THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

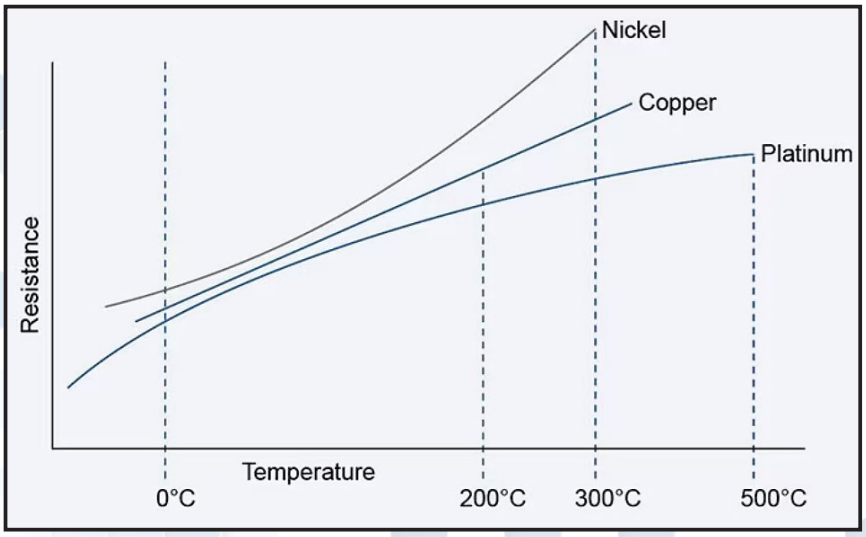
GTH - Resistance Temperature Detectors (RTDs)

The Gund Company's embedded RTD sensors for turbo and hydro generators are used as part of the long-time industry accepted practice, allowing for continuous assessment of equipment condition. The GTH - Resistance Temperature Detectors (RTDs) are placed in the stator winding slots. The RTDs are produced and tested per the IEC 60751.

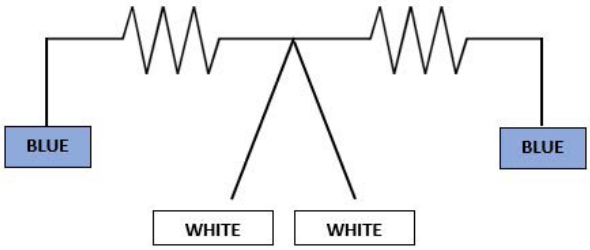
The longer length of the GTH-RTD sensors element designs allows for averaging the measurement process over a greater portion of the slot length. This eliminates the problems related to tip sensitive sensors that can be misleading when 'hot spots' are present. Since stator RTD sensors sometimes exceed 20 inches in body length, this is a useful characteristic the RTD brings to monitoring the health of your generator.

Part ID	Dimensions	Rating	Element	Resistance	Number of Elements	Lead Wire Length	Number of Wires	Lead Wire Gauge	Lead Wire Coating
RTD2A4570.76213.46P41239522RT	18"L x 0.530W x 0.030T	Class H	Platinum	100 Ωm ± 0.5% @ 0C	2	40 ft	4	22 AWG	PTFE/ Shielded

Element Type	Base Resistance	TCR (Ohm/Ohm/C)
Platinum	100	0.00385
Nickel	120	0.00672
Copper	10	0.00427



RTD Resistance versus Temperature

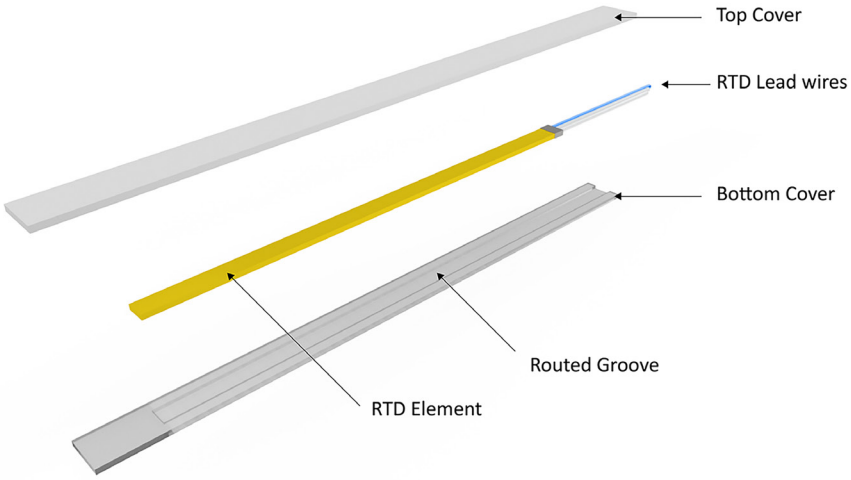


THE GUND COMPANY

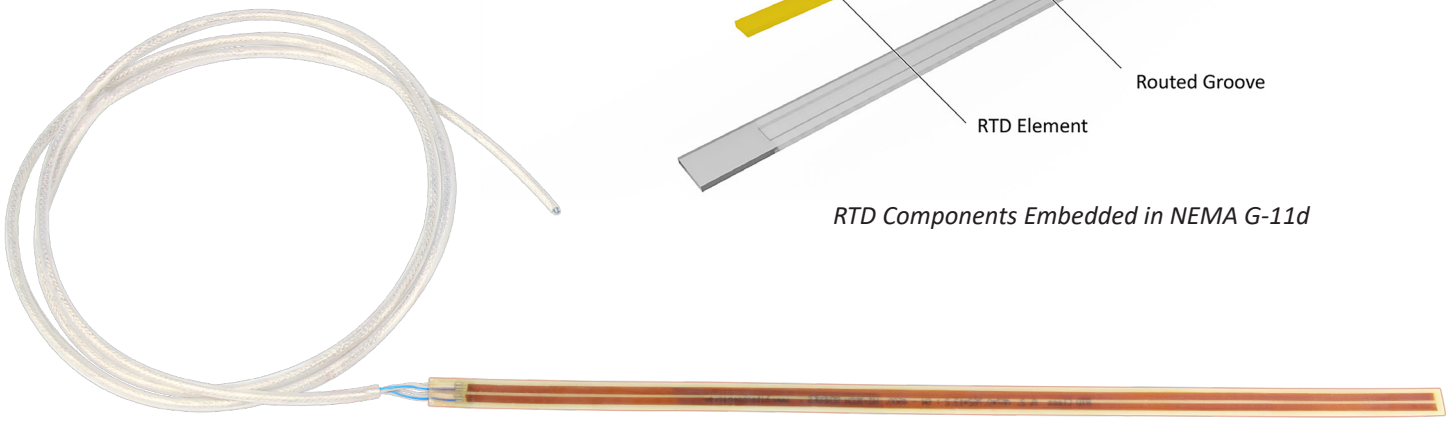
MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

GTH - Resistance Temperature Detectors (RTDs)

Enclosure types include G-11 and Semi-Conductive rigid enclosure of the elements.



RTD Components Embedded in NEMA G-11d



RTD Embedding Materials

The RTD can be embedded in either NEMA G-11 or The Gund Company's Semi-Conductive materials up to 109 inches for installation into the stator of your application. NEMA G-11 provides a mechanical protection for the RTD during the installation phase and protects the RTD throughout its life span. The Semi-Conductive material provides the same mechanical protection with the added benefit of corona dissipation.

RTD Testing

RTDs can be tested upon request up-to 3000 V_{RMS} @60Hz for 1 minute between lead wire and enclosure body.