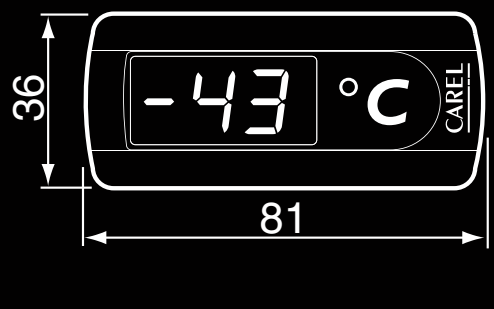
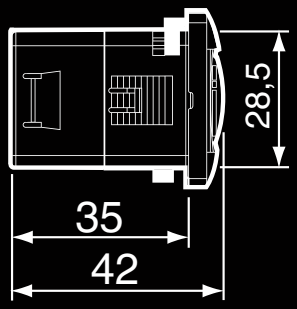
plug-in

powercompact ...high technology inside!

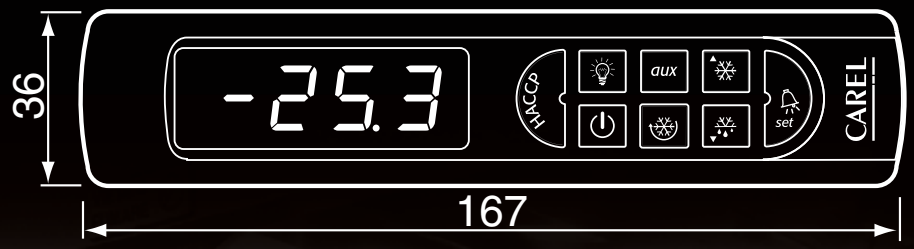
CAREL

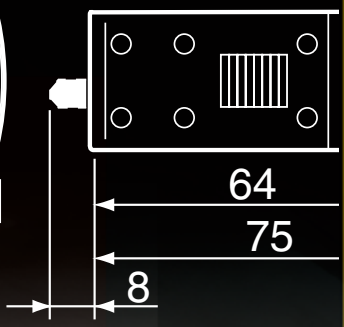
Technology & Evolution





dima di foratura
drilling template
71x29 mm





plug-in

powercompact is CAREL's ultimate solution for controlling stand-alone refrigeration units. It is particularly suitable for applications where high rated loads, significant number of outputs, ease of use, high mechanical protection (IP), and compact design are the primary objectives.

powercompact provides a complete range of dependable products and accessories. With its easy set up and mounting it is beneficial for both the installer and the manufacturer.

...high technology inside!

Models are available with 2, 3, 4 and 5 relays, featuring 2 Hp compressor relays and 115/230 Vac power supply.

powercompact is very flexible and can be used in many different applications without the need for drastic design changes.

Continuous monitoring of critical events (HACCP), connection to supervisory and telemaintenance systems, highly rated relay outputs, on-board terminal block, programming key and repeater display, position ***powercompact*** at the high-end of CAREL's range of refrigeration controllers.

powercompact **new defrost features**:

The ***powercompact*** 's defrost cycles are automatically tuned according to the operating conditions of the unit, thus guaranteeing greater efficiency and consequent energy savings

Comply With
HACCP
93/43/EU

Comply with
UNI EN 441

RS485 serial connection

powercompact can be connected to a RS485 network and a supervisory system via an add-on serial module.

Programming the parameters

powercompact can be programmed quickly and error-free using the special programming key, even when not powered.
The use of this accessory is very beneficial, allowing optimised management of product inventory, quick and effective servicing, and dependable programming in just a few seconds.

On-board terminal block

powercompact is fitted with an on-board terminal block that allows the direct connection of the loads (a terminal rail in the panel is no longer necessary).
This feature, along with the use of double throw relays, further enhances ***powercompact*** 's flexibility, which is a key element of its design.
Terminal blocks with screw terminals or spade connectors are available, to suit manufacturers' and installers' needs.

