TEMPERATURE

ST-S*

STAINLESS STEEL FLUSH-MOUNT THERMISTOR AND RTD SENSORS ST-S* SERIES



Precon

DESCRIPTION

The **PreCon Model ST-S* Stainless Steel Flush-Mount Thermistor and RTD Sensor** provides precision room temperature sensing for building automation systems. The active sensing element is made of a highly stable precision thermistor material or Platinum RTD. This material is ruggedized to provide moisture/vapor resistance and is bonded to a 430 stainless steel plate. The back is insulated to reduce interior wall temperature influence. This sensor is intended for interior use only.

FEATURES

- Lifetime warranty
- ±0.36°F (0.2°C) thermistor accuracy
- ±0.27°F (0.15°C) or 0.54°F (0.30 RTD°C) RTD accuracy
- Wide selection of thermistor and RTD curves
- Insulated backing for room temperature response
- Vandal-resistant flush mounting
- Adaptable with many options
- 430 Stainless steel finish
- Easy to mount to wall or back box
- · Standard size plate to cover mounting holes

APPLICATION

SPECIFICATIONS

The **Model ST-S*** is designed to be wall mounted indoors. It is ideal for use in schools or cold storage lockers, where vandalism or fork lifts can damage ordinary wall sensors. The sensor has an insulated back which reduces conductive influences of wall temperatures, yet allows significant convective influences to be sensed. Security screws, **XS** option, are available where tamper proofing is required.

OPERATION

- Setpoint adjustment
- Momentary switch override
- Security screws

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	Temperature Coefficient	
±0.36°F (0.2°C)	Thermistor	Negative temperature coefficient
· ·	RTD	Positive temperature coefficient
±0.72°F (0.40°C)	Temperature Stability	-
+/-0.0774°F (0.043°C)	Thermistor	0.24°F (0.13°C) over five years
±0.27°F (0.15°C)	RTD	Max 0.04% after 1k hours @ 500 °C
±0.54°F (0.30°C)	Heat Dissipation	2.7 mW/°C (power needed to raise
1 contractions of the second s	Kar	the temperature by 1°C)
2.252 kΩ, 3 kΩ, 10 kΩType II, III & III	Enclosure Rating	NEMA 1, Brushed stainless steel
w/11K shunt, 20 kΩ, 100 kΩ	Mounting	Directly to wall or single gang box
	Wiring Terminations	8' of 24 AWG pigtails prestripped
1000Ω Nickel	_	ends, Type 71 & 81 sensors have
100Ω Pt 385 Curve		18" leads
1000Ω Pt 385 Curve	Weight	0.2 lb (0.1 Kg)
1000Ω Pt 375 Curve	Approvals	CE
	Warranty	Lifetime
-40° to 221°F (-40° to 105°C)	-	- 97
	±0.72°F (0.40°C) +/-0.0774°F (0.043°C) ±0.27°F (0.15°C) ±0.54°F (0.30°C) 2.252 kΩ, 3 kΩ, 10 kΩType II, III & III w/11K shunt, 20 kΩ, 100 kΩ 1000Ω Nickel 1000Ω Pt 385 Curve 1000Ω Pt 385 Curve 1000Ω Pt 375 Curve	$\begin{array}{c} \pm 0.36^{\circ} F \ (0.2^{\circ} C) & \text{Thermistor} \\ RTD \\ \pm 0.72^{\circ} F \ (0.40^{\circ} C) \\ \pm 0.0774^{\circ} F \ (0.043^{\circ} C) \\ \pm 0.27^{\circ} F \ (0.15^{\circ} C) \\ \pm 0.54^{\circ} F \ (0.30^{\circ} C) \\ \end{array} \\ \begin{array}{c} 2.252 \ \mathrm{k\Omega}, \ 3 \ \mathrm{k\Omega}, \ 10 \ \mathrm{k\Omega} Type \ II, \ III \ \& \ III \\ w/11 K \ shunt, \ 20 \ \mathrm{k\Omega}, \ 100 \ \mathrm{k\Omega} \\ \end{array} \\ \begin{array}{c} Enclosure \ Rating \\ Mounting \\ Wiring \ Terminations \\ I000\Omega \ Nickel \\ 1000\Omega \ Pt \ 385 \ Curve \\ 1000\Omega \ Pt \ 385 \ Curve \\ 1000\Omega \ Pt \ 375 \ Curve \\ \end{array} \\ \begin{array}{c} Weight \\ Approvals \\ Warranty \\ \end{array} \end{array}$

