

thermsolutions

SubmittalSheet:

Project Name:	Notes/Comments:
Location:	
Order Number:	
Contractor:	
Supplier:	
Architect/Engineer:	

BENEFITS SUMMARY

- Adaptive refrigeration control is third party verified to provide 15%+ energy savings.
- Easily integrates into existing building automation system with Modbus RTU
- Simple to program
- Energy saving fan cycling -Title 24 compliant
- Regulates the amount of defrost heat to prevent steaming
- Optional Door Switch with all the necessary time delays
- Off time or electric defrost on pre-defined schedule or custom defrost interval
- Compressor protection limits maximum starts per hour
- Visual and Audible Alarming -High temp/Low temp/Sensors/ Door/Power Failure (PF)
- Service Call Saver Post Defrost Indicator
- Manual defrost
- 1st defrost 2 hrs after start up
- Keyboard Lock Feature

KE2 Adaptive Control

Energy saving refrigeration controller for walk-in freezers and coolers — for new equipment or upgrade of existing refrigeration equipment - pn 21177

Description:

Energy saving adaptive/demand defrost controller with Title 24 compliant fan cycling insures that system is operating efficiently. Energy saving demand defrost algorithm third party verified to provide 15%+ energy savings. Title 24 fan programming dictates that evaporator fans, served by a single compressor, and operating without variable capacity controls, will reduce their airflow 40% for at least 75% of the time when compressor is not running.

Specifications

Controller

Controlle						
Input Volt	age:	120V / 208-240V				
Storage Te	mp:	-40° to 120°F (-40° to 49°C)				
Operating	Temp:	-40° to 120°F (-40° to 49°C)				
Display:		4 digit 7-segment LED				
IP Rating:		IP65				
Inputs (4):		3 colored 15' temp sensors (KE2 SKU 21151)				
		2 dual purpose (temperature or digital signal inputs)				
Alarm - Vis	ual	Front panel display				
Alarm - Au	dible	Buzzer				
Alarm - External		Modbus Communication				
Service Call Saver - Post Defrost Indicator*		Display indicates system has just exited defrost				
		Normally Open		Normally Closed		
Outputs:		120V	240V	120V	240V	
(3) Relays	FLA	30A	30A	N/A	12A	
Single Pole	LRA	98A	80A	N/A	24A	
Double	Resistive	N/A	30A	N/A	30A	
Throw	Horsepower	1 hp	2 hp	1/4 hp	1/2 hp	
	Pilot Duty	800VA	720VA	290VA	360VA	
Communication:		RS-485 (Modbus)				
Temperat	ure Sensor					
Sensor Specs: -60° to 150°F (-51°C to 66°C) moisture resistant package						



*Service Call Saver - Post Defrost Indicator: To eliminate unwarranted service calls, the controller alerts the user when it is coming out of a defrost cycle using the onboard display. The display alternates between dEF and the actual temperature measured by the air sensor. This continues until the temperature reaches setpoint, or for the amount of time set by dFt (Defrost Time), whichever is shorter.

DIMENSIONS -

Inches