NTC probes or Digital

Some of the ***powercompact*** 's digital inputs can be configured as analog inputs to enable the use of NTC probes.
This option allows the following functions:

- monitoring of a third temperature point (the temperature value is also shown on the repeater display);
- complete and independent "defrost termination" management;
- control of condenser fans (using the auxiliary output);
- detection of possible high temperature alarms and requests for servicing.

Comply with **EN 441**

The European standard EN441-13 defines the criteria for measuring the temperature of refrigeration units. The standard indicates the characteristics that the measurement device must have in terms of precision, resolution, range of measurement, and time constant. Moreover, it includes precise provisions regarding the positioning of the temperature probe used to measure the "hot point". ***powercompact*** can satisfy all of the HACCP requirements, including separate management of the control temperature and the "hot point" temperature.

Comply With **HACCP** 93/43/EU

powercompact with the real time clock option can guarantee control over the temperature of the food in compliance with the HACCP standards.
Once the parameters and specified time and temperature limits have been set, ***powercompact*** automatically monitors the unit, storing any critical situations. Operational alarms and power failure alarms that may affect the room temperature, and therefore affect the quality of food, are saved to a permanent memory device (EEPROM), allowing them to be easily called up and viewed on the ***powercompact*** display.

Real Time Clock Card

This accessory is used to log data, as well as, to program real time defrost cycles (rather than prese defrost intervals).
The Real Time Clock makes ***powercompact*** comply with the HACCP standards. It is guarantee to operate for 10 years, even in the event of a pow

Large display

powercompact is fitted with a very powerful and attractive display, featuring 3 digits plus decimal point, a plus/minus sign and graphical icons, simplifying the reading of the values and the operating status.
The silicon keypad ensures ease-of-use and reliability when entering values, and allows direct access to the HACCP, light, defrost and continuous cycle functions.
The removable display frame makes it very easy and economical to customize.

Remote control

Remote control is essential in some applications, and with ***powercompact*** it's easier than ever to achieve.
This accessory provides direct access to the main functions and configuration parameters.
By acting on buttons that mimic the instrument's keypad, ***powercompact*** can be programmed from a remote location, quickly and effectively.

"Hot point" display terminal

A LED user interface can be connected to the models with 4 and 5 relay outputs. Acting as a thermometer, it displays the temperature measured by the third probe that is located on the cabinet's hottest point, as defined by the EN441-13 standard.

Wide range switching power supply

The possibility to operate over an extended range of power supply voltages (115 Vac to 230 Vac) is an all-new feature for this type of application, although it is currently available on CAREL's *infrared Universal* and *infrared Refrigeration* series.
This technology ensures maximum performance, reducing dimensions and costs.
In addition, it allows ***powercompact*** to operate at temperatures as high as 65 °C (149 °F).

et

ed
er failure.