September 2016

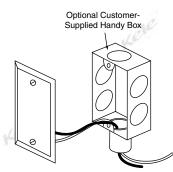
TEMPERATURE

STAINLESS STEEL FLUSH-MOUNT THERMISTOR AND RTD SENSORS **ST-S* SERIES**

MOUNTING

Toggle bolts or other direct wall-mount screws can be used where conduit is not required. Adapters are not required when mounting directly to electrical outlet boxes. Tighten mounting screws, crushing foam gasketing until plate edges lightly touch the wall. Insulate or seal all interior holes to prevent drafts from affecting the temperature readings. Terminate with butt splices or soldering. Twist on wire connectors are not recommended.

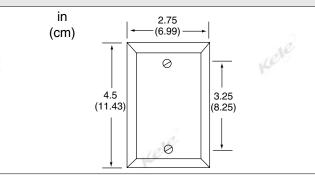
Basic model comes with screws for stainless steel faceplate, two #6-32 screws for handy-box mounting, and 8' (2.4m) of 24 AWG wire. Security screws (**XS** Option) are #6-32 with a spanner head.



The sensor should be mounted approximately five feet above the floor, on an interior wall, away from any heating or cooling generating devices.

877-826-9037 USA kele.com

DIMENSIONS



ORDERING INFORMATION

MODEL DESCRIPTION ST-S3 10,0002 flush-mount thermistor @ 77°F (25°C), Type III (gray leads) ST-S11K 10,0002 flush-mount thermistor @ 77°F (25°C), Type III (gray leads) ST-S21 22520 flush-mount thermistor @ 77°F (25°C), Type II (gray leads) ST-S24 10,0002 flush-mount thermistor @ 77°F (25°C), Type II (gray leads) ST-S24 10,0002 flush-mount thermistor @ 77°F (25°C), Type II (gray leads) ST-S42 20,0002 flush-mount thermistor @ 77°F (25°C), Type II (gray leads) ST-S43 10,0002 flush-mount thermistor @ 77°F (25°C), Type IV (green leads) ST-S44 20,0002 flush-mount thermistor @ 77°F (25°C), Type IV (green leads) ST-S45 10002 flush-mount RTD @ 32°F (0°C), 385 platinum curve (yellow leads) ST-S61 10002 flush-mount RTD @ 32°F (0°C), 385 platinum curve (gleow leads) ST-S81 10002 flush-mount RTD @ 32°F (0°C), 385 platinum curve (gleow leads) ST-S81 10002 flush-mount RTD @ 32°F (0°C), 375 platinum curve (gleow leads) ST-S91 10002 flush-mount RTD @ 32°F (0°C), 385 platinum curve (gleow leads) ST-S91 10002 flush-mount RTD @ 32°F (0°C), 385 platinum curve (gleow leads) X25 25' (7.6m) lead length 24 AWG X4 Setpoint adjustment (0 to 10kΩ) XA Setpoint adjustment (0 to 10,0002 resist					
ST-S11K 10,000Ω flush-mount thermistor @ 77°F (25°C), Type III (green leads) ST-S21 2252Ω flush-mount thermistor @ 77°F (25°C), Type III (green leads) ST-S24 10,000Ω flush-mount thermistor @ 77°F (25°C), Type III (green leads) ST-S24 10,000Ω flush-mount thermistor @ 77°F (25°C), Type III (green leads) ST-S27 100,000Ω flush-mount thermistor @ 77°F (25°C), Type IV (green leads) ST-S42 20,000Ω flush-mount thermistor @ 77°F (25°C), Type IV (green leads) ST-S43 1000Ω flush-mount RTD @ 70°F (21°C), nickel curve (yellow leads) ST-S41 100Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (yellow leads) ST-S81 100Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (yellow leads) ST-S81 100Ω flush-mount RTD @ 32°F (0°C), 375 platinum curve (green leads) OPTIONS X25 X25 25' (7.6m) lead length 24 AWG XA Setpoint adjustment (0 to 10kΩ) XA1K Setpoint adjustment (0 to 10,00Ω resitance input) XA1500 Setpoint adjustment (0 to 1,500Ω, resistance input) XD Dula sensors XK Custom logo XM Momentary switch wired N.O. to terminal block XN Certificate, one reference point3 32°F/158°F(0°C/25°C/70°C)	MODEL	DESCRIPTION			
