



## Appliance Controls

# K & S Series Electric Thermostat



The K & S Series is a snap acting, single-pole, single throw type thermostat. The use of 30 amp silver contacts and heavy duty terminals give them durability and sustained accuracy. The snap action mechanism is precise and reliable.

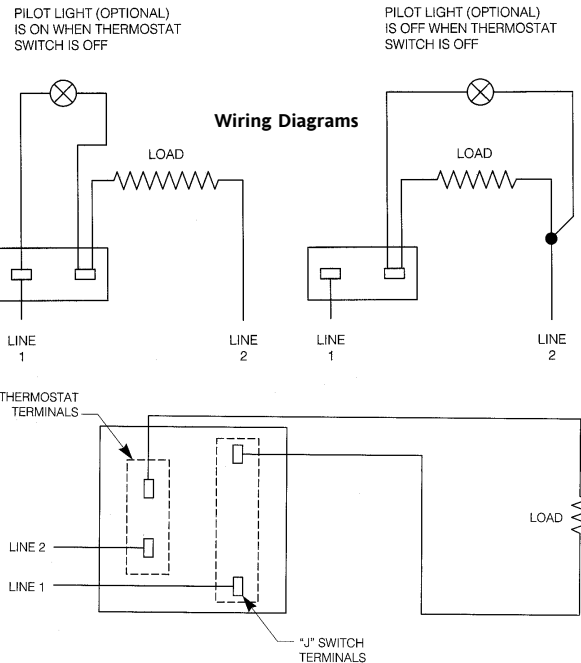
This direct acting series is suitable for commercial cooking industry and industrial applications.

### Design Features

- Temperature ranges to 650°F (343°C)
- K Series with NAK filled diastats, temperature ranges to 975°F (524°C) possible
- Rugged and compact design for versatility and long life
- Bulb and capillary available in copper, nickel plated copper, nickel plated steel and stainless steel
- Plastic coating available for protection against moisture, dust, etc.
- Dials of heat resisting plastic available

### Specifications

- Ambient temperature: 32°F (0°C) to 200°F (93°C)



### Electric Thermostat - Model S Series

Model1	Description	UL Ratings2	CSA Ratings3	European4	AGA5
S	SPST - Break on Temperature Rise	277 V AC, 30 A	277 V AC, 30 A	277 V AC, 25 A (Tab Term.)	120-277 V AC, 5 A, 125 V A
		250 V AC, 1200 V A, 18 FLA, 72 LRA	250 V AC, 18 FLA, 72 LRA	277 V AC, 30 A (Screw Term.)	110/120 V AC, 1/6 hp
		251-550 V AC, 125 V A	120-550 V AC, 125 V A	480 V AC, 20 A (Screw Term.)	
		480 V AC, 20 A		226°F Max. Amb.	
SJ	SPST - Break on Temperature Rise With Aux. Switch Break in "OFF" Position	277 V AC, 30 A	120-240 V AC, 13 FLA, 50 LRA	277 V AC, 25 A (Tab Term.)	
		250 V AC, 1200 V A, 18 LA, 72 LRA	120-550 V AC, 125 V A	277 V AC, 30 A (Screw Term.)	
		251-550 V AC, 125 V A	250 V AC, 18 FLA, 72 LRA	480 V AC, 20 A (Screw Term.)	
				226°F Max. Amb.	
	"J" Switch has no Ambient Rating	480 V AC, 20 A	480 V AC, 20 A	240 V AC, 25 A	
	Aux. Sw. 277 V AC, 30 A		240 V AC, 30 A		
SP	SPST - Break on Temperature Rise Except With Positive "OFF" Dial	277 V AC, 30 A	277 V AC, 30 A	277 V AC, 25 A (Tab Term.)	120-277 V AC, 5 A, 125 V A
		250 V AC, 1200 V A, 18 FLA, 72 LRA	250 V AC, 18 FLA, 72 LRA	277 V AC, 30 A (Screw Term.)	110/120 V AC, 1/6 hp
		251-550 V AC, 125 V A	120-550 V AC, 125 V A	480 V AC, 20 A (Screw Term.)	
		480 V AC, 20 A		226°F Max. Amb.	
SR	SPST - Make On Temperature Rise	277 V AC, 30 A	277 V AC, 30 A		
		250 V AC, 1200 V A, 18 FLA, 72 LRA	250 V AC, 18 FLA, 72 LRA		
		251-550 V AC, 125 V A	120-550 V AC, 125 V A		
		480 V AC, 20 A			

