



techsystem

automatyka klimatyzacja wentylacja

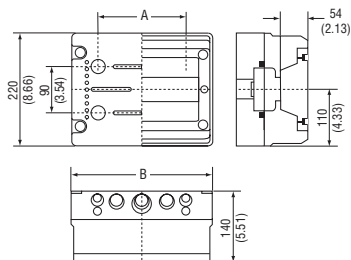
▸ zapoznaj się z naszą ofertą

Refrigeration Field Controllers

CR Electrical Control Cabinets (1/5)



CR Series



Dimensions in mm (inches)

Description

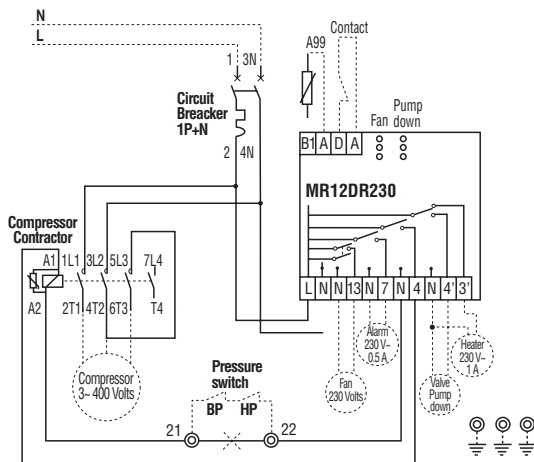
Designed to facilitate installers work, this range of electrical cabinet is intended for use in cold rooms working at positive or negative temperatures and powered either with single phase or three phase power supply. Based on specifically designed controllers, it incorporates all control functions as required by modern cold room units, such as compressor control, defrost management, fan management, alarm function and solenoid valve for "pump down".

It also includes all the safety equipment needed such as circuit breakers for the compressor and for the controller. Particular attention has been given to the accessibility so that the installation time will be reduced to a minimum. Space has been left available for customisation.

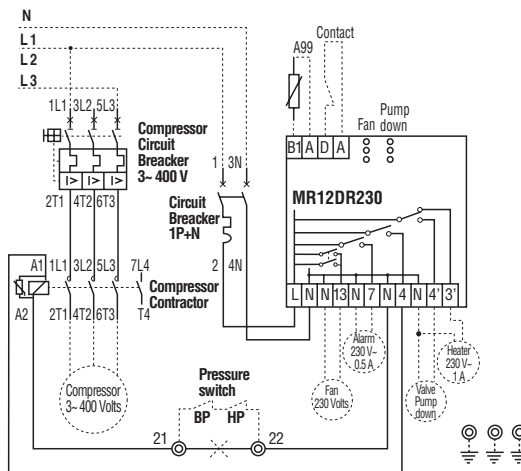
Features

- Power rating from:
 - 0,37 to 1,5 kW in single phase
 - 1,5 to 7,5 kW in three phases
- Standard DIN rail components
- Most wiring integrated on the controller
- Specifically designed controller to manage Pump Down
- Accurate and interchangeable
- IP 68 sensor
- IP 65 standard DIN polycarbonate cabinets
- Integrate circuit breaker for motor and controller
- In field extension
- Main Switch

Model	Dimensions in mm (inches)	
	A	B
12 modules	164 (6.46)	275 (10.8)
18 modules	269 (10.6)	380 (15)



Positive temperature cold room single phase model



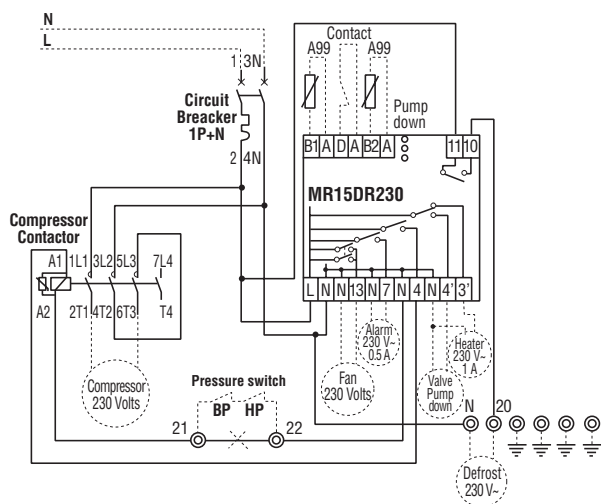
Positive temperature cold room three phase mode

