

Robertshaw®

K & S SERIES 5300 SERIES

ELECTRIC THERMOSTAT



The Robertshaw® K and S Series is a snap acting, single pole single throw (SPST) type thermostat. The K models have a 25 Amp rating and the S models have a 30 Amp rating. The S and K each uses silver contacts and has heavy duty terminals for durability and sustained accuracy. The snap action mechanism is precise and reliable. This direct acting series of thermostats is suitable for the commercial cooking industry.

Features and Benefits

- Temperature ranges up to 600°F (316°C)
- K Series with NAK filled diastats, temperature ranges to 975°F (524°C)
- Rugged and compact design for versatility and long life
- Bulb and capillary available in copper, nickel plated copper and stainless steel
- Plastic coating available for protection against moisture, dust, etc.
- Dials of heat resistant plastic available

AVAILABLE BULB DIAMETERS

inches	0.187	0.250	0.312	0.375
[millimeters]	4,8	6,4	7,9	9,5

Specifications

- Ambient temperature: 32°F to 200°F (0°C to 93°C)
 - See charts on pages 8 and 9 for exceptions
- Single pole single throw (SPST) type switch
 - See charts on pages 8 and 9 for options
- Various voltages
- Agency Certifications
 - CSA, UL, AGA and CE available



An ISO 9001 – 2008 Certified Company



K & S SERIES 5300 SERIES

ELECTRIC THERMOSTAT

Model K Series

Model ¹	Description	UL Ratings ²	CSA Ratings ³	European ⁴	AGA ⁵
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
			277 V AC, 25 A	226°F Max. Amb.	200°F Ambient, 250°F, With Suffix "T"
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.	
			Aux. Sw. 250 V AC, 25 A	Aux. Sw. 240 V AC, 25 A	
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		
			Aux. Sw. 250 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
			277 V AC, 25 A		
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.)	
			277 V AC, 25 A	226°F Max. Amb.	
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
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	
		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
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



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Model S Series

Model ¹	Description	UL Ratings ²	CSA Ratings ³	European ⁴	AGA ⁵
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 FLA, 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.)	
		480 V AC, 20 A	480 V AC, 20 A	226°F Max. Amb.	
	"J" Switch has no Ambient Rating	Aux. Sw. 277 V AC, 30 A	240 V AC, 30 A	240 V AC, 25 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			
		480 V AC, 20 A	120-550 V AC, 125 V A	480 V AC, 20 A (Screw Term.)	
		277 V AC, 30 A		226°F Max. Amb.	
SR	SPST- Make On Temperature Rise	250 V AC, 1200 V A, 18 FLA, 72 LRA	277 V AC, 30 A		
		251-550 V AC, 125 V A	250 V AC, 18 FLA, 72 LRA		
		480 V AC, 20 A	120-550 V AC, 125 V A		

Model K Series Chart Legend

- 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

Model S Series Chart Legend

- 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 - CE: CB Report # US/8299B/UL (2004)
- ⁵ AGA - Certification No. 164327-1195960

