thermsolutions®

Submittal Sheet

A.9.69B April 2021

BENEFIT SUMMARY

- Ideal for truck stock – Replaces both air defrost timeclock and thermostat
- Simplifies wiring, saves installation time
- Off time defrost on a pre-defined or custom schedule
- Compressor protection – adjustable maximum starts per hour
- Manual defrost
- 1st defrost 2 hrs after start up
- Alarms – High temp/Low temp/ Sensor Failure
- 120V / 208-240V
- 45" temperature sensor included
- Real time clock with battery backup ensures that custom defrost schedules are not lost during power failures
- Modbus communications with remote monitoring, control, and alarm notifications, when used with the proper KE2-EM
- Service Call Saver – post defrost indicator
- Keypad lock feature
- 366 days of temperature data logging when used with the KE2-EM

Project Name: _____

Location: _____

Order Number: _____

Contractor: _____

Supplier: _____

Architect/Engineer: _____

Notes/Comments: _____

☑ Add KE2 Therm Edge Manager to this project for remote access / monitoring.

KE2 Temp + Air Defrost

The KE2 Temp + Air Defrost (KE2 Temp) controller is designed to simplify refrigeration controls by combining the function of a thermostat and off-time defrost timeclock in one simple to use device – increasing functionality and reducing wiring. **PN 20611**

Additionally, the KE2 Temp is now accessible remotely using the KE2 Edge Manager (KE2-EM); a simple, multi-functional, communication device. When the KE2 Temp is connected to a KE2-EM, it provides immediate local network communication to the KE2 Temp. More information on the KE2-EM is found in bulletin Q.5.62.

DESCRIPTION:

The KE2 Temp's robust design provides versatility for a wide range of air defrost applications. When applied to medium temperature applications of 36°F and higher, the built-in defrost clock may be used to perform time-initiated and time-terminated defrost cycles.

The KE2 Temp is an easy-to-understand thermostat and air defrost timeclock that eliminates frustration with the overly complicated options available today. The KE2 Temp has been thoughtfully setup to provide reliable system operation with an intuitive user interface.

The controller's single-pole-double-throw relay controls the refrigeration and defrost cycles.

SPECIFICATIONS:

Input Voltage:		120V / 208-240V			
Storage Temp:		-13° to 120°F (-25° to 49°C)			
Operating Temp:		-40° to 120°F (-40° to 49°C)			
Display:		3 digit 7-segment LED			
IP Rating:		IP65			
Input:		1 temperature sensor (replacement part KE2 SKU 20199)			
Outputs: (1) Relay Single Pole Double Throw		**Normally Open**		**Normally Closed**	
		120V	**240V**	**120V**	**240V**
	FLA	12A	12A	10A	10A
	Resistive	20A	20A	20A	20A
	Pilot Duty	800VA	720VA	290VA	360VA
Communication:		RS-485 (Modbus)			
Temperature Sensor					
Sensor Specs:		-60° to 150°F (-51°C to 66°C) moisture resistant package			

A.9.69B April 2021 supersedes A.9.69B May 2017 and all prior publications

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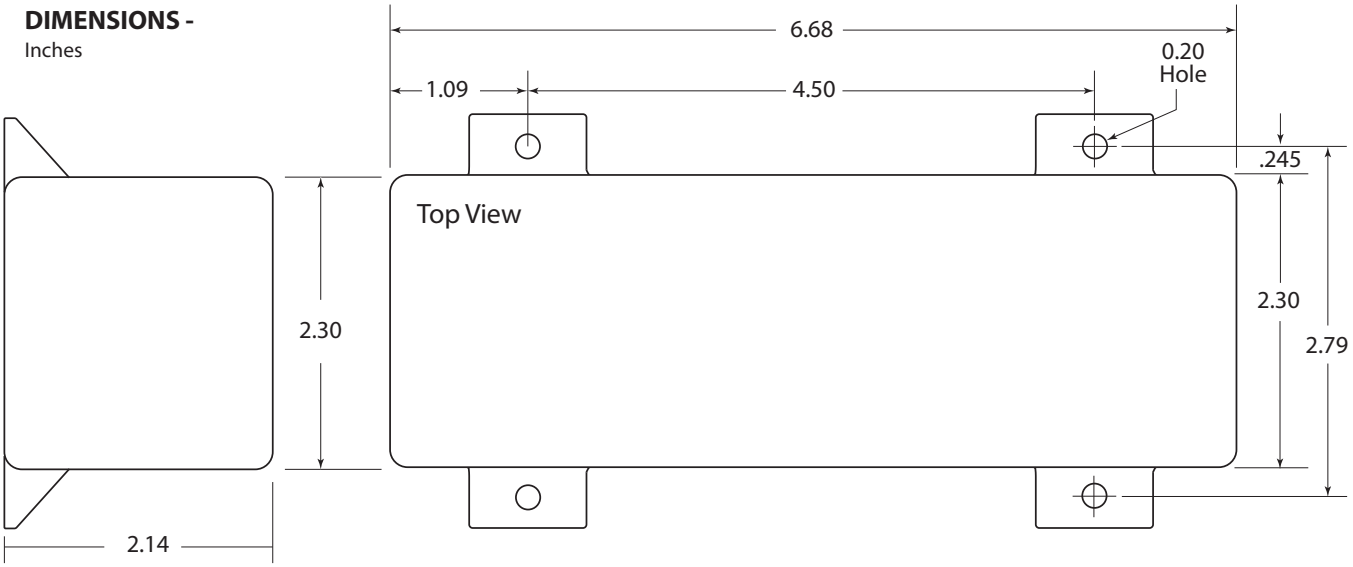
DIMENSIONS -
Inches



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	Maximum Compressor Starts/Hour	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	Modbus 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 controller will then call for refrigeration based on temperature only.

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

Advanced Setpoints - includes setpoints only visible when CUS (custom) is selected under dPd (defrosts per day)

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		Maximum Compressor Starts/Hour	5 (Off)*	6	10
dPd		Defrost Per Day	0	6	12, CUS
	d12 - d1	Start time of Defrost #12 through #1	00	dis (disabled)	23,dis (disabled)
	tod	Time of Day	0.0	12.0	23.5
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		Modbus 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 controller will then call for refrigeration based on temperature only.

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