

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

**CONNECTION DIAGRAM**  
(\* ) = Configurable function

