

X10308

Sensors | Temperature

TPSR Thermistor Sensor

Up to 155°C



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KEY FEATURES:

- ✓ **High-Temperature Resistance:** Operates effectively in environments up to 155°C.
- ✓ **Precise Temperature Monitoring:** 220kΩ thermistor at 25°C with a Beta Value of 4461.
- ✓ **Durable Construction:** PTFE/ETFE insulated cable, heatshrink, and epoxy for enhanced durability.
- ✓ **Reliable Insulation:** 10MΩ insulation resistance at 100V DC.
- ✓ **Secure Connections:** Nylon-insulated ring lug rated at 105°C.

The **TPSR Thermistor Sensor** is a high-precision temperature sensing solution designed for a wide range of industrial and commercial applications. Built to withstand harsh environments, this sensor assembly offers reliable performance in temperatures up to 155°C, making it ideal for monitoring and controlling heat-sensitive processes.

The TPSR sensor features a robust 7/0.2 core cable with PTFE/ETFE insulation, rated for continuous operation at 155°C. The thermistor itself is rated at 220kΩ at 25°C with a Beta Value of 4461, providing accurate and consistent temperature readings. Encased in durable heatshrink tubing rated up to 125°C and reinforced with an epoxy mix rated up to 120°C, this sensor is engineered for longevity and durability.

The assembly includes a ring lug with nylon insulation, rated at 105°C, ensuring secure and stable connections in demanding conditions. With an insulation resistance of 10MΩ at 100V DC minimum, the TPSR Thermistor Sensor guarantees safe and efficient operation across a variety of applications.

The TPSR Thermistor Sensor is the ideal choice for accurate, reliable temperature sensing in high-temperature environments, ensuring safety and efficiency in your critical applications.

TECHNICAL SPECIFICATIONS

Heatshrink rated up to	125°C
Epoxy mix rated up to	120°C
Cable: 7/0.2 core. PTFE/ETFE insulated rated at	155°C
Ring lug insulation: Nylon, rated at	105°C
Insulation resistance	10MΩ at 100V dc min.
Thermistor	220kΩ at 25°C/Beta Value 4461

APPLICATIONS:

- Industrial heating systems
- Automotive engine monitoring
- HVAC systems
- Electronics cooling
- Household appliances
- Power generation equipment
- Medical devices
- Laboratory equipment

YOU MUST READ THIS BEFORE INSTALLATION

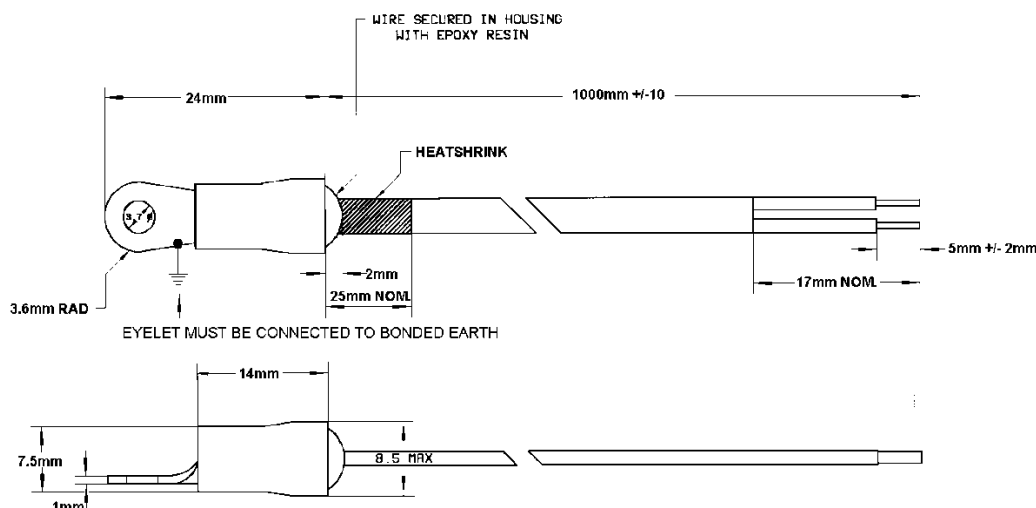
 ELECTRICAL SAFETY	 INSTALLATION REQUIREMENTS	 USER RESTRICTIONS	 USAGE ENVIRONMENT	 HOT SURFACE WARNING
WARNING: RISK OF ELECTRIC SHOCK Always consult the Installation & Maintenance Instructions before connecting this product to the power supply. WARNING: Disconnect Power Before Servicing Ensure the electrical supply is safely disconnected before connecting to any supply, load, or control terminals.	WARNING: Installation by Qualified Personnel Only This product must only be installed or fitted by a competent, qualified installer familiar with the relevant electrical standards and installation practices.	WARNING: Not for Use by Vulnerable Individuals This product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they are supervised or instructed by a person responsible for their safety.	WARNING: Industrial Use Only This is an industrial-grade product and is not intended for household use.	WARNING: Hot Surfaces On certain models, surfaces marked with this symbol become hot during use. Avoid direct contact and follow all thermal safety precautions.

TPSR Thermistor Sensor

Up to 155°C

INSTALLATION

DIMENSIONS & CONNECTIONS



RECOMMENDATIONS

FUSING

It is recommended to use semiconductor (fast acting) type fuses or circuit breakers (Semiconductor - MCB) for unit protection. On initial switch on some loads may need an increased Factor of Safety (F of S) for unit and/or device protection. See SRA datasheet for information.

DOCUMENTS

Other documents available on request, which may be appropriate for your application:

Code	Identity	Description
X10284	TPSR	TPSR datasheet
X10229	RFI	Filtering Recommendations: Addressing the EMC Directive
X10213	ITA	Interaction: Uses for phase angle and for burst fire control
X10255	SRA	Safety Requirements: Addressing the Low Voltage Directive (LVD) including Thermal Data/Cooling, Live Parts Warning, Earthing Requirements and Fusing Recommendations
P01.1	COS	UAL Conditions of Sale

It is recommended that installation and maintenance of this equipment should be done with reference to the current edition of the I.E.T. regulations (BS7671) by suitably qualified/trained personnel. The regulations contain important requirements regarding the safety of electrical equipment. For International standards refer STANDARDS on D of C.

PRODUCT CODE AND RELATED PRODUCT CODE

Product Code	Product Description
A84018	TPSR Thermistor Assembly

FOR USE WITH: A01825 - TPSR-25/25A 230v AC controller