



36 x 72mm

Features :

- 2½ Digits, 7 Segment LED Single white Display
- Capacitive touch keypad
- 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
- IDM (optional)
- Cyclic Timer (optional)

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°
Set point	1
Indication Accuracy	±1°

Output Specifications

CH403B-1-NTC :	1) Main output : SPDT, 10A @ 250V AC / 30V DC
CH403B-2-NTC :	1) Main output : SPST, 20A @ 250V AC / 30V DC
CH403B-3-NTC :	1) Main output : SPST, 20A @ 240V AC / 30V DC 2) Alarm output : SPDT, 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 Alarm
Display Offset Adjustment	-19.9° to 19.9°
Restart Time Delay	Programmable from 00 to 19.9min
Relay Action	Heat & Cool mode
Defrost Time	Programmable from 00 to 99min
Defrost Frequency	Programmable from 00 to 99 (Hr / min / sec)

Specification for NTC Sensor

Sensor Type	NTC probe
Thermistor Range	-40 to 90°C
Nominal Resistance	10K ohms @ 25°C

Auxiliary Supply Specifications

Supply Voltage	CH403B-1-NTC : 230V AC @ 50 / 60Hz CH403B-2-NTC : 230V AC @ 50 / 60Hz CH403B-3-NTC : 230V AC @ 50 / 60Hz
Power Consumption	CH403B-1-NTC : 3 VA maximum CH403B-2-NTC : 3 VA maximum CH403B-3-NTC : 3 VA maximum

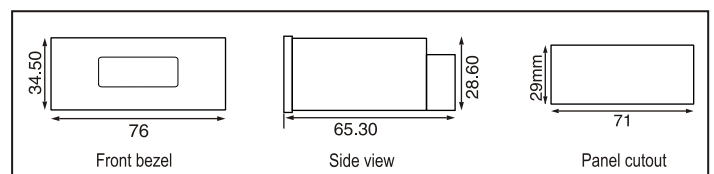
Environmental Specifications

Temperature	Operating : 0 to 60°C Storage : -20 to 75°C
Humidity (non - condensing)	95% RH

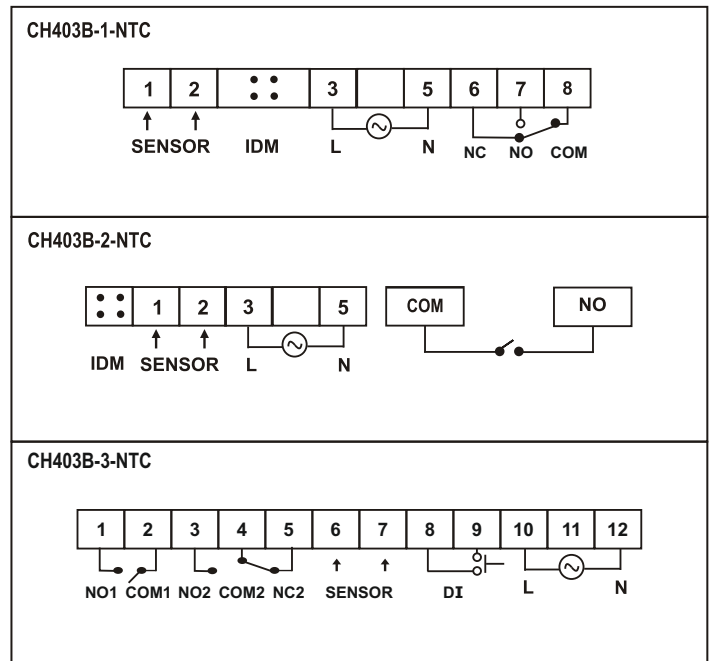
Mechanical Specifications

Mounting	Panel
Weight	CH403B-1-NTC : 150 gms CH403B-2-NTC : 150 gms CH403B-3-NTC : 185 gms

Dimensions (All are in mm)



Terminal connections



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

Ordering information

Product Code	Output	Alarm Output	Supply Voltage	Certification
CH403B-1-NTC	10A Relay	--	230V AC	--
CH403B-2-NTC	20A Relay	--	230V AC	--
CH403B-3-NTC	20A Relay	Yes	230V AC	--

Sensor provided with product

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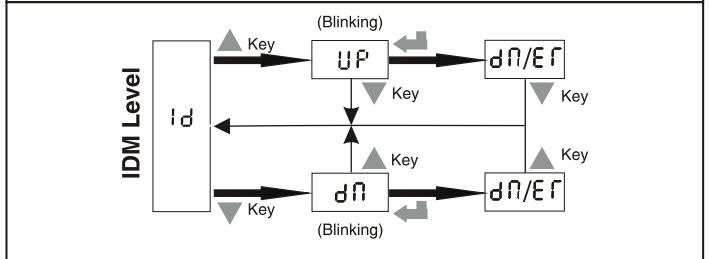
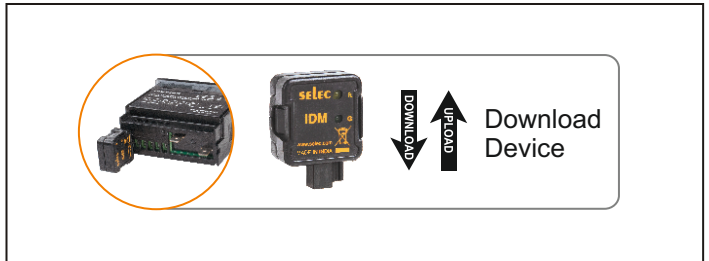
Accessory(Also available separately on request)

PROBE



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

Independent Downloader Module (IDM)



IDM Level	
Display	Parameter Description
id	Independent Downloader Module
UP	Upload from product to IDM
DL	Download from IDM to product
dn	Operation Successful
Er	Operation unsuccessful