SOLLATEK DATA SHEET NO:

Sollatek™
Intelligent Controls

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.

Features

- 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).

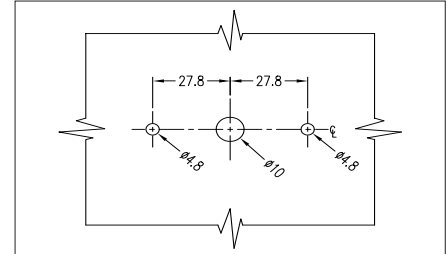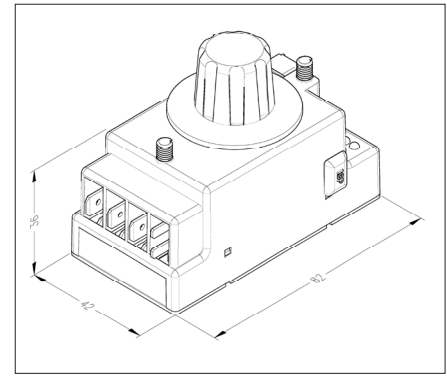|	
Current rating	1x16A
	2x3A
Weight (g)	100
Unit dimensions LxWxH (mm)	82 x 42 x 36 (58 with knob)
No. Temp probe inputs	2
No. control outputs	Up to 3

Order probes separately

Features:

| MICROPROCESSOR CONTROL | SPLASH PROOF | START UP DELAY | ACTIVE DEFROST | PROGRAMMABLE | DIGITAL THERMOSTAT | ENERGY SAVING | USER ADJUSTABLE | FAN CONTROL | LIGHT CONTROL | 16 AMPS UP TO |

Specifications

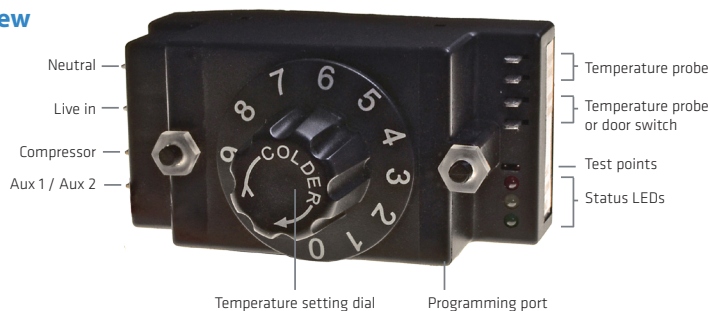| Temperature Control*	Air and evaporator		
Defrost Control*	Timed or active		
Energy Saving*	Temperature set-back and fan cycling		
Over temperature protection*	Condenser probe		
	FCA12	FCA22	FCA32
Number of relays	16A	16A + 5A	16A + 2 x 5A
Output- compressor	16A 250VAC		
	70A Inrush Current @ 240VAC		
	140A Inrush Current @ 120VAC		
	0.75HP @ 120VAC		
	1.5HP @ 240VAC		
	4000 VA Breaking Capacity		
Output - Aux1, Aux2	N/A	5A 250VAC	
	40A Inrush Current @ 240VAC		
	80A Inrush Current @ 120VAC		
	0.125HP @ 120VAC		
	0.25HP @ 240VAC		
	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		
Operating Temperature Range	-5ºC to +55ºC		
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		

Mechanical drawing

Stock No and Description

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
9T16030B	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

Overview

- Neutral
- Live in
- Compressor
- Aux 1 / Aux 2
- Temperature probe
- Temperature probe or door switch
- Test points
- Status LEDs
- Temperature setting dial
- Programming port

RoHS

Sollatek
Intelligent Controls