



FREORANGE

FREOCOM FCAX2™

TEMPERATURE CONTROL, ENERGY SAVING AND VOLTAGE PROTECTION FOR ALL FRIDGES, FREEZERS AND COOLERS

Description

The FCA provides very accurate temperature control for your cooler, effective energy saving functions and timed and/or temperature controlled defrost. Furthermore it protects equipment from high and low voltage.

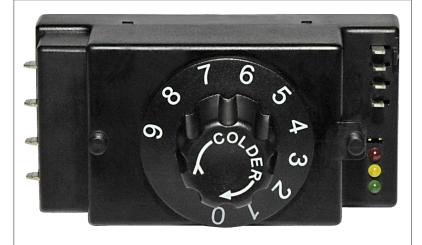
The FCAx2 has the option of controlling three separate outputs (compressor, Aux1 and Aux2). It has two probe inputs.

The unit provides reliability and immunity from environmental factors such as humidity and altitude.

A connection port is provided for programming, display or mobile modem connection. These factors make the FCAx2 the total solution for all refrigeration equipment.



- Highly accurate temperature measurement and control – not affected by barometric pressure.
- Direct retrofit for electro-mechanical thermostats.
- Controls compressor, lights, fans and defrost heater.
- Two external remote temperature probes for precise measurement of air, evaporator or condenser temperatures.
- Temperature dial, user-adjustable.
 Range can be user customised.
- Intelligent time delay (TimeSave™).
- Time and/or temperature controlled defrost.
- Suitable for evaporator or air control.
- · Energy saving features.
- Connects to digital display, GSM modem complete with GPS.



- Can interface to door switch, pressure sensor and other inputs.
- Wide operating voltage (80Vac to 300Vac) for universal stocking.
- · High and low voltage protection.
- Spike/surge protection.
- Programmable allows the units to be custom programmed.
- Programmer and configuration software available.
- Can withstand up to 450V.
- Encapsulated to give water splash resistance for rugged applications.
- Certifications include: UL, IEC (CE), HazLoc (ATEX).

Current rating	1x16A
	2x3A
Weight (g)	100
Unit dimensions LxWxH (mm)	82 x 42 x 36 (58 with knob)
No. Temp probe inputs	2
No. control outputs	Up to 3
Order probes congrately	

Order probes separately

Features:



















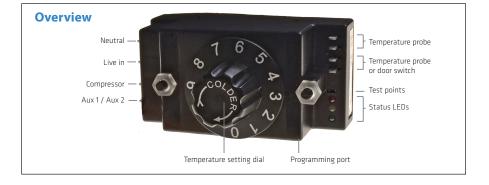




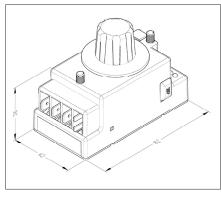
Specifications

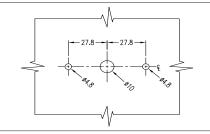
Temperature Control*	Air and evaporator			
Defrost Control*	Timed or active			
Energy Saving*	Temperature set-back and fan cycling			
Over temperature protection*	Condenser probe			
	FCA12 FCA22 FCA32			
Number of relays	16A 16A + 5A 16A + 2 x 5A			
Output- compressor	16A 250VAC			
	70A Inrush Current @ 240VAC			
	140A Inrush Current @ 120VAC			
	0.75HP @ 120VAC			
	1.5HP @ 240VAC			
	4000 VA Breaking Capacity			
Output - Aux1, Aux2	N/A 5A 250VAC			
Output Nux1, Nux2	40A Inrush Current @ 240VAC			
	80A Inrush Current @ 120VAC			
	0.125HP @ 120VAC			
	0.25HP @ 240VAC			
La Parella	750 VA Breaking Capacity			
Indication	3 off LEDs			
Data interface	To digital display or Mobile modem for remote			
	control and collection of data via a web server			
Control knob	0-9 with off position			
Operating Voltage	75 to 300V			
Continuous Withstand Voltage	up to 450V			
Time Delay*	180 Secs			
Voltage Protection*	High voltage and low voltage including hysteresis			
Low Voltage Blind Time*	2 Secs			
Immediate Disconnect Voltage*	75 / 150V			
High Voltage Blind Time*	0.5 Secs			
Control	Microprocessor			
Mounting	2 x M4 plastic studs (nuts provided)			
Programming connector	Mini USB connector			
Door switch	Via second probe input or data interface			
Temperature control	-28°C to +25°C			
Condenser high temperature alarm	+30°C to +120°C			
Working frequency	Auto-sense 50/60Hz			
Surge Protection	6.5kA, <10ns, 160J			
Power Connections	0.25" fast-on terminals suitable for push-on crimps			
Environmental	Sealed and protected against water, humidity, dust			
	and insects			
Temperature Probe Type	NTC Thermistor			
Temperature Probe Length	1 meter or 3 meters (different lengths available)			
Unit dimensions LxWxH (mm)	82 x 42 x 36 (58 with knob)			
Unit Weight	Approx 100g			
Packing Specifications	Supplied in a carton containing 100 units			
Carton Quantity	100pcs			
Carton Dimensions (L x W x H)	50.7 x 30.4 x 27.7 cm			
Carton Gross Weight	13Kg			
Cartons per Pallet	21 (or 2100 units per pallet)			
Pallet Dimensions	120 x 102 x 99 cm			
Pallet Gross Weight	293Kg			
Certifications	IEC - EN 60730, UL - UL873			
	CSA - C22.2 No.24-93, Hazloc approved			

All the above mentioned operational parameters are configurable based on the customer's needs.



Mechanical drawing





Stock	Nο	and	Descri	ntion

92370310

FreoCom FCA12 1xO/P 2xI/P 75-300V

92370320

FreoCom FCA22 2xO/P 2xI/P 75-300V

92370330

FreoCom FCA32 3xO/P 2xI/P 75-300V

9T16012BM

Temp Probe 6mm Blk 1.2m +-20C 0.1" 4way

9T16030E

Temp Probe 6mm Black 3m -20 to +70C

9T23010B

Temp Probe 3mm Black 1m -20C to +20C

9T23010B-D

Temp Probe 3mm Blk 1m -20C~+20C Dipped

9T23010R

Temp Probe 3mm Red 1m -20C to +20C

9T23010W

Temp Probe 3mm White 1m -20C to +20C

9T23030B

Temp Probe 3mm Black 3m -20C to +20C

9T25010B

Temp Probe 5mm Black 1m -20C to +20C

9T25015B

Temp Probe 5mm Black 1.5m -20C to +20C

9T25030B

Temp Probe 5mm Black 3m -20C to +20C

9T26010B

Temp Probe 6mm Black 1m -20C to +20C

9T26030B

Temp Probe 6mm Black 3m -20 to +20C

9T45010R

Temp Probe 5mm Red 1m +50C to +90C

9T45030R

Temp Probe 5mm Red 3m +50C to +90C