1 Model SL for temperature limiting applications

2 UL Ratings (UL Guide / XAPX2) - File No. E12103

3 CSA Ratings - CSA File No. LR36461

4 CE Approved - IEC 730-1 (1993), Amd 1 (1994), and IEC 730-2-9 (1992) UL International Compliance Services

5 AGA - tested per ANSI Z21.23 Certification No. C2765001

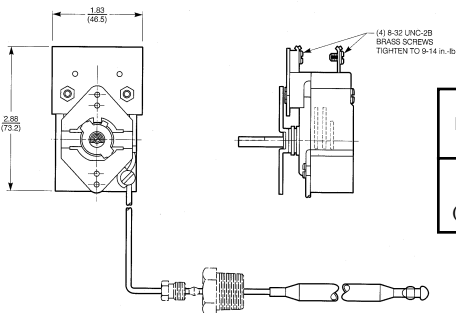
# Electric Thermostat - Model K Series

Model <sup>1</sup>	Description	UL Ratings <sup>2</sup>	CSA Ratings <sup>3</sup>	European <sup>4</sup>	AGA <sup>5</sup>
K	SPST- Break on Temperature Rise	250 V AC, 25 A, 690 V A, 18 FLA, 72 LRA	120-240 V AC, 13 FLA, 50 LRA	277 V AC, 25 A (Tab Term.)	Applies to Suffix B, P, R, T Controls
		120 V AC, 575 V A	120-550 V AC, 125 V A	277 V AC, 25 A (Screw Term.)	120-277 V AC, 5 A
		277 V AC, 125 V A	250 V AC, 18 FLA, 17 LRA	480 V AC, 20 A (Screw Term.)	110/120 V AC, 1/6 hp
KA	SPST - Break on Temperature Rise With SPST Aux. Switch Break in "OFF" Position	120 V AC, 575 V A	120-240 V AC, 13 FLA, 50 LRA	277 V AC, 25 A (Tab Term.)	
		250 V AC, 25 A, 690 V A, 18 FLA, 72 LRA	120-550 V AC, 125 V A	277 V AC, 25 A (Screw Term.)	
		277 V AC, 125 A	250 V AC, 18 FLA, 17 LRA	480 V AC, 20 A (Screw Term.)	
		Aux. Sw. 240 V AC, 25 A	277 V AC, 25 A	226°F Max. Amb.	
KB	SPST - Break on Temperature Rise With SPDT Aux. Switch, Break in "OFF" Position	120 V AC, 575 V A	120-240 V AC, 13 FLA, 50 LRA		
		250 V AC, 25 A, 690 V A, 18 FLA, 72 LRA	120-550 V AC, 125 V A		
		277 V AC, 125 V A	250 V AC, 18 FLA, 17 LRA		
		Aux. Sw. 240 V AC, 25 A	277 V AC, 25 A		
KK	SPST- Break on Temperature Rise With Push to Turn	120 V AC, 575 V A	120-240 V AC, 13 FLA, 50 LRA		Applies to Suffix B, P, R, T Controls
		250 V AC, 25 A, 690 V A, 18 FLA, 72 LRA	120-550 V AC, 125 V A		120-277 V AC, 5 A
		277 V AC, 125 V A	250 V AC, 18 FLA, 17 LRA		110/120 V AC, 1/6 hp
KN	SPST - Break on Temperature Rise With NAK Filled Bulb	120 V AC, 575 V A	120-240 V AC, 13 FLA, 50 LRA	277 V AC, 25 A (Tab Term.)	Also Applies to Suffix P Controls
		250 V AC, 1200 V A, 18 FLA, 72 LRA	120-550 V AC, 125 V A	277 V AC, 25 A (Screw Term.)	120 V AC, 5 A
		251-550 V AC, 125 V A	250 V AC, 18 FLA, 72 LRA	480 V AC, 20 A (Screw Term.)	250°F Bake, 275°F Clean Amb.
		200°F Cook Amb., 225°F Clean Amb.	277 V AC, 25 A Non-inductive	226°F Max. Amb.	
KP	SPST - Break on Temperature Rise Except With Positive "OFF" Dial	120 V AC, 575 V A	120-240 V AC, 13 FLA, 50 LRA	277 V AC, 25 A (Tab Term.)	Applies to Suffix B, P, R, T Controls
		250 V AC, 25 A, 690 V A, 18 FLA, 72 LRA	120-480 V AC, 125 V A	277 V AC, 25 A (Screw Term.)	110/20 V AC, 1/6 hp
		277 V AC, 125 V A	250 V AC, 18 FLA, 72 LRA	480 V AC, 20 A (Screw Term.)	
KR	SPST- Make on Temperature Rise	120 V AC, 575 V A	120-240 V AC, 13 FLA, 50 LRA		Applies to Suffix B, P, R, T Controls
		250 V AC, 25 A, 690 V A, 18 FLA, 72 LRA	120-480 V AC, 125 V A		110/20 V AC, 1/6 hp
		277 V AC, 125 V A	250 V AC, 18 FLA, 72 LRA		
		277 V AC, 25 A			
KX	SPST - Break on Temperature Rise Used on Low Current Pilot Duty Applications	120-277 V AC, 50 V A	120-277 V AC, 50 V A	120-277 V AC, 50 V A	24 V AC, 24 V A PD
		221°F Cook Amb., 250°F Clean Amb.		50/60 Hz	1 V AC, 0.25 V A PD 200°F Cook Amb., 250°F Clean
KXA	Similar to KX With Same Aux. Switch As Model KA	120-277 V AC, 50 V A	120-277 V AC, 50 V A	120-277 V AC, 50 V A	24 V AC, 24 V A PD
		221°F Cook Amb., 250°F Clean Amb.	Aux. Sw. 250 V AC, 25 A	50/60 Hz	200°F Cook Amb., 250°F Clean
		Aux. Sw. 120-277, 50 V A		Aux. Sw. 240 V AC, 25 A	
KXN	Similar to KX With NAK Filled Bulb	120-277 V AC, 50 V A	120-277 V AC, 50 V A		24 V AC, 24 V A PD
		221°F Cook Amb., 250°F Clean Amb.			1 V AC, 0.25 V A PD 200°F Cook Amb., 250°F Clean
					24 V AC, 24 V A PD 1 V AC, 0.25 V A PD 200°F Cook Amb., 250°F Clean
KXR	SPST - Make on Temperature Rise Used on Low Current Pilot Duty Circuits	120-277 V AC, 50 V A	120-277 V AC, 50 V A		24 V AC, 24 V A PD
		221°F Cook Amb., 250°F Clean Amb.			1 V AC, 0.25 V A PD 200°F Cook Amb., 250°F Clean

