

# ECP200 EXPERT PULSE

Electrical panel for **cold room control with differential magnetothermic circuit breaker** and with integrated **command of pulse electronic expansion valve 230Vac On/Off** and single-phase compressor up to 2HP. This panel can be used also only for the control of the evaporating unit.



## APPLICATIONS

- Complete control of single-phase static or ventilated refrigeration systems up to 2 HP, with off-cycle or electrical defrosting and direct or pump-down compressor stop.
- Thought for systems with evaporator managed by ON/OFF electronic expansion valve at 230 Vac.
- Utility for managing the single-phase evaporating unit with electronic expansion valve only ON/OFF at 230 Vac.

## MAIN CHARACTERISTICS

- Defrost with real time clock.
- Independent and separated functions for alarm relay and TeleNET or Modbus-RTU standard protocol.
- Control of electronic expansion valve ON/OFF with 230 VAC coil.
- **The integration of the valve control permits its programming and a simplified management with the same display, enabling an immediate start-up of the system.**
- Direct control of compressor, defrosting heaters, evaporator fans and room light with free-voltage outputs.
- Built-in differential magnetothermic breaker for protection and cut-off of refrigeration unit.
- Innovative, stylish design. Transparent cover for access to magnetothermic breaker, all with IP 65 protection rating.
- Auxiliary relay with parameter-configured activation (alarm, temperature set-point, direct control via frontal pushbutton, thermostat-holder demisting element).
- RS485 for connection to TeleNET industrial supervision network or Modbus-RTU standard protocol.
- Easy installation and opening thanks to new hinged cover.
- Simple, flexible programming gives extreme versatility of use.
- Compressor can be run in pump-down stop mode.
- Installation times and costs reduced thanks to incorporation of control and protection in a single room-dedicated unit.



TECHNICAL CHARACTERISTICS	ECP 200 EXPERT PULSE
BOX DIMENSIONS	262 x 168 x 97 mm
WEIGHT	2 Kg
PROTECTION RATING	IP65
POWER SUPPLY	230VAC $\pm 10\%$ 50/60HZ
LOAD TYPE	SINGLE PHASE
WORKING TEMPERATURE	- 5 $\div$ + 50 °C
STORAGE TEMPERATURE	- 10 $\div$ + 70 °C
RELATIVE AMBIENT TEMPERATURE	< 90% RH
MAIN SWITCH - GENERAL PROTECTION	2 POLES DIFFERENTIAL MAGNETOTHERMIC 16A
CONTROL	PEGO
DEFROSTING	ELECTRICAL
COMPONENT STATUS INDICATORS	LED + DISPLAY
ALARM SIGNALS	LED + BUZZER
DEFROST	PRESENT (RTC)
<b>INPUTS</b>	
AMBIENT PROBE	NTC 10K 1%
EVAPORATOR PROBE	NTC 10K 1%
SUCTION PROBE	NTC 10K 1%
EVAPORATION PRESSURE PROBE	4-20mA / 0-5V RATIO
DOOR SWITCH	PRESENT
HIGH/LOW PRESSURE SWITCH	PRESENT
MAN IN COLD ROOM ALARM	PRESENT
COMPRESSOR WORK MODE SELECTION	PUMP-DOWN / THERMOSTAT
<b>OUTPUTS</b>	
COMPRESSOR	1500W (AC3) FREE VOLTAGE CONTACT
EVAPORATOR FANS	500W (AC3) FREE VOLTAGE CONTACT
DEFROSTING HEATERS	3000W (AC1) FREE VOLTAGE CONTACT
ELECTRONIC VALVE	PULSE 230 VAC
ROOM LIGHT	800W (AC1) FREE VOLTAGE CONTACT
AUXILIARY RELAY OR ALARM	100 W FREE VOLTAGE CONTACT
SUPERVISION SYSTEM	TELENET / MODBUS-RTU

## CONNECTION DIAGRAM

( \* ) = Configurable function

