

ECP200 EXPERT PULSE

Electrical panel for **cold room control with differential magnetothermic circuit breaker** and with integrated **command of pulse electronic expansion valve 230 V AC On/Off** and single-phase compressor up to 2 HP. 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 V AC.
- Utility for managing the single-phase evaporating unit with electronic expansion valve only ON/OFF at 230 V AC.

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 V AC 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 IP65 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	263 x 180 x 96 mm
WEIGHT	2 kg
PROTECTION RATING	IP65
POWER SUPPLY	230 V AC $\pm 10\%$ 50-60 Hz
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 16 A
CONTROL	PEGO
DEFROSTING	ELECTRICAL
COMPONENT STATUS INDICATORS	LED + DISPLAY
ALARM SIGNALS	LED + BUZZER
DEFROST	PRESENT (RTC)
INPUTS	
AMBIENT PROBE	NTC 10 k Ω 1%
EVAPORATOR PROBE	NTC 10 k Ω 1%
SUCTION PROBE	NTC 10 k Ω 1%
EVAPORATION PRESSURE PROBE	4-20 mA / 0-5V RATIO
DOOR SWITCH	PRESENT
HIGH/LOW PRESSURE SWITCH	PRESENT
MAN IN COLD ROOM ALARM	PRESENT
COMPRESSOR WORK MODE SELECTION	PUMP-DOWN / THERMOSTAT
OUTPUTS	
COMPRESSOR	1500 W (AC3) FREE VOLTAGE CONTACT
EVAPORATOR FANS	500 W (AC3) FREE VOLTAGE CONTACT
DEFROSTING HEATERS	3000 W (AC1) FREE VOLTAGE CONTACT
ELECTRONIC VALVE	PULSE 230 V AC
ROOM LIGHT	800 W (AC1) FREE VOLTAGE CONTACT
AUXILIARY RELAY OR ALARM	100 W FREE VOLTAGE CONTACT
SUPERVISION SYSTEM	TELENET / MODBUS-RTU

CONNECTION DIAGRAM

(*) = Configurable function