Positive temperature cold room cabinets - Selection Table

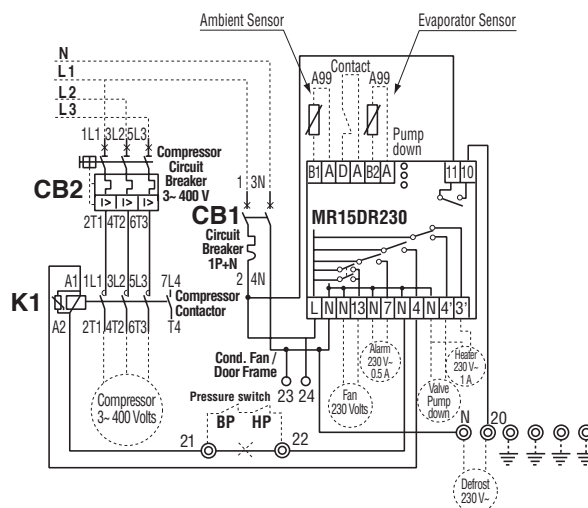
Cabinet Size	Power Supply		Compressor		Evaporator Fan	Ordering Codes
	Modules	VAC	Φ	Power AC-3	Amps	
12	230	1	0,37 kW	5	1,6	CR-PS037-1
12	230	1	0,75 kW	8	1,6	CR-PS075-1
12	230	1	1,1 kW	10	3,2	CR-PS110-1
12	230	1	1,5 kW	12	3,2	CR-PS150-1
18	400	3	1,5 kW	3,5	3,2	CR-PT150-1
18	400	3	2,5 kW	5,7	3,2	CR-PT250-1
18	400	3	4,0 kW	8,5	4,8	CR-PT400-1
18	400	3	5,5 kW	11,5	4,8	CR-PT550-1
18	400	3	7,5 kW	15,5	4,8	CR-PT750-1

Refrigeration Field Controllers

CR Electrical Control Cabinets (2/5)



**Negative temperature cold room
single phase model**



**Negative temperature cold room
three phase mode**

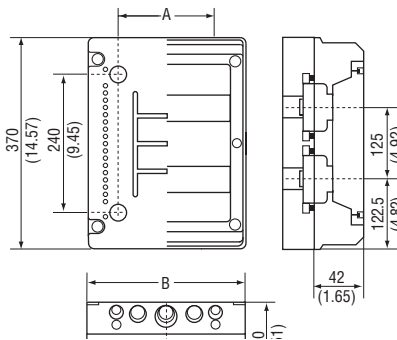
Negative temperature cold room cabinets - Selection Table

Cabinet Size	Power Supply		Compressor		Evaporator Fan	Cond. Fan / Door frame heater	Defrost	Ordering Codes
	Modules	VAC	Φ	Power AC-3				
12	230	1	0,37 kW	5	1,6	---	8	CR-NS037-1
12	230	1	0,75 kW	8	1,6	---	12	CR-NS075-1
12	230	1	1,1 kW	10	3,2	---	12	CR-NS110-1
12	230	1	1,5 kW	12	4,8	---	16	CR-NS150-1
18	400	3	1,5 kW	3,5	3,2	3	12	CR-NT150-1
18	400	3	2,5 kW	5,7	3,2	3	12	CR-NT250-1
18	400	3	4,0 kW	8,5	4,8	3	15	CR-NT400-1
18	400	3	5,5 kW	11,5	4,8	3	15	CR-NT550-1
18	400	3	7,5 kW	15,5	4,8	3	15	CR-NT750-1

Refrigeration Field Controllers CR Electrical Control Cabinets (3/5)



CR Series



Dimensions in mm (inches)

Dimensions in mm (inches)		
Model	A	B
24 modules	164 (6.46)	275 (10.8)