ST-S21 2252Ω flush-mount thermistor @ 77°F (25°C), Type II (blue leads) ST-S22 3000Ω flush-mount thermistor @ 77°F (25°C), Type II (blue leads) ST-S24 10,000Ω flush-mount thermistor @ 77°F (25°C), Type II (yellow leads) ST-S24 20,000Ω flush-mount thermistor @ 77°F (25°C), Type II (gray leads) ST-S42 20,000Ω flush-mount thermistor @ 77°F (25°C), Type II (gray leads) ST-S43 100Ω flush-mount RTD @ 70°F (21°C), Type IV (green leads) ST-S44 20,000Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (yellow leads) ST-S45 100Ω flush-mount RTD @ 32°F (0°C), 375 platinum curve (yellow leads) ST-S45 100Ω flush-mount RTD @ 32°F (0°C), 375 platinum curve (green leads) ST-S91 1000Ω flush-mount RTD @ 32°F (0°C), 375 platinum curve (green leads) ST-S91 1000Ω flush-mount RTD @ 32°F (0°C), 375 platinum curve (green leads) X25 25' (7.6m) lead length 24 AWG XA Setpoint adjustment (0 to 1,000Ω resitance input) XA1K Setpoint adjustment (0 to 1,000Ω resitance input) XA1K Setpoint adjustment (0 to 1,000Ω, resistance input) XA Setpoint adjustment (0 to 1,000Ω resitance input) XA1K Setpoint adjustment (0 to 1,000Ω resitance input) XA1 Momentary switch wired N.O. to terminal	ST-S3	10,000Ω flush-mount thermistor @ 77°F (25°C), Type III (gray leads)			
ST-S22 3000Ω flush-mount thermistor @ 77°F (25°C), Type II (blue leads) ST-S24 10,000Ω flush-mount thermistor @ 77°F (25°C), Type II (gray leads) ST-S24 20,000Ω flush-mount thermistor @ 77°F (25°C), Type II (gray leads) ST-S42 20,000Ω flush-mount thermistor @ 77°F (25°C), Type IV (green leads) ST-S63 1000Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (yellow leads) ST-S81 100Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (green leads) ST-S85 1000Ω flush-mount RTD @ 32°F (0°C), 375 platinum curve (green leads) ST-S91 1000Ω flush-mount RTD @ 32°F (0°C), 375 platinum curve (green leads) ST-S91 1000Ω flush-mount RTD @ 32°F (0°C), 375 platinum curve (green leads) OPTIONS X25 25' (7.6m) lead length 24 AWG XA Setpoint adjustment (0 to 10kΩ) XA1K XA1K Setpoint adjustment (0 to 1,500Ω, resistance input) XA XA Setpoint adjustment (0Ω to 1,500Ω, resistance input) XA XA Custom logo XM M Momentary switch wired N.O. to terminal block XN XN Custificate, one reference points 32°F/158°F(0°C/25°C/70°C) XN XN NIST certificate, three reference points 32°F/158°F(0°C/25°C/70°C) XN </th <th>ST-S11K</th> <th>10,000Ω flush-mount thermistor @ 77°F (25°C), Type III with 11K shunt (gray leads)</th>	ST-S11K	10,000Ω flush-mount thermistor @ 77°F (25°C), Type III with 11K shunt (gray leads)			
ST-S24 10,000Ω flush-mount thermistor @ 77°F (25°C), Type II (gray leads) ST-S27 100,000Ω flush-mount thermistor @ 77°F (25°C), Type II (gray leads) ST-S42 20,000Ω flush-mount RTD @ 70°F (21°C), Type IV (green leads) ST-S63 1000Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (yellow leads) ST-S63 1000Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (yellow leads) ST-S85 1000Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (yellow leads) ST-S85 1000Ω flush-mount RTD @ 32°F (0°C), 375 platinum curve (plue leads) ST-S81 1000Ω flush-mount RTD @ 32°F (0°C), 375 platinum curve (green leads) ST-S81 1000Ω flush-mount RTD @ 32°F (0°C), 375 platinum curve (green leads) ST-S81 1000Ω flush-mount RTD @ 32°F (0°C), 375 platinum curve (green leads) ST-S81 1000Ω flush-mount RTD @ 32°F (0°C), 375 platinum curve (green leads) X45 Setpoint adjustment (0 to 10kΩ) XA1K Setpoint adjustment (0 to 10kΩ) XA1K Setpoint adjustment (0Ω to 1,500Ω, resistance input) XD Dual sensors XK Curtificate, one reference point 32°F(0°C) XM Momentary switch wired N.O. to terminal block XN Certificate, three reference points 32°F/77°F/158°F(0°C/C) X	ST-S21	2252Ω flush-mount thermistor @ 77°F (25°C), Type II (green leads)			
