

Automation Components, Inc.

TEMPERATURE | THERMISTORS, RTDS | SUN SHIELD



SUN SHIELD Weather Proof, Thermistor / RTD

The ACI Sun Shield is a reliable solution for protecting the temperature sensors when mounted in a location where an overhang or shade is unavailable. It consists of nine (9) molded, white plastic plates which are used to reduce the thermal effect of the sun and increasing the air flow between the plates. The Sun Shield also provides an added level of protection for the sensors from rain and snow. The Sun Shield is available with any of our standard Balco, Nickel, or Platinum RTDs as well as any of our standard thermistors.

Applications: Outdoor Temperature Monitoring

The ACI Thermistors & RTDs Sun Shield is covered by ACI's Five (5) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's website, www.workaci.com.

Nominal Thermistor Resistive Output @ 77°F	1.8K Series: 1.8KΩ (Red/Yellow)	CSI Series: 10KΩ (Green/Yellow)	
(25°C) (Lead Wire Colors) Non-Linear NTC	3K Series: 3KΩ (White/Brown)	10KS Series: 10KΩ (White/Blue)	
(Negative Temperature Coefficient):	AN Series (Type III): 10KΩ (White/White)	10K-E1 Series: 10KΩ (Gray/Orange)	
	AN-BC Series: 5.238KΩ (White/Yellow)	20K Series: 20KΩ (Brown/Blue)	
	CP Series (Type II): 10KΩ (White/Green)	100KS Series: 100KΩ (Black/Yellow)	
Thermistor Accuracy 32-158°F (0-70°C):	+/- 0.36°F (0.2°C) except 10K-E1 Series: +/- 0.54°F (0.3°C)		
	1.8K Series: +/- 0.9°F (0.5°C) @ 77°F (25°C) & +/- 1.8°F (1.0°C) from 32 to 158°F (0 to 70°C)		
Thermistor Power Dissipation Constant:	3 mW/°C except 1.8K Series: 1 mW/°C; 10K-E1 Series: 2 mW/°C		
Thermistor Sensor Response Time (T63):	10 Seconds nominal		
Lead Wire Length Conductor Size:	14" (35.6 cm) 22 AWG (0.65 mm)		
Insulation Rating:	Etched Teflon (PTFE) Colored Leads Mil Spec 16878/4 Type E		
Platinum RTD (PTC) Number Wires (Wire Colors):	100-2W Series: (Brown/Brown) & RHx-2W-1K Series: (Black/Black)		
	100-3W Series: (Brown/Brown/Black) & RHx-3W-1K Series: (Black/Black/White)		
Platinum RTD Output @ 32°F (0°C):	100-xW-O-SUN Series: 100 Ohms nominal		
	1K-xW-O-SUN Series: 1000 Ohms nominal (x = # of wires)		
Platinum RTD Tolerance Class:	+/-0.06% Class A Tolerance Formula: +/-°C = (0.15°C + (0.002 * t)		
Platinum RTD Din Standard:	DIN EN 60751 (IEC 751)		
Temperature Coefficient:	3850 ppm/ ℃		
Platinum RTD Stability:	+/-0.03% after 1000 Hours @ 572°F (300°C)		
Nickel RTD (PTC) Output @ 70°F (21.1°C) (Wire Colors):	1K-NI-O-SUN Series: 1000 Ohms nominal (1K-	Nickel RTD) Red/Red	
Nickel RTD Sensor Accuracy:	32°F (0°C): +/-0.72°F (0.4°F); 70°F (21.1°C): +/-0.34°F (0.17°C); 130°F (54.4°C): +/-1.00°F (0.56°C)		
Nickel Din Standard:	Din 43760		
Temperature Coefficient (0-100°C):	6370 ppm/°C		
Nickel RTD Stability:	+/-0.05% after 1000 Hours @ 302°F (150°C)		
Balco RTD Output @ 70°F (21.1°C) (Wire Colors):	BALCO-O-SUN Series: 1000 Ohms nominal (B	alco RTD) Orange/Yellow	
Balco RTD Sensor Accuracy 70°F (21.1°C):	+/- 1.0%		
Balco RTD Temperature Coefficient (0-100°C):	4618 ppm/°C		
Balco RTD Stability:	+/-0.05% after 1000 Hours @ 302°F (150°C)		
Temperature Sensor Response Time (T63):	10 Seconds nominal		
Enclosure Specifications (Material, Flammability,	Polystyrene Plastic; UL94-V2; -40 to 158°F (-40 to	o 70°C); NEMA 4X (IP 66)	
Temperature, NEMA/IP Rating):			
Probe Material Probe Dimensions (Length x Diameter	: 304 Stainless Steel 6.00" (152.4 mm) x 0.25" (6.	35mm)	
Product Dimensions (L x W x D):	15.66" (397.88 mm) x 9.38" (238.13 mm) x 7.50" (190.50 mm)		
Product Weight:	5.49 lbs. (2.49 kg)		
Agency Approvals:	CE, RoHS2, WEEE		



CE

X

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CE



DIMENSIONAL DRAWING		
9.38" (238.13mm)	2.23" (56.71mm) 7.50" (199.50mm) 3.32" (84.21mm) 15.66" (397.88mm)	2.55" (64.77mm)
Front View	Right View	Top View

CUSTOM ORDERING	Model # Example: A/ AN-BC O-SUN NIST A. B. C. D.	MODEL #
A. Sensor Series No Selection Required	A/	A /
B. Model Series Select One (1)	100-2W 100-3W 1K-2W 1K-3W 1K-NI BALCO 1.8K 3K 10KS 10K-E1 AN (Type III) AN-BC CP (Type II) CSI 20K 100KS	
C. Configuration No Selection Required	O-SUN = Outside Sun Shield (NEMA 4X)	O-SUN
D. NIST (Temperature) Select One (1)	= No NIST Certificate NIST = NIST Certificate (Must Specify 1, 3 or 5 Points)	