



KE2 Temp + Air Defrost

For Medium Temperature Applications with Air Defrost
Condensed Quick Start Guide PN 20611



Q.3.65 September 2021

Complete Instructions Locations

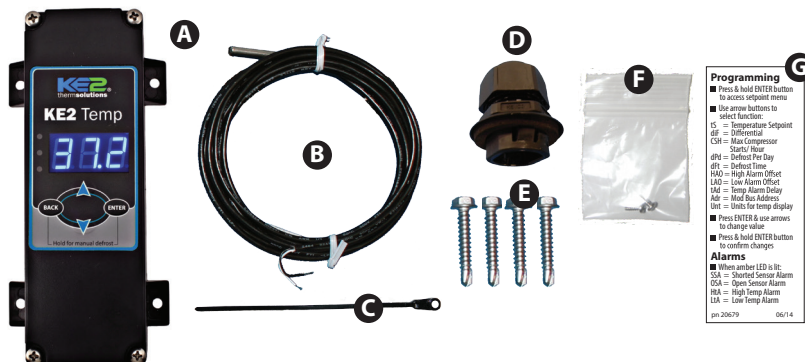
Visit: <http://ke2therm.com/product/ke2-temp-defrost/>
and click the **Link to Literature** button

— OR —

QR code:
KE2 Temp Literature



YouTube
KE2 Temp Videos



What's in the Kit

The following parts are included:

- A** (1) KE2 Temp + Air Defrost controller
- B** (1) temperature sensor - 45"
- C** (1) sensor ziptie
- D** (1) liquid tight cord grip
- E** (4) self-tapping mounting screws
- F** (2) screws for high voltage shield
- G** (1) programming sticker

Supplies List

The accessories required for the controller to work are supplied. However, some truck stock items may be needed. See the following list.

- conduit to go between the controller & evaporator
- (2) conduit connectors (straight or elbow as required)
- (4) high voltage wires (matched to the load of the liquid line solenoid/compressor and the controller.)
- wire labeling (numbers, colors, etc.)
- additional wire ties
- 18 gauge twisted shielded pair (if extending sensor wires)
- Cat5e or cable rated for RS-485 communication (if adding communication)
- foam insulation (if running wires outside the space)
- silicone (for sealing any box penetrations)

Controller Navigation

- INDICATOR LIGHTS:**
- Red blinking – Real Time Clock battery needs to be replaced
 - Yellow light – non-critical alarm (system running)
 - Green light – Liquid Line Solenoid (LLS) relay energized
 - Green blinking – waiting on minimum run or off time to start/stop refrigeration

- Access Setpoint mode by pressing and holding **ENTER** until tS (temperature setpoint) displays on the screen.
- Use **▲** and **▼** to scroll through available setpoints.
- Press **ENTER** to view the current setting.
- Use **▲** and **▼** to change the setpoint
Press **ENTER** to move between the digits to accelerate the changes.
- Press and hold **ENTER** to confirm each setpoint change.
- Press **BACK** to escape.

Setpoints

- tS** = Temperature Setpoint
- diF** = Differential
- CSH** = Compressor Starts/Hour, Maximum
- dPd** = Defrost Per Day
- dFt** = Defrost Time
- HAO** = High Alarm Offset
- LAO** = Low Alarm Offset
- tAd** = Temp Alarm Delay
- Adr** = Mod Bus Address
- Unt** = Units for temp display (FAH or CEL)

Only visible if
CUS (custom) is
selected for dPd
(Defrost per day)

- tOd
- d1
- d2
- d3
- d4
- d5
- d6
- d7
- d8
- d9
- d10
- d11
- d12

Alarms - When amber LED is lit:

- SSA** = Shorted Sensor Alarm
- OSA** = Open Sensor Alarm
- HtA** = High Temp Alarm
- LtA** = Low Temp Alarm

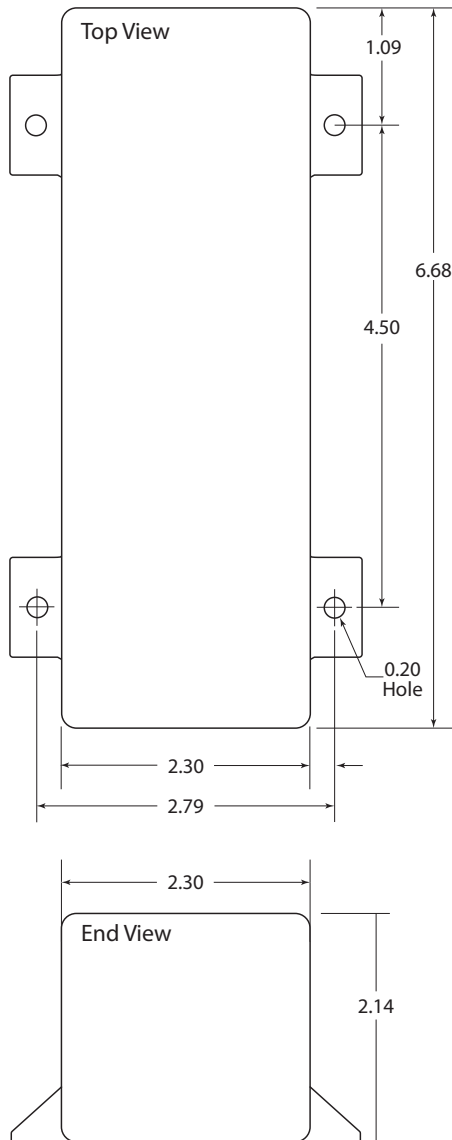
Basic Setpoints

Setpoint	Description	Minimum	Default	Maximum
tS	Temperature Setpoint	-50°F (-45°C)	35°F	100°F (38°C)
diF	Differential	1°F (1K)	2°F	30°F (17K)
CSH	Max. Comp. Starts/Hr.	5 (Off)*	6	10
dPd	Defrost Per Day	0	6	12, CUS**
dFt	Defrost Time	0 min	15 min	720 min
HAO	High Alarm Offset	1°F (1K)	5°F	10°F (6K)
LAO	Low Alarm Offset	1°F (1K)	3°F	10°F (6K)
tAd	Temp Alarm Delay	1 min	90 min	180 min
Adr	Mod Bus Address	1	1	247
Unt	Units for temp display	FAH	FAH	CEL

*Selecting fewer than 5 compressor starts per hour results in the starts per hour feature being turned off. The compressor will then function on temperature only.

** Selecting CUS (custom) unlocks additional Setpoints. See Advanced Setpoints table.

Dimensions - Inches



Wiring Diagram