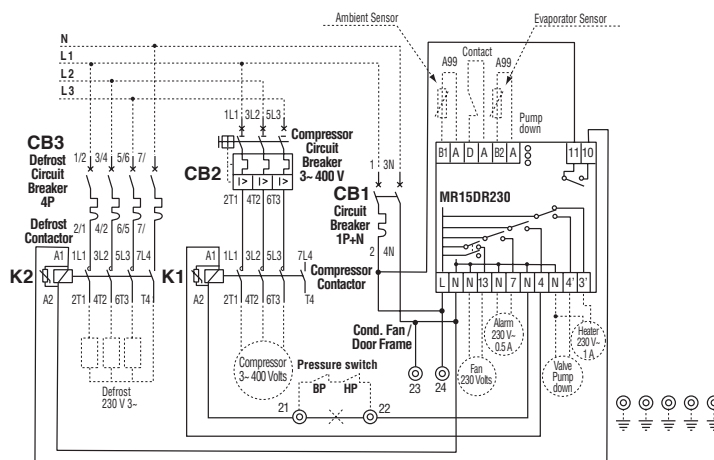
Description

Designed to facilitate installers work, this range of electrical cabinet is intended for use in cold rooms working at positive or negative temperatures and powered either with single phase or three phase power supply. Based on specifically designed controllers, it incorporates all control functions as required by modern cold room units, such as compressor control, defrost management, fan management, alarm function and solenoid valve for "pump down".

It also includes all the safety equipment needed such as circuit breakers for the compressor and for the controller. Particular attention has been given to the accessibility so that the installation time will be reduced to a minimum. Space has been left available for customisation.

Features

- Power rating from: 1,5 to 7,5 kW in three phases
- Standard DIN rail components
- Most wiring integrated on the controller
- Specifically designed controller to manage Pump Down
- Accurate and interchangeable
- IP 68 sensor
- IP 65 standard DIN polycarbonate cabinets
- Integrate circuit breaker for motor and controller
- In field extension
- Main Switch



Negative temperature cold room three phase Compressor and three phase Defrost models

Negative temperature cold room with three phase defrost - Selection Table

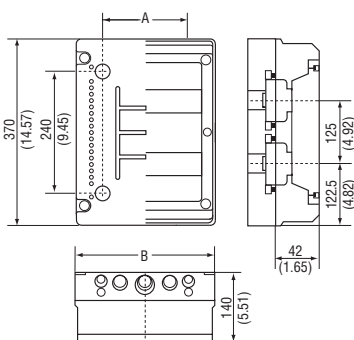
Cabinet Size	Power Supply		Compressor		Evaporator Fan	Defrost	Ordering Codes
	VAC	Φ	Power AC-3	Amps	Amps	Amps	
24	400	3	1,5 kW	3,5	3,2	3 x 5	CR-NDT150-1
24	400	3	2,5 kW	5,7	3,2	3 x 9	CR-NDT250-1
24	400	3	4,0 kW	8,5	4,8	3 x 10	CR-NDT400-1
24	400	3	5,5 kW	11,5	4,8	3 x 12	CR-NDT550-1
24	400	3	7,5 kW	15,5	4,8	3 x 16	CR-NDT750-1

Refrigeration Field Controllers

CR Electrical Control Cabinets (4/5)



CR Series



Dimensions in mm (inches)

Description

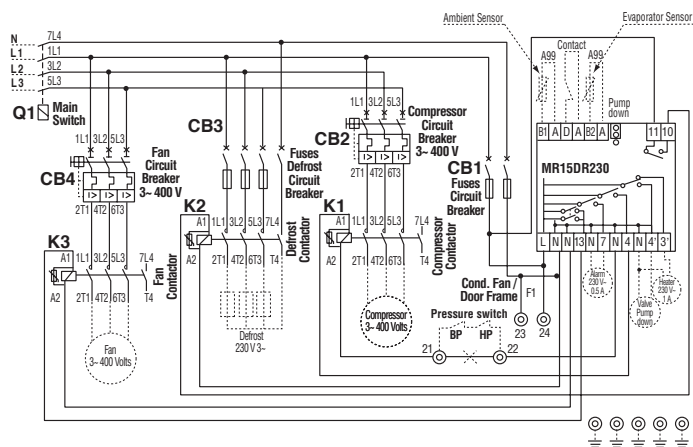
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It also includes all the safety equipment needed such as circuit breakers for the compressor and for the controller. Particular attention has been given to the accessibility so that the installation time will be reduced to a minimum. Space has been left available for customisation.