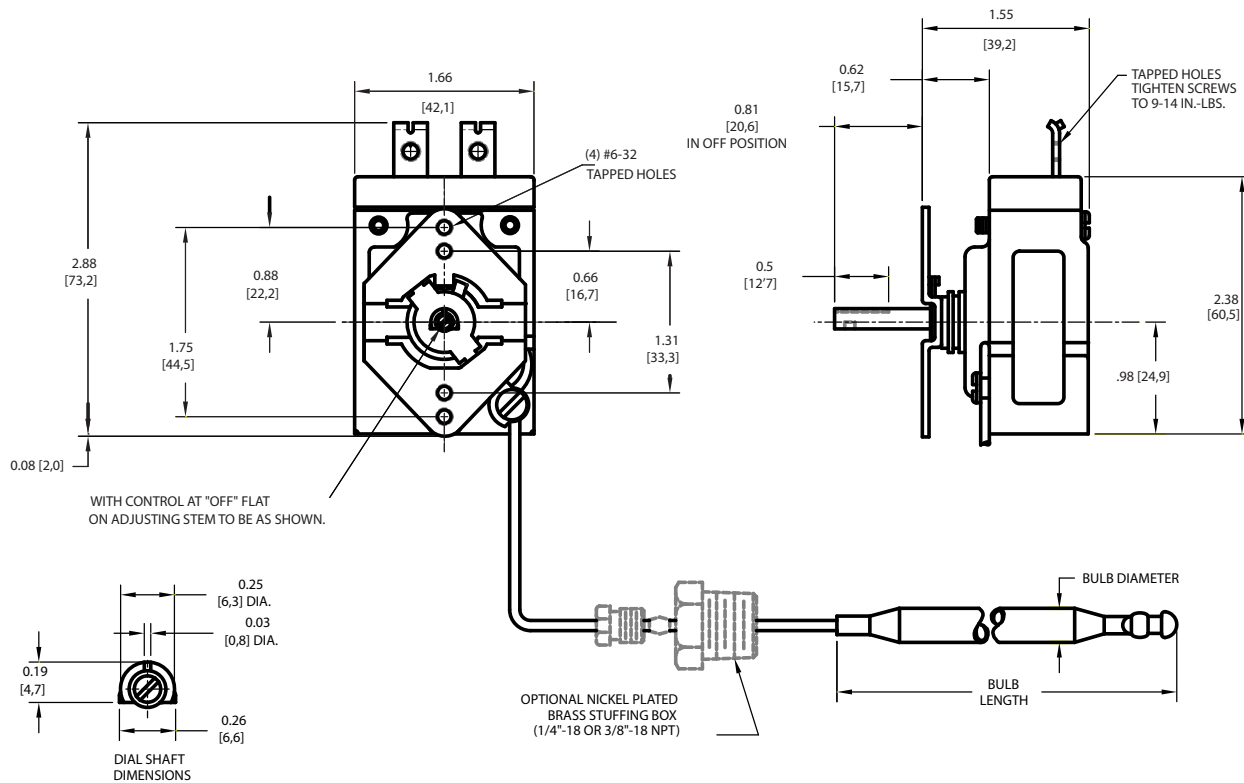
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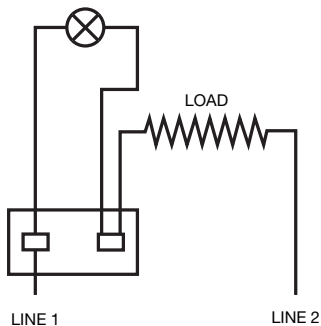
PRODUCT DIMENSIONS

Dimensions are inches and [millimeters].

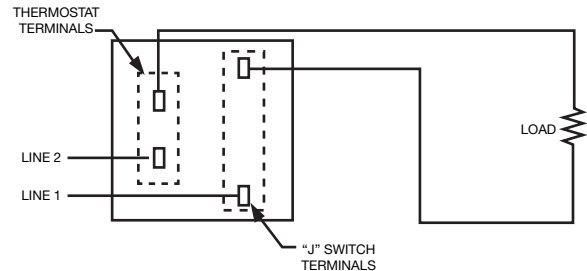
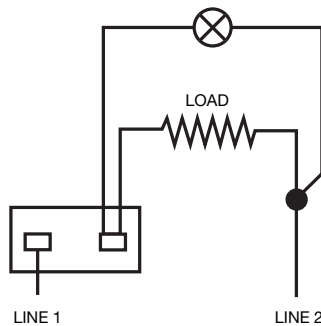


WIRING DIAGRAMS

PILOT LIGHT (OPTIONAL) IS ON WHEN THERMOSTAT SWITCH IS OFF



PILOT LIGHT (OPTIONAL) IS OFF WHEN THERMOSTAT SWITCH IS OFF



Robertshaw

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