compatibility with all the current pCO sistema user interfaces (pLD, pGD⁰⁻¹ and pGD²⁻³), with all the pCO sistema controllers (pCO³, pCO¹, pCO^C, pCO¹), with all the pLAN modules (FCM speed control modules, EVD drivers for electronic expansion valves, pAD room terminals).

The compact dimensions (8 DIN modules), the number of inputs/outputs (18 in total), and the wide range of accessories that has always been one of the strengths of the pCO sistema controllers, make the new **pCO^{XS}** controller a versatile and competitive solution for all air-conditioning OEMs.

Applications



Chillers

Air handling units

Roof-tops

Computer rooms

Shelters

Hardware features

The hardware features of the **pCO^{XS}**, such as the wide range DC power supply (22 to 60 Vdc) and voltage-free digital inputs, make it ideal for the management of shelter applications.

In the version with BELIMO MP-Bus[®] protocol, one 3-wire cable is sufficient (2 for the power and 1 for the signal) to easily connect all the servo controls (max. 8) on the unit plus one sensor, active or passive, directly to each actuator.

This allows the low-cost control of large systems, thanks to the flexibility of the system and the simplicity of the connections.

Technical specifications

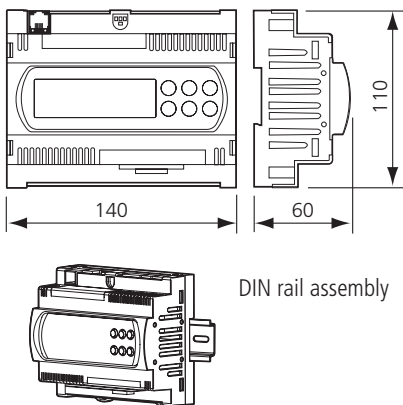
operating conditions	-10T60, 90% RH non-condensing *-25T60, 90% RH non-condensing *-25T65, 90% RH non-cond.; max. power switchable by the relay limited to 1 A resistive, 1 A inductive, cosφ= 0.4, 1(1) as per EN 60730-1
storage conditions	-20T70, 90% RH non-condensing *-30T70, 90% RH non-condensing
index of protection	IP20, IP40 front panel only / UL: type 1
environmental pollution	normal
class acc. to protection against electric shock	integrated into class I and/or II appliances
PTI of the insulating materials	250 V
period of stress across the insulating parts	long
type of action	1C
type of disconnection or microswitching	microswitching
category of resistance to heat and fire	category D (UL94 - V0)
immunity against voltage surges	category 1
ageing characteristics (operating hours)	80,000
no. automatic operating cycles	100,000 (EN 60730-1), 30,000 (UL873)
software class and structure	Class A

The device is not designed to be hand-held and should be installed inside an electrical panel according to the requirements of the reference standards.

*: version with extended temperature range: PCO1000CX0, PCO1002CX0, PCO1MP0CX0.

Warning: for applications subject to significant vibrations (1.5 mm pk-pk sinusoidal, 10-55 Hz) it is recommended to clamp the cables connected to the pCO^{XS} around 3 cm from the connectors.

Dimensions



Wiring diagram