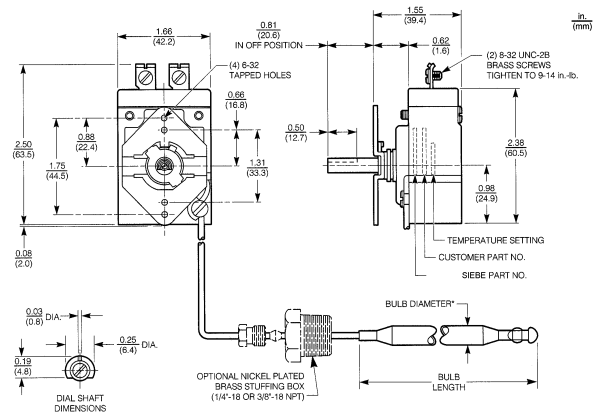
- 1 Model KL for temperature limiting applications
- 2 UL Ratings UL Guide - XAPX2) - File No. E12103
- 3 CSA Ratings - CSA File No. LR36461
- 4 CE Approved - IEC 730-1 (1993), Amd 1 (1994), and IEC 730-2-9
- 5 AGA - tested per ANSI Z21.23 Certification No. C2765001

For ALL other ratings contact your Sales Representative

(1992) UL International Compliance Services



\*AVAILABLE BULB DIAMETERS  
 Inches 0.187 0.250 0.312 0.375  
 (mm) (4.8) (6.4) (7.9) (9.5)  
 AVAILABLE CAPILLARY LENGTHS  
 24 to 120 in 12" increments  
 (609.6 to 3048 in 304.8mm increments)



**Application Responsibility**  
 Invensys Appliance Controls, as a supplier, will comply with those agreed to drawing requirements and specifications that define this product. Suitability for any application is the responsibility of the purchaser.