powercompact

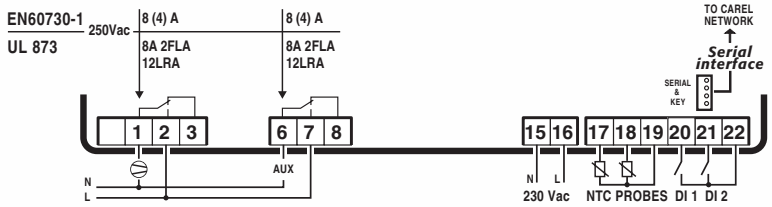
	Vac power supply	OUTPUTS compressor	defrost	evaporator fans	light / aux 1	aux 2	INPUTS ambient temperature	defrost temperature	digital input / probe 3	digital input / probe 4	HACCP	programming key	PLUS high efficiency display	buzzer	infrared	real time clock	optional "hot point" display terminal	optional RS485 card
PB00S0EA*0	230	8 A			8 A		●	●	●	●		●	●	●				●
PB00Y0EN*0	230	8 A	8 A				●	●	●	●		●	●	●				●
PB00F0EN*0	230	8 A	8 A	5 A			●	●	●	●		●	●	●				●
PB00F0EP30	230	16 A	8 A	8 A			●	●	●	●		●	●	●				●
PB00Y0EV30	230	16 A	8 A		8 A		●	●	●	●		●	●	●				●
PB00F0HA*0	115/230	16 A	8 A	8 A	8 A		●	●	●	●		●	●	●			●	●
PB00C0HN*0	115/230	2 Hp	16 A	8 A	8 A		●	●	●	●		●	●	●			●	●
PB00C0HN30	115/230	2 Hp	16 A	8 A	8 A		●	●	●	●		●	●	●			●	●
PB00C0HB*0	115/230	2 Hp	16 A	8 A	8 A		●	●	●	●	●	●	●	●	●	●	●	●
PB00H0HN*0	115/230	2 Hp	16 A	8 A	8 A	8 A	●	●	●	●		●	●	●			●	●
PB00H0HB*0	115/230	2 Hp	16 A	8 A	8 A	8 A	●	●	●	●	●	●	●	●	●	●	●	●

(*) = "**0**" terminals with fastening screw; 1 faston terminals for plug-in power connections to probes and digital inputs.
Codes ending in "**30**": spade connectors with fastening screws for power connections to probes and digital inputs.

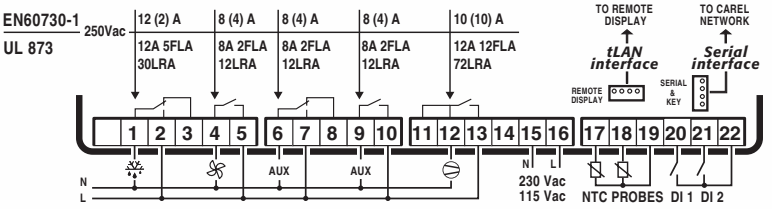
Options

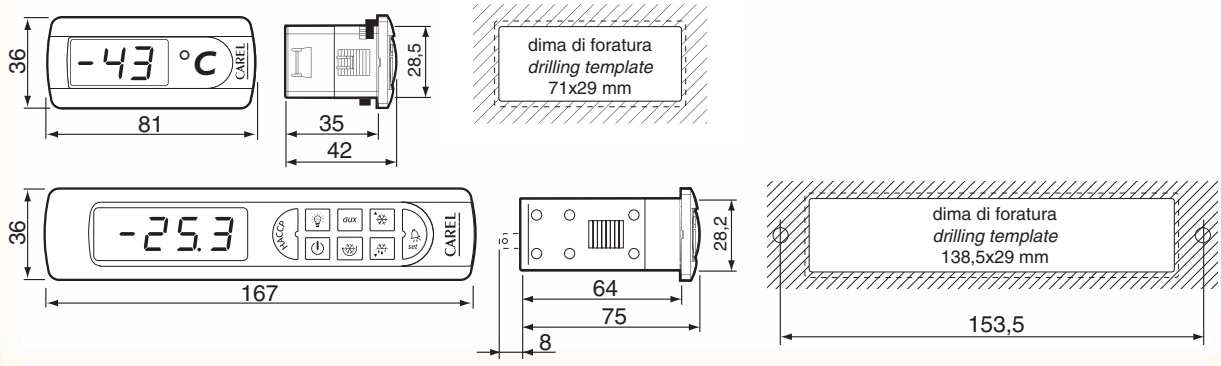
PSOPZKEY00: programming key
IRTRRES000: remote control
MCH2004850: RS485 serial card
IROPZDSP00: display terminal optional board

Basic version: **PB00S0EA*0**



Top version: **PB00H0HB*0**





CAREL S.p.A. Via dell'Industria, 11 35020 Brugine (PD) Italy - Tel. (+39) 0499 716611 - Fax (+39) 0499 716600

Cod. +302235231 rel. 2.0 - 05.04.2005