

# ECP\_\_ VD CR

ECP300 VD CR | ECP400 VD CR  
ECP750 VD CR | ECP1000 VD CR

A line of power boards for refrigeration systems with three-phase compressors up to 10 HP to be linked to an out-of-room control unit.

Controls and powers the compressor, condenser fans, evaporator fans, solenoid valve, defrost elements managed by means of cold fans and defrost call enabling from out-of-room control unit.

Examples of out-of-room control units to link

**ECP200 EXPERT BASE 4A**



**EXPERT NANO 4CK**



**PLUSR 200 EXPERT CR**



**ECP\_\_ VD CR**

## APPLICATIONS

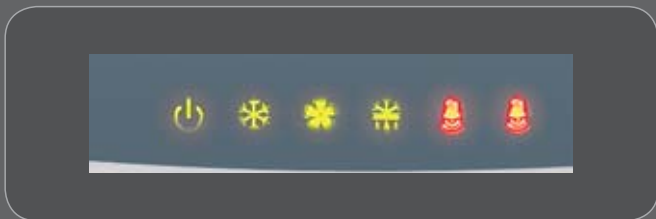
- Control of three-phase static or ventilated refrigeration systems up to 10 HP, with electric or off-cycle defrost linked to an out-of-room control unit.

## OPTIONS

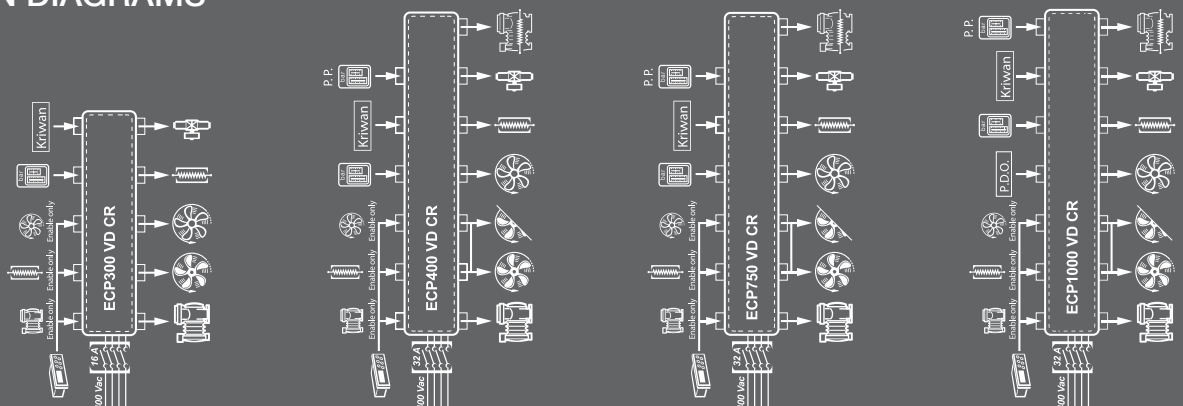
- Installation of magnetothermic circuit breakers instead of fuses.
- Compressor shutdown in pump-down mode.
- Datalogger function with PLUSR200 EXPERT CR out-of-room controller for temperature and alarms registration.

## MAIN CHARACTERISTICS

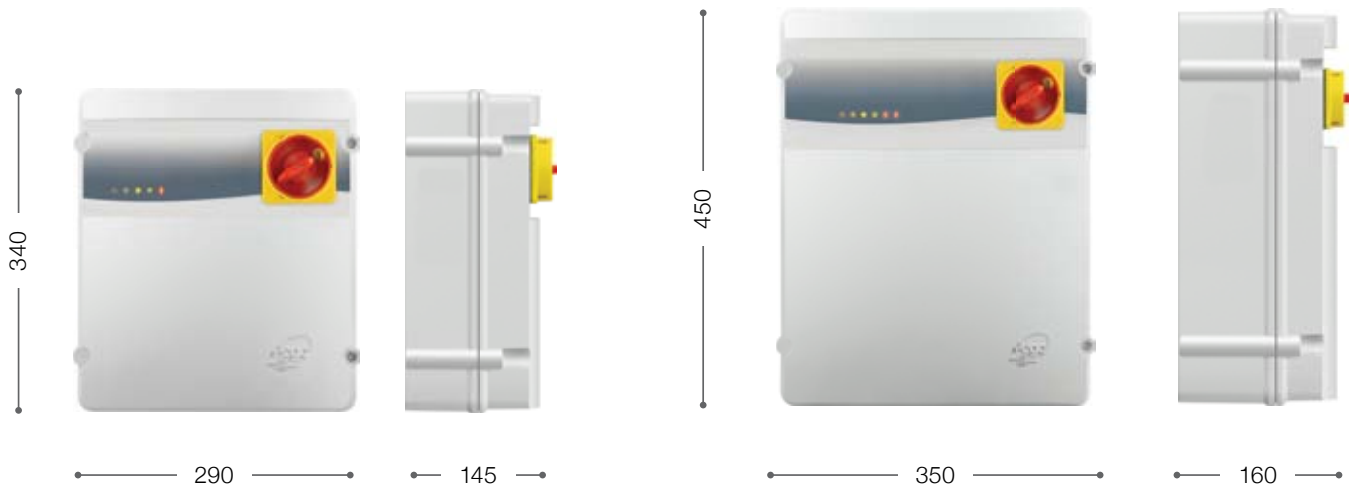
- Direct control of compressor, condenser fans, compressor oil element, defrost elements, evaporator fans, solenoid valve and all standard-compliant electrical safeguards.
- Compact unit with self-extinguishing ABS housing panel and IP65 protection rating plus circuit breaker on front of panel.
- System status indicated by LED icon.
- Can be controlled by thermostat, thermo-regulator or out-of-room control unit.
- Can house thermo-regulator on front of panel.



