



36 x 72mm

Features :

- 2½ Digits, 7 Segment LED Single Display
- LED Status Indicator : Set Point Lock, Defrost, Relay ON, Alarm ON
- °C /°F Selectable
- Defrost Management
- High & Low Temperature Alarm, Door Alarm, Sensor Break Alarm,
- Door Open Alarm Delay
- Cyclic Timer (Applicable for second Output)

Certifications :

Display Specifications

Display	2½ Digits, 7 Segment Display LED Single Display
LED Indications	Set Point lock, Defrost, Relay ON, Alarm

Input Specifications

Input	NTC
Resolution	1 / 0.1°
Setpoint	1
Indication Accuracy	0.25% of Full scale ±1°

Output Specifications

CH403A-1-NTC :	1) Main output : SPDT, 10A @ 250V AC / 30V DC 2) Alarm output : SSR drive
CH403A-2-NTC :	1) Main output : SPST, 20A @ 230V AC / 30V DC
CH403A-3-NTC :	1) Main output : SPDT, 10A @ 250V AC / 30V DC 2) Alarm output : SPST, 5A @ 250V AC / 30V DC

Functional Specifications

Control Action	ON - OFF
Hysteresis	0.1° to 9.9°
Alarm Modes	High Alarm, Low Alarm, Door open mode
Timer Mode	cyclic (Hr / min / sec. selection)
Display Offset Adjustment	-19.9° to 19.9°
Reset Time Delay	Adjustment from 0 to 19.9min
Relay Action	Heat & Cool mode
Defrost Time	Programmable from 00 to 99min
Defrost Frequency	Programmable from 00 to 99min

Specification for NTC Sensor

Sensor Type	NTC probe
Thermistor Range	-40 to 100°C
Nominal Resistance	10K ohms @ 25°C

Auxiliary Supply Specifications

Supply Voltage	CH403A-1-NTC : 230V AC @ 50 / 60Hz CH403A-2-NTC : 90 to 270V AC / DC @ 50 / 60Hz CH403A-3-NTC : 230V AC @ 50 / 60Hz
Power Consumption	CH403A-1-NTC : 3 VA maximum CH403A-2-NTC : 5 VA maximum CH403A-3-NTC : 3 VA maximum

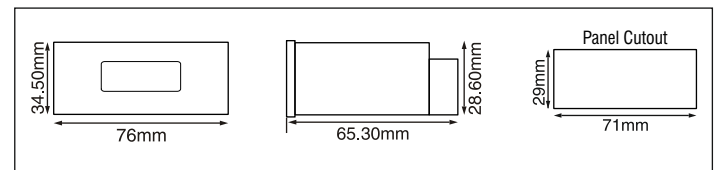
Environmental Specifications

Temperature	Operating : 0 to 50°C(32 to 122°F) Storage : -20 to 75°C(-4 to 167°F)
Humidity (non - condensing)	95% RH

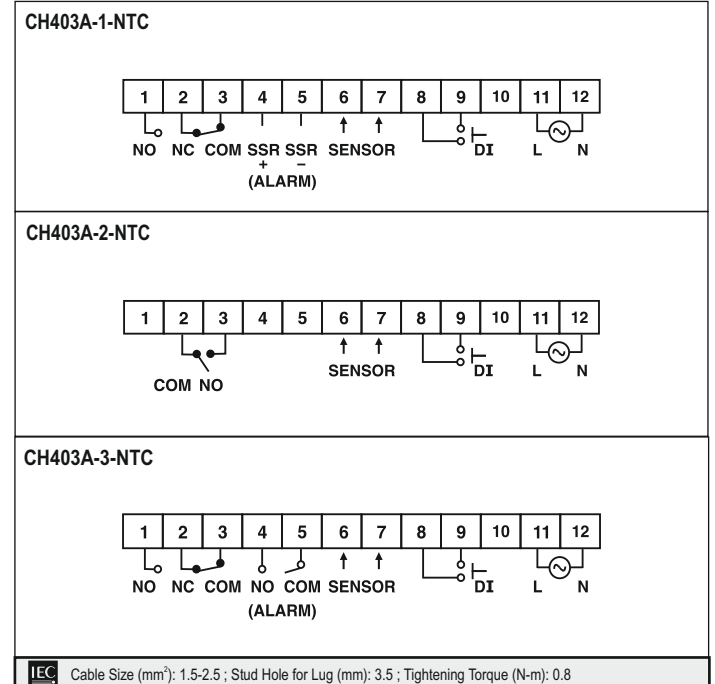
Mechanical Specifications

Mounting	Panel
Weight	CH403A-1-NTC : 140 gms CH403A-2-NTC : 130 gms CH403A-3-NTC : 140 gms

Dimensions



Terminal connections



Cable Size (mm²): 1.5-2.5 ; Stud Hole for Lug (mm): 3.5 ; Tightening Torque (N-m): 0.8

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 cycles 50Hz / 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 (see Specifications of NTC Sensor for details)	TSP04
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Accessory(Also available separately on request)

PROBE



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

Ordering Information

PRODUCT CODE	OUTPUT		SUPPLY VOLTAGE	CERTIFICATION
	CONTROL OUTPUT	ALARM OUTPUT		
CH403A-1-NTC-CE	RELAY	SSR	230V AC	CE
CH403A-2-NTC-CE	RELAY	--	90 to 270V AC / DC	CE
CH403A-3-NTC-CE	RELAY	RELAY	230V AC	CE