2. Power up the device as shown in the section
- Power supply for TC3B21N5V: 115 VAC.
- Door switch/multi-purpose input.

4.1 Switching the device on/off

1. If the device is activated, the display will show the P5 value (‘current temperature’ default). If the display shows an alarm code, see the section ‘ALARMS’.

2. Touch the SET key for 4 s (or do not operate for 60 s) to exit the procedure.

4.2 Unlock keypad

1. Touch the UP key for 2 s.

2. Touch the DOWN key for 2 s.

3. Touch the SET key (or do not operate for 15 s).

4.3 Set the setpoint

1. Touch the UP key for 2 s.

2. Touch the DOWN key for 2 s.

3. Touch the SET key (or do not operate for 15 s).

4.4 Activate manual defrost (P1 0 = 0, default)

1. Touch the UP key for 2 s.

2. Touch the DOWN key for 2 s.

3. Touch the SET key (or do not operate for 60 s) to exit the procedure.

5. Make the electrical connection as shown in the section ‘ELECTRICAL CONNECTION’. Check that the supply voltage, electrical frequency and power are within the set limits. See the section ‘SPECIFICATIONS’.

6. Power up the device.

7. Touch the UP or DOWN key within 15 s to set the value.

8. Touch the SET key.

9. Touch the UP or DOWN key within 15 s to select a label.

10. Touch the SET key (or do not operate for 15 s): the display will show the label ‘SP’.

11. Touch the SET key (or do not operate for 15 s): the display will show the label ‘PA’.

12. Touch the SET key (or do not operate for 15 s).

13. Touch the UP or DOWN key within 15 s to set the value.

14. Touch the SET key (or do not operate for 15 s): the display will show the label ‘MP’.

15. Touch the SET key (or do not operate for 15 s): the display will show the label ‘MAP’.

16. Touch the UP or DOWN key within 15 s to set the value.

17. Touch the SET key (or do not operate for 15 s): the display will show the label ‘MAP’.

18. Touch the SET key (or do not operate for 60 s) to exit the procedure.

19. Important

- Check that the keypad settings are appropriate; see the section ‘CONFIGURATION PARAMETERS’.

- When you store customised settings, you overwrite the default.

20. Important

- Check that the keypad settings are appropriate; see the section ‘CONFIGURATION PARAMETERS’.

- When you store customised settings, you overwrite the default.

21. Important

- Check that the keypad settings are appropriate; see the section ‘CONFIGURATION PARAMETERS’.

- When you store customised settings, you overwrite the default.

22. Important

- Check that the keypad settings are appropriate; see the section ‘CONFIGURATION PARAMETERS’.

- When you store customised settings, you overwrite the default.

23. Important

- Check that the keypad settings are appropriate; see the section ‘CONFIGURATION PARAMETERS’.

- When you store customised settings, you overwrite the default.

24. Important

- Check that the keypad settings are appropriate; see the section ‘CONFIGURATION PARAMETERS’.

- When you store customised settings, you overwrite the default.
Mounting methods for the control device
To be fitted to a panel, snap-in brackets provided.

Degree of protection provided by the covering
IP65 (front)

Connection method
Fixed screw terminal blocks for wires up to 2.5 mm²

Maximum permitted length for connection cables:

- Power supply: 10 m (32.8 ft)
- Analog inputs: 10 m (32.8 ft)
- Digital inputs: 10 m (32.8 ft)
- Digital outputs: 10 m (32.8 ft)

Operating temperature
From 32 to 131 °F (from 0 to 55 °C)

Storage temperature
From -13 to 158 °F (from -25 to 70 °C)

Operating humidity
Relative humidity without condensate from 10 to 90%

Pollution status of the control device
2

Compliance
Europe: CE declares product compliance meets requirements of DPC, LVD, and RoHS Directives.
USA: UL Recognized Component, SDFY2.SA516; FCC Part 15 Subpart B Class A
Canada: UL Recognized Component, SDFY8.SA516; ICES-003 Class A

Power supply:

- TC3B21N5V 115 VAC (+10% -15%), 50/60 Hz (+/- 3Hz), max. 2 VA
- TC3B21N7V 230 VAC (+10% -15%), 50/60 Hz (+/- 3Hz), max. 2 VA

Over-voltage category
III

Software class and structure
A

Analog inputs
1 for NTC probes (cabinet probe)

NTC probes
Sensor type:
- 3435 (10 KΩ @ 77 °F, 25 °C)

Measurement field:
- From -40 to 221 °F (from -40 to 105 °C)

Resolution:
- 1 °F (0.1 °C)

Other inputs
Input configurable for analog input (auxiliary probe) or digital input (digital multi-purpose, dry contact)

Dry contact
Contact type:
- 5 VDC, 1.5 mA

Over-voltage category
A

Digital output
1 electro-mechanical relay (compressor relay)

Type 1 or Type 2 actions
Type 1

Additional features of Type 1 or Type 2 actions
C

Displays
3 digits custom display, with function icons