Cooling Controller

CH403C



36 x 72mm

Features :

- 3 Digits, 7 segment LED single white display
- Capacitive touch keypad
- LED Status indicator: Set point lock, Defrost, Relay ON
- °C/°F Selectable
- Defrost management
- IDM Applicable
- Compact size

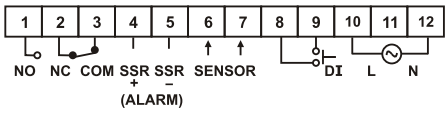
Certifications : CE, IP65

Technical specifications

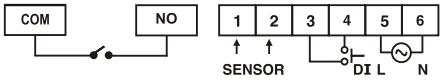
Display specifications	
Display	3 Digits, 7 Segment LED single white display
LED Indication	Set point lock, Defrost, Relay ON
Input specifications	
Inputs	NTC
Resolution	0 / 0.1°
Set point	1
Indication accuracy	±1% of Full scale
Output specifications	
CH403C-1-NTC V2	Main Output: NO: 10A 250 VAC/ 24 VDC NO/ NC: 5A/ 5A 250 VAC/ 24 VDC Alarm output : SSR drive
CH403C-2-NTC	SPST 20A @ 230 VAC/ 30 VDC
CH403C-3-NTC	Main output: NO :10A 250 VAC/ 24 VDC NO/ NC: 5A/ 5A 250 VAC/ 24 VDC Alarm output : SPST, 5A@250VAC/24V DC
Special feature	Door open mode, Defrost management
Functional specifications	
Control action	ON-OFF
Hysteresis	0.1 to 99.9°
Display offset adjustment	-19.9 to 20.0
Reset time delay	Adjustable form 00 to 99 min
Relay action	Heat & Cool mode
Defrost time	Programmable from 00 to 99 min
Defrost frequency	Programmable from 00 to 99 (Hr / min / sec)
NTC Sensor specifications	
Sensor type	NTC Probe
Thermistor range	- 40 to 90°C
Nominal resistance	10KΩ @ 25°C
Auxiliary supply specifications	
Supply voltage	230 VAC @ (50/ 60Hz)
Power consumption	3 VA max @ 230 VAC
Environment specifications	
Temperature	Operating: 0°C to 50°C (32 to 122°F); Storage: - 20°C to 75°C (- 4 to 167°F)
Humidity (Non - condensing)	95% RH
Mechanical specifications	
Mounting	Panel
Weight	150 gms

Terminal connections

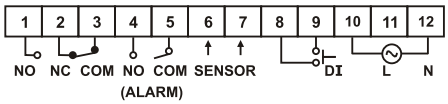
CH403C-1-NTC V2



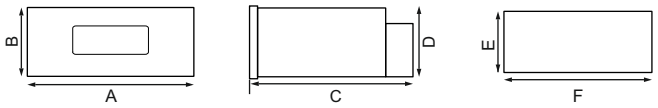
CH403C-2-NTC



CH403C-3-NTC



Dimensions (All are in mm)



Front bezel | Side view | Panel cutout

MODEL / DIM	A	B	C	D	E	F
CH403C	76	34.50	65.30	28.60	29	71

Compliance

Applicable EMI / EMC Standards		
Product Standard : IEC 61326-1		
Category		**Standard 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

Sensor provided with product

NTC Sensor	TSP04

Probe



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

Ordering information

Product code	Output		Supply voltage	Certification
	Control output	Alarm output		
CH403C-1-NTC	RELAY (10A)	- - -	90 to 270 VAC/ DC	CE
CH403C-1-NTC V2	RELAY (10A)	SSR (12V)	90 to 270 VAC/ DC	CE
CH403C-2-NTC	RELAY (20A LUG Type)	- - -	90 to 270 VAC/ DC	CE
CH403C-3-NTC	RELAY (10A)	RELAY (5A)	90 to 270 VAC/ DC	CE