Features

- Power rating from:
 - 0,37 to 1,5 kW in single phase
 - 1,5 to 7,5 kW in three phases
- Standard DIN rail components
- Most wiring integrated on the controller
- Specifically designed controller to manage Pump Down
- Accurate and interchangeable
- IP 68 sensor
- IP 65 standard DIN polycarbonate cabinets
- Integrate circuit breaker for motor and controller
- In field extension
- Main Switch

Model	Dimensions in mm (inches)	
	A	B
36 modules	-	380 (15)



Negative temperature cold room three phase Compressor, Defrost and Evaporator Fan

Negative temperature cold room cabinets with three phase defrost Selection Table

Cabinet Size	Power Supply		Compressor		Evaporator Fan	Cond. Fan/ Door frame heater	Defrost	Ordering Codes
	Modules	VAC	Φ	Power AC-3	Amps		Amps	
36	400	3	1,5 kW	3,5	3 x 2	3	3 x 5	CR-NFDT150-1
36	400	3	4,0 kW	8,5	3 x 2	3	3 x 10	CR-NFDT400-1
36	400	3	7,5 kW	15,5	3 x 2	3	3 x 16	CR-NFDT750-1

Refrigeration Field Controllers

CR Electrical Control Cabinets (5/5)

Parameters Descriptions

Display code	Parameter	Setting Range	Default	MR12DR	MR15DR
Temperature control parameters					
	Setpoint	-40 to 70 °C		●	●
Hy	Hysteresis (HY)	1 to 9 K	2	●	●
LL	Lower setpoint limit (LL)	-40 °C to higher limit	-40	●	●
HL	Higher setpoint limit (HL)	lower limit to 70 °C	70	●	●
CC	Anti short cycling (CC)	0 to 9 min	2	●	●
Co	Deep freezing time (Co)	0 to 99 min	60	●	●
Alarm parameters					
AH	High. temperature alarm	0 to 50 °C related to setpoint	10	●	●
AL	Low temperature alarm	-50 to 0 °C related to setpoint	-10	●	●
Ad	Alarm differential	1 to 9 K	1	●	●
At	Alarm time delay	0 to 99 min	30	●	●
Defrost parameters					
dF	Defrost function	0 = Electric heater 1 = Hot gas	0		●
dE	Defrost end function	0 = By time 1 = By temperature	1		●
dt	Defrost termination temp	0 to 20 °C	7		●
di	Defrost interval time	0 to 99 hours	12	●	●
dd	Max. defrost duration	0 to 99 min	40	●	●
dC	Dripping time	0 to 99 min	5	●	●
dU	First defrost after power on	OFF, 0 to 99 min	OF	●	●
dP	Display during defrost	0 = Last value before defrost 1 = Setpoint	0	●	●
dr	Delay displayed temp after defrost	1 to 99 min	20	●	●
Digital input parameters					
iF	Digital input function	0 = Instrument OFF 1 = Alarm signalling 2 = Alarm reset 3 = Alarm reset and fan cut-off	0	●	●
id	Digital input time delay	0 to 99 sec	5	●	●
Fan control parameters					
FF	Fan operating function	0 = Parallel with compressor 1 = Continuous running	0		●
Fd	Fan start-up delay after defrost end and power up	0 to 99 min.	5		●
Fr	Fan start-up temperature after defrost end and power up	-30 to +5 °C/-22 to 41 °F	2		●
Other parameters					
SF	Thermostat operating function when sensor failure	0 = Always ON 1 = Always OFF 2 = Automatic	2	●	●
So	Offset thermostat sensor	-20 to +20 units	0	●	●
Un	Temperature units	0 = °C 1 = °F	0	●	●
PU	Display updating time delay	1 to 99 sec	1	●	●