## CONNECTION DIAGRAMS



# THREE-PHASE SYSTEMS WITHOUT ELECTRONICS FOR REMOTE CONTROL



TECHNICAL CHARACTERISTICS	ECP300 VD CR	ECP400 VD CR	ECP750 VD CR	ECP1000 VD CR
<b>BOX DIMENSIONS</b>	290 x 340 x 145 mm	350 x 450 x 160 mm	350 x 450 x 160 mm	350 x 450 x 160 mm
<b>WEIGHT</b>	5 kg	6 kg	6 kg	7 kg
<b>PROTECTION RATING</b>	IP65	IP65	IP65	IP65
<b>POWER SUPPLY</b>	400 V AC ±10% 50-60 Hz	400 V AC ±10% 50-60 Hz	400 V AC ±10% 50-60 Hz	400 V AC ±10% 50-60 Hz
<b>LOAD TYPE</b>	THREE-PHASE	THREE-PHASE	THREE-PHASE	THREE-PHASE
<b>WORKING TEMPERATURE</b>	-5 ÷ +50 °C	-5 ÷ +50 °C	-5 ÷ +50 °C	-5 ÷ +50 °C
<b>STORAGE TEMPERATURE</b>	-10 ÷ +70 °C	-10 ÷ +70 °C	-10 ÷ +70 °C	-10 ÷ +70 °C
<b>RELATIVE AMBIENT HUMIDITY</b>	< 90% RH	< 90% RH	< 90% RH	< 90% RH
<b>MAIN SWITCH</b>	16 A	32 A	32 A	32 A
<b>OVERLOAD PROTECTION</b>	THERMAL RELAY	THERMAL RELAY	THERMAL RELAY	THERMAL RELAY
<b>GENERAL PROTECTION</b>	FUSES	FUSES	FUSES	FUSES
<b>CONTROL</b>	<b>COMPRESSOR</b>	EXTERNAL ON /OFF	EXTERNAL ON /OFF	EXTERNAL ON /OFF
	<b>DEFROST</b>	EXTERNAL ON /OFF	EXTERNAL ON /OFF	EXTERNAL ON /OFF
	<b>FANS</b>	EXTERNAL ON /OFF	EXTERNAL ON /OFF	EXTERNAL ON /OFF
<b>DEFROSTING</b>	ELECTRICAL	ELECTRICAL	ELECTRICAL	ELECTRICAL
<b>INSULATION TRANSFORMER</b>		PRESENT	PRESENT	PRESENT
<b>STATUS INDICATORS</b>	LED	LED	LED	LED
<b>ALARM SIGNALS</b>	LED	LED	LED	LED
<b>INPUTS</b>				
<b>COMPRESSOR POWER</b>	ENABLE ONLY	ENABLE ONLY	ENABLE ONLY	ENABLE ONLY
<b>DEFROST</b>	ENABLE ONLY	ENABLE ONLY	ENABLE ONLY	ENABLE ONLY
<b>EVAPORATOR FANS</b>	ENABLE ONLY	ENABLE ONLY	ENABLE ONLY	ENABLE ONLY
<b>OIL DIFFERENTIAL PRESSURE SWITCH</b>				PRESENT
<b>HIGH/LOW PRESSURE SWITCH</b>	PRESENT	PRESENT	PRESENT	PRESENT
<b>KRIWAN® CONNECTION</b>	PRESENT	PRESENT	PRESENT	PRESENT
<b>CONDENSER FANS REGULATOR PRESS. SWITCH (R.P.S.)</b>		PRESENT	PRESENT	PRESENT
<b>OUTPUTS</b>				
<b>COMPRESSOR</b>	2200 W (0,5÷3 HP)	2200÷3000 W (3÷4 HP)	3000÷5500 W (4÷7,5 HP)	5500÷7500 W (7÷10 HP)
<b>CONDENSER FANS OUTPUT 1</b>	800 W (1PH)	800 W (1PH)	800 W (1PH)	2000 W (3PH) OR 1500 W (1PH)
<b>CONDENSER FANS OUTPUT 2 (SEPARATED)</b>		800 W (1PH) TOTAL	800 W (1PH) TOTAL	2000 W (3PH) OR 1500 W (1PH)
<b>EVAPORATOR FANS</b>	800 W (1PH)	1500 W (1PH)	1500 W (1PH)	2000 W (3PH) OR 1500 W (1PH)
<b>DEFROSTING HEATERS</b>	4000 W (AC1)	7500 W (AC1)	9000 W (AC1)	12000 W (AC1)
<b>SOLENOID VALVE</b>	PRESENT	PRESENT	PRESENT	PRESENT
<b>COMPRESSOR OIL HEATER</b>		PRESENT	PRESENT	PRESENT