ST-S27 100,000Ω flush-mount thermistor @ 77°F (25°C), Type II (gray leads) ST-S42 20,000Ω flush-mount thermistor @ 77°F (25°C), Type IV (green leads) ST-S63 1000Ω flush-mount RTD @ 70°F (21°C), a85 platinum curve (yellow leads) ST-S71 100Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (yellow leads) ST-S81 1000Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (yellow leads) ST-S81 1000Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (yellow leads) ST-S91 1000Ω flush-mount RTD @ 32°F (0°C), 375 platinum curve (green leads) OPTIONS X25 X25 25' (7.6m) lead length 24 AWG XA Setpoint adjustment (0 to 10kΩ) XA1K Setpoint adjustment (0 to 1,500Ω, resistance input) XD Dual sensors XK Custom logo XM Momentary switch wired N.0. to terminal block XN Certificate, one reference points 32°F/0°C) XN1 NIST certificate, two reference points 32°F/158°F(0°C/25°C/70°C) XN2 NIST certificate, three reference points 32°F/7158°F(0°C/25°C/70°C) XN3 NIST certificate, three reference points 32°F/7158°F(0°C/25°C/70°C) XN4 NIST certificate, three reference points 32°F/75°L58°F(0°C/25°C/70°C) <	ST-S22	3000Ω flush-mount thermistor @ 77°F (25°C), Type II (blue leads)			
ST-S42 20,000Ω flush-mount RTD @ 70°F (25°C), Type IV (green leads) ST-S63 1000Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (yellow leads) ST-S71 100Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (yellow leads) ST-S85 1000Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (blue leads) ST-S85 1000Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (blue leads) ST-S85 1000Ω flush-mount RTD @ 32°F (0°C), 375 platinum curve (green leads) OPTIONS X25 X25 25' (7.6m) lead length 24 AWG XA1 K Setpoint adjustment (0 to 10kΩ) XA1K Setpoint adjustment (0 to 10,00Ω resistance input) XA1K Setpoint adjustment (0 Ω to 1,500Ω, resistance input) XD Dual sensors XK Custom log0 XM Momentary switch wired N.O. to terminal block XN Certificate, one reference points 32°F/158°F(0°C) XN1 NIST certificate, three reference points 32°F/75°C/ XN2 NIST certificate, three reference points 32°F/75°F/158°F(0°C/25°C/70°C) XN3 NIST certificate, three reference points 32°F/75°F/158°F(0°C/25°C/70°C) XN3 NIST certificate, three reference points 32°F/75°F/158°F(0°C/25°C/70°C) XN3 N	ST-S24	10,000Ω flush-mount thermistor @ 77°F (25°C), Type II (yellow leads)			
ST-S63 1000Ω flush-mount RTD @ 70°F (21°C), nickel curve (yellow leads) ST-S71 100Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (yellow leads) ST-S81 100ΩΩ flush-mount RTD @ 32°F (0°C), 385 platinum curve (yellow leads) ST-S85 100ΩΩ flush-mount RTD @ 32°F (0°C), 385 platinum curve (yellow leads) ST-S91 100ΩΩ flush-mount RTD @ 32°F (0°C), 385 platinum curve (green leads) ST-S91 100ΩΩ flush-mount RTD @ 32°F (0°C), 375 platinum curve (green leads) X25 25' (7.6m) lead length 24 AWG XA Setpoint adjustment (0 to 10kΩ) XA1K Setpoint adjustment (0 to 1,000Ω resitance input) XA1K Setpoint adjustment (0 Ω to 1,500Ω, resistance input) XD Dual sensors XK Custom logo XM Momentary switch wired N.O. to terminal block XN Certificate, one reference point 32°F/0°C/ XN1 NIST certificate, two reference points 32°F/77°F/158°F(0°C/25°C/70°C) XN2 NIST certificate, thore reference points 32°F/77°F/158°F(0°C/25°C/70°C) XN3 NIST certificate, thore reference points 32°F/77°F/158°F(0°C/25°C/70°C) XN4 Matched sensor pair, matched to ±0.1°F, 0.05°C (must order two sensors) XS Security screws (SD-6 spanner screwdriver require	ST-S27	100,000Ω flush-mount thermistor @ 77°F (25°C), Type II (gray leads)			
