COOLING CONTROLLER

CH403C-4-NTC



36 x 72mm

Features :

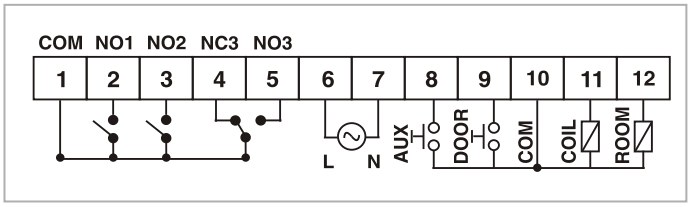
- 3 Digit, 7 Segment LED display
- Capacitive touch keypad
- 2 x NTC sensor probe
- Heating, Cooling & Evaporation
- Defrost management
- °C / °F selectable
- Door open alarm delay

Certifications : CE RoHS compliant IP65

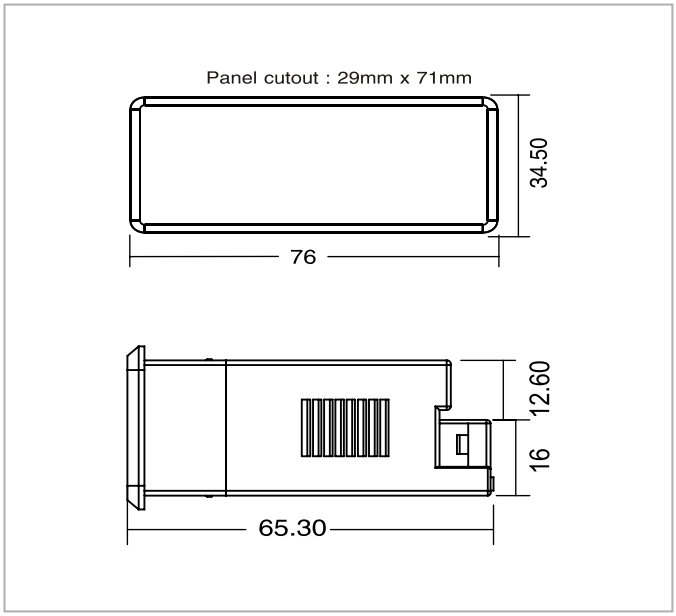
Technical specifications

Display specifications	
Display	3 Digit, 7 Segment LED display
LED indication	Defrost, Relay ON, Alarm, Door Open, Time Delay
Input specifications	
Inputs	2 x NTC Probe
Resolution	0.1 / 1°C
Set point	2
Indication accuracy	±1°
Output specifications	
Contact rating	1) Defrost: SPST, 7A @ 250VAC / 30VDC 2) Fan: SPST, 7A @ 250VAC / 30VDC 3) Compressor: SPDT, 10A @ 250VAC / 30VDC
Functional specifications	
Control action	ON / OFF (With hysteresis programmable)
Hysteresis	1 to 20°C
Alarm modes	High temp alarm, Low temp alarm, Compressor fail alarm, Door open alarm, Sensor break alarm
Display offset adjustment	-10 to 10°C
Restart time delay	Programmable from 0 to 99 minutes
Relay action	Heating, Cooling & Evaporation
Defrost time	Programmable from 0 to 99 minutes
Defrost frequency	Programmable from 1 to 31 (Hr / min / sec)
NTC sensor specifications	
Sensor type	NTC probe
Thermistor range	-50 to100°C
Nominal resistance	10KΩ @ 25°C
Auxiliary supply specifications	
Supply voltage	85 to 270V AC / DC, 50 / 60Hz
Power consumption	3VA maximum
Rated impulse voltage	2500V
Environment specifications	
Temperature	Operating : 0°C to 60°C ; Storage : -25°C to 60°C
Humidity (non - condensing)	95% RH
Mechanical specifications	
Mounting	Panel
Weight	129 gms

Terminal connections



Dimensions (All are in mm)



Sensor provided with product

NTC Sensor (See specification of NTC sensor for details)	TSP04

Probe



Model	Sensor type	Temperature range (°C)	Nominal Resistance
TSP04	NTC probe	-40 to +100	10KΩ @ 25°C

Compliance

Applicable EMI / EMC Standards		
Product Standard : IEC 61326-1		
Category		**Standards Compliance**
ESD Immunity	IEC 61000-4-2	Level III
Surge Immunity	IEC 61000-4-5	+/- 2 kV common mode, +/- 1 kV differential mode
Radiated Susceptibility	IEC 61000-4-3	Level III, 80 to 1000MHz Level II, 1.4GHz to 2GHz Level I, 2GHz to 2.7GHz
Conducted Susceptibility	IEC 61000-4-6	Level II
Voltage Dips and Interruptions	IEC 61000-4-11	**Dips** : 0% residual voltage / 1 cycle (Criteria B), 40% residual voltage / 10 cycles 50Hz / 12 cycles 60Hz (Criteria C)70% residual voltage / 25 cycles50Hz / 30 cycles 60Hz (Criteria C) **Interruptions** : 0% residual voltage / 250 cycles 50Hz / 300 cycles 60Hz (Criteria C)
Conducted Emission	CISPR-11	
Radiated Emission	CISPR-11	
Electrical Fast Transient	IEC 61000-4-4	Level III

Ordering information

Product Code	Output 1	Output 2	Output 3	Supply Voltage	Certification
CH403C-4-NTC	RELAY (7A)	RELAY (7A)	RELAY (10A)	85 to 270V AC / DC	CE RoHS compliant IP65