ECP300 EXPERT VD 4 | ECP300 Expert VD 7

A line of power and control panels for refrigeration systems with three-phase compressor up to 7,5 HP, for the complete management of cold room.

Magnetothermic protection and motor circuit breaker for the compressor accessible from the front panel linked to an innovative form makes it a perfect and functional choice.

Available version with PULSE electronic valve integrated control.



APPLICATIONS

• Control of three-phase refrigeration plant up to 7.5 HP, static or ventilated, with off-cycle or electrical defrosting.

OPTIONS

• Hot-gas defrost control.

CONNECTION DIAGRAMS



MAIN CHARACTERISTICS

- Direct control of the compressor, condenser fans, compressor oil heater, defrosting heaters, evaporator fans, solenoid valve, room light and all standard-compliant electrical safeguards.
- General magnetothermic circuit breaker accessible from the front panel, which cuts the general power supply.
- Adjustable motor circuit breaker for compressor protection accessible from the front panel.
- Easy wiring on the internal terminal block.
- Selection of functioning mode for the compressor (pump-down / thermostat).
- Auxiliary relay with activation configurable by parameter.
- Transparent cover for access to magnetothermic circuit breaker, all with IP65 protection rating.
- Electronic control with wide LED display and easy to use buttons.
- Signaling with LED icons of the plant status.
- RS485 for connection to TeleNET industrial supervision network or Modbus-RTU standard protocol.

THREE-PHASE SYSTEMS EXPERT SERIES

- 300 -





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TECHNICAL CHARACTERISTICS	ECP300 EXPERT VD 4	ECP300 EXPERT VD 7
BOX DIMENSIONS	400 x 300 x 135 mm	400 x 300 x 135 mm
WEIGHT	9 kg	10 kg
PROTECTION RATING	IP65	IP65
POWER SUPPLY	400 V AC ±10% 50-60 Hz	400 V AC ±10% 50-60 Hz
LOAD TYPE	THREE-PHASE	THREE-PHASE
WORKING TEMPERATURE	-5 ÷ +40 °C	-5 ÷ +40 °C
STORAGE TEMPERATURE	-25 ÷ +55 °C	-25 ÷ +55 °C
RELATIVE AMBIENT HUMIDITY	30% - 90% RH W/OUT CONDENSATE	30% - 90% RH W/OUT CONDENSATE
RANGE OF READING	-45 ÷ +45 °C	-45 ÷ +45 °C
MAIN SWITCH / GENERAL PROTECTION	4 POLES MAGNETOTHERMIC 16 A	4 POLES MAGNETOTHERMIC 25 A
COMPRESSOR PROTECTION	MOTOR CIRCUIT BREAKER	MOTOR CIRCUIT BREAKER
CONTROL	PEGO	PEGO
DEFROSTING	ELECTRICAL	ELECTRICAL
STATUS INDICATORS	LED + DISPLAY	LED + DISPLAY
ALARM SIGNALS	LED + BUZZER	LED + BUZZER
INPUTS		
AMBIENT PROBE	NTC 10 kΩ	NTC 10 kΩ
EVAPORATOR PROBE	NTC 10 kΩ	NTC 10 kΩ
DOOR SWITCH	PRESENT	PRESENT
HIGH/LOW PRESSURE SWITCH	PRESENT	PRESENT
KRIWAN [®] CONNECTION	PRESENT	PRESENT
COMPRESSOR FUNCTIONING MODE SELECTION	PUMP-DOWN / THERMOSTAT	PUMP-DOWN / THERMOSTAT
OUTPUTS		
COMPRESSOR	370 W ÷ 3000 W (0,5 ÷ 4 HP)	3000 W ÷ 5500 W (4 ÷ 7,5 HP)
CONDENSER FANS OUTPUT 1	800 W (1PH)	800 W (1PH) (1PH)
CONDENSER FANS OUTPUT 2 (SEPARATED)		TOTAL (1PH)
EVAPORATOR FANS	500 W (1PH)	2000 W (3PH) or 1500 W (1PH)
DEFROSTING HEATERS	6000 W (AC1) EQ. RESISTIVE LOAD	9000 W (AC1) EQ. RESISTIVE LOAD
ROOM LIGHT	800 W (AC1) RESISTIVE LOAD	800 W (AC1) RESISTIVE LOAD
SOLENOID VALVE	PRESENT	PRESENT
COMPRESSOR OIL HEATER	PRESENT	PRESENT
ALARM RELAY	PRESENT	PRESENT
SUPERVISION SYSTEM	TELENET / MODBUS-RTU	TELENET / MODBUS-RTU