ST-S71 100Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (yellow leads) ST-S81 100Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (yellow leads) ST-S85 1000Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (yellow leads) ST-S91 1000Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (green leads) OPTIONS X25 25' (7.6m) lead length 24 AWG XA Setpoint adjustment (0 to 10kΩ) XA1K XA1K Setpoint adjustment (0 to 1,500Ω, resistance input) XA1K XD Dual sensors XK XK Custom logo XM Momentary switch wired N.O. to terminal block XN XN1 NIST certificate, one reference point 32°F(0°C) XN2 NIST certificate, two reference points 32°F/75°F/158°F(0°C/70°C) XN3 NIST certificate, two reference points 32°F/75°F/158°F(0°C/25°C/70°C) XN4 NIST certificate, two reference points 32°F/75°F/158°F(0°C/25°C/70°C) XN3 NIST certificate, three reference points 32°F/75°F/158°F(0°C/25°C/70°C) XN4 Security screws (SD-6 spanner screwdriver required) XZ Three wire RTD connections (Optional only on Type 81, standard on Type 71) XZ Three wire RTD connections (Optional only on Type 81, standard on Type 71)	ST-S42	20,000Ω flush-mount thermistor @ 77°F (25°C), Type IV (green leads)			
ST-S81 100Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (yellow leads) ST-S85 1000Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (blue leads) ST-S91 1000Ω flush-mount RTD @ 32°F (0°C), 375 platinum curve (green leads) OPTIONS X25 25' (7.6m) lead length 24 AWG XA Setpoint adjustment (0 to 1000Ω resitance input) XA1K XA1K Setpoint adjustment (0 to 1.000Ω resitance input) XA1K XD Dual sensors XK XM Momentary switch wired N.O. to terminal block XN XN1 NIST certificate, one reference point 32°F/0°C) XN1 XN2 NIST certificate, three reference points 32°F/75°F/158°F(0°C/70°C) XN3 XN3 NIST certificate, three reference points 32°F/75°F/158°F(0°C/70°C) XN3 XN3 NIST certificate, three reference points 32°F/75°F/158°F(0°C/70°C) XN3 XN3 NIST certificate, three reference points 32°F/75°F/158°F(0°C/25°C/70°C) XN3 XS Security screws (SD-6 spanner screwdriver required) XZ XZ Three wire RTD connections (Optional only on Type 81, standard on Type 71) XZ ST-S27 Three wire RTD connections (Optional only on Type 81, standard on Type 71) XZ <	ST-S63	1000Ω flush-mount RTD @ 70°F (21°C), nickel curve (yellow leads)			
ST-S85 1000Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (blue leads) ST-S91 1000Ω flush-mount RTD @ 32°F (0°C), 375 platinum curve (green leads) OPTIONS X25 25' (7.6m) lead length 24 AWG XA Setpoint adjustment (0 to 10kΩ) XA1K XA1K Setpoint adjustment (0 to 10kΩ) XA1K XA1K Setpoint adjustment (0 to 1,000Ω resitance input) XA1K XD Dual sensors XK XW Custom logo XM Momentary switch wired N.O. to terminal block XN XN Certificate, one reference point 32°F(0°C) XN2 NIST certificate, one reference point 32°F(77°C/158°F(0°C/25°C/70°C) XN3 NIST certificate, three reference point 32°F/77°C/158°F(0°C/25°C/70°C) XN4 Security screws (SD-6 spanner screwdriver required) XZ Three wire RTD connections (Optional only on Type 81, standard on Type 71)	ST-S71				
ST-S91 1000Ω flush-mount RTD @ 32°F (0°C), 375 platinum curve (green leads) OPTIONS X25 25' (7.6m) lead length 24 AWG XA Setpoint adjustment (0 to 10kΩ) XA1K XA1K Setpoint adjustment (0 to 10kΩ) XA1500 XA1500 Setpoint adjustment (0 to 1,500Ω, resistance input) XD D Dual sensors XK Custom logo XM Momentary switch wired N.O. to terminal block XN Certificate of conformance XN1 NIST certificate, one reference point 32°F(0°C) XN2 XN3 NIST certificate, two reference points 32°F/77°F/158°F(0°C/70°C) XN3 NIST certificate, two reference points 32°F/77°F/158°F(0°C/25°C/70°C) XN3 Security screws (SD-6 spanner screwdriver required) XZ Three wire RTD connections (Optional only on Type 81, standard on Type 71) ST-S27 TM Example: ST-S27-XM 100,000Ω Type II stainless steel flush-mount sensor					
OPTIONS X25 25' (7.6m) lead length 24 AWG XA Setpoint adjustment (0 to 1000Ω resitance input) XA1K Setpoint adjustment (0 to 1,000Ω resitance input) XA1K Setpoint adjustment (0 to 1,000Ω resitance input) XA1K Setpoint adjustment (0 to 1,000Ω resitance input) XD Dual sensors XK Custom logo XM Momentary switch wired N.O. to terminal block XN Certificate of conformance XN1 NIST certificate, one reference point 32°F(0°C) XN2 NIST certificate, two reference points 32°F/77°F/158°F(0°C/25°C/70°C) XN3 NIST certificate, three reference points 32°F/77°F/158°F(0°C/25°C/70°C) XN3 NIST certificate, three reference points 32°F/77°F/158°F(0°C/25°C/70°C) XN4 Matched sensor pair, matched to ±0.1°F, 0.05°C (must order two sensors) XS Security screws (SD-6 spanner screwdriver required) XZ Three wire RTD connections (Optional only on Type 81, standard on Type 71) XZ FX-S27-XM 100,000Ω Type II stainless steel flush-mount sensor	ST-S85	1000 Ω flush-mount RTD @ 32°F (0°C), 385 platinum curve (blue leads)			
X25 25' (7.6m) lead length 24 AWG XA Setpoint adjustment (0 to 10k2) XA1K Setpoint adjustment (0 to 1,000Ω resitance input) XA1500 Setpoint adjustment (0 Ω to 1,500Ω, resistance input) XD Dual sensors XK Custom logo XM Momentary switch wired N.O. to terminal block XN Certificate of conformance XN1 NIST certificate, one reference point 32°F(0°C) XN2 NIST certificate, three reference points 32°F/758°F(0°C/70°C) XN3 NIST certificate, three reference points 32°F/758°F(0°C/70°C) XN3 NIST certificate, three reference points 32°F/758°F(0°C/70°C) XN4 Security screws (SD-6 spanner screwdriver required) XZ Three wire RTD connections (Optional only on Type 81, standard on Type 71) XI Example: ST-S27-XM 100,000Ω Type II stainless steel flush-mount sensor	ST-S91	1000Ω flush-mount RTD @ 32°F (0°C), 375 platinum curve (green leads)			
XA Setpoint adjustment (0 to 10kΩ) XA1K Setpoint adjustment (0 to 1,000Ω resitance input) XA1S00 Setpoint adjustment (0 to 1,000Ω resitance input) XD Dual sensors XK Custom logo XM Momentary switch wired N.O. to terminal block XN1 NIST certificate of conformance XN2 NIST certificate, one reference point 32°F(0°C) XN3 NIST certificate, two reference points 32°F/158°F(0°C/70°C) XN3 NIST certificate, three reference points 32°F/77°F/158°F(0°C/25°C/70°C) XN3 NIST certificate, three reference points 32°F/77°F/158°F(0°C/25°C/70°C) XP Matched sensor pair, matched to ±0.1°F, 0.05°C (must order two sensors) XS Security screws (SD-6 spanner screwdriver required) XZ Three wire RTD connections (Optional only on Type 81, standard on Type 71) ST-S27 - XM		OPTIONS			
XA1K Setpoint adjustment (0 t0 1,000Ω resitance input) XA1500 Setpoint adjustment (0Ω to 1,500Ω, resistance input) XD Dual sensors XK Custom logo XM Momentary switch wired N.O. to terminal block XN Certificate of conformance XN1 NIST certificate, one reference point 32°F(0°C) XN2 NIST certificate, two reference point 32°F/77°F/158°F(0°C/70°C) XN3 NIST certificate, three reference point 32°F/77°F/158°F(0°C/25°C/70°C) XN3 NIST certificate, three reference point 32°F/77°F/158°F(0°C/25°C/70°C) XP Matched sensor pair, matched to ±0.1°F, 0.05°C (must order two sensors) XS Security screws (SD-6 spanner screwdriver required) XZ Three wire RTD connections (Optional only on Type 81, standard on Type 71) ST-S27 -		X25 25' (7.6m) lead length 24 AWG			
XA1500 Setpoint adjustment (0Ω to 1,500Ω, resistance input) XD Dual sensors XK Custom logo XM Momentary switch wired N.O. to terminal block XN Certificate of conformance XN1 NIST certificate, one reference point 32°F(0°C) XN2 NIST certificate, wo reference points 32°F/75°F/158°F(0°C/25°C/70°C) XN3 NIST certificate, three reference points 32°F/77°F/158°F(0°C/25°C/70°C) XP Matched sensor pair, matched to ±0.1°F, 0.05°C (must order two sensors) XS Security screws (SD-6 spanner screwdriver required) XZ Three wire RTD connections (Optional only on Type 81, standard on Type 71) ST-S27 - XM Example: ST-S27-XM 100,000Ω Type II stainless steel flush-mount sensor		XA Setpoint adjustment (0 to $10k\Omega$)			
XD Dual sensors XK Custom logo XM Momentary switch wired N.O. to terminal block XN Certificate of conformance XN1 NIST certificate, one reference point 32°F(0°C) XN2 NIST certificate, two reference points 32°F/158°F(0°C/70°C) XN3 NIST certificate, three reference points 32°F/158°F(0°C/25°C/70°C) XP Matched sensor pair, matched to ±0.1°F, 0.05°C (must order two sensors) XS Security screws (SD-6 spanner screwdriver required) XZ Three wire RTD connections (Optional only on Type 81, standard on Type 71)		XA1K Setpoint adjustment (0 to 1,000 Ω resitance input)			
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	l	XZ Three wire RTD connections (Optional only on Type 81, standard on Type 71)			
	KT 4				
RELATED PRODUCTS					
KT1 Mounting screwdriver 1/16" allen key	SD-6				
KT1 Mounting screwdriver 1/16" allen key SD-6 Security spanner screwdriver (required for XS option)	T81U-XR	F81U-XR 100 ohm. Type 81 4-20 mA temperature transmitter, custom rangeable			
KT1Mounting screwdriver 1/16" allen keySD-6Security spanner screwdriver (required for XS option)					
KT1Mounting screwdriver 1/16" allen keySD-6Security spanner screwdriver (required for XS option)T81U-XR100 ohm, Type 81 4-20 mA temperature transmitter, custom rangeable					
KT1Mounting screwdriver 1/16" allen keySD-6Security spanner screwdriver (required for XS option)T81U-XR100 ohm, Type 81 4-20 mA temperature transmitter, custom rangeableT85U-XR1000 ohm, Type 85 4-20 mA temperature transmitter, custom rangeable					
KT1Mounting screwdriver 1/16" allen keySD-6Security spanner screwdriver (required for XS option)T81U-XR100 ohm, Type 81 4-20 mA temperature transmitter, custom rangeableT85U-XR1000 ohm, Type 85 4-20 mA temperature transmitter, custom rangeableT91U-XR1000 ohm, Type 91 4-20 mA temperature transmitter, custom rangeable	UR	Moisture-resistant three-wire butt splice			
KT1Mounting screwdriver 1/16" allen keySD-6Security spanner screwdriver (required for XS option)T81U-XR100 ohm, Type 81 4-20 mA temperature transmitter, custom rangeableT85U-XR1000 ohm, Type 85 4-20 mA temperature transmitter, custom rangeable					

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September 2016