



# THE GUND COMPANY

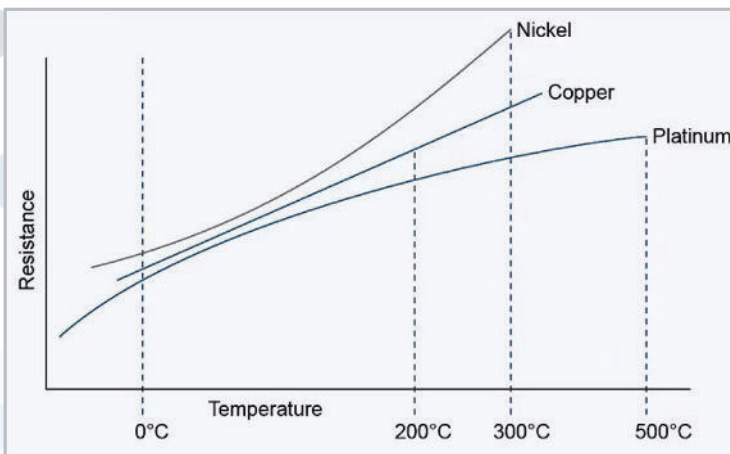
MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

## Resistance Temperature Detectors (RTDs)

Embedded temperature monitoring of motors and generators is a long-time industry accepted practice, allowing for continuous assessment of equipment condition. The embedded method of monitoring utilizes specially designed Resistance Temperature Detectors (RTDs) and Thermocouples (T/Cs) placed outside the major insulation as specified in ANSI C50-10-1990, the sensing element of RTDs are placed in the stator winding slots. The longer length of the 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
RTD1A2540.7626.6P3457226PTS	10"L x 0.260"W x 0.030"T	Class H	Platinum	100 Ωm ± 0.5% @ 0C	1	15 ft	3	26 AWG	PTFE
RTD2A3050.76213.5P3457226PTV	12"L x 0.520"W x 0.030"T	Class H	Platinum	100 Ωm ± 0.5% @ 0C	2	15 ft	6	26 AWG	PTFE
RTD2A4570.76213.5P3457226PTV	18"L x 0.520"W x 0.030"T	Class H	Platinum	100 Ωm ± 0.5% @ 0C	2	15 ft	6	26 AWG	PTFE
RTD1A2540.7626.6C3457226PTS	10"L x 0.260"W x 0.030"T	Class H	Copper	10 Ωm ± 0.5% @ 0C	1	15 ft	3	26 AWG	PTFE
RTD1A2540.7626.6N3457226PTS	10"L x 0.260"W x 0.030"T	Class H	Nickel	120 Ωm ± 0.5% @ 0C	1	15 ft	3	26 AWG	PTFE

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



RTD Resistance versus Temperature



RTD Single Element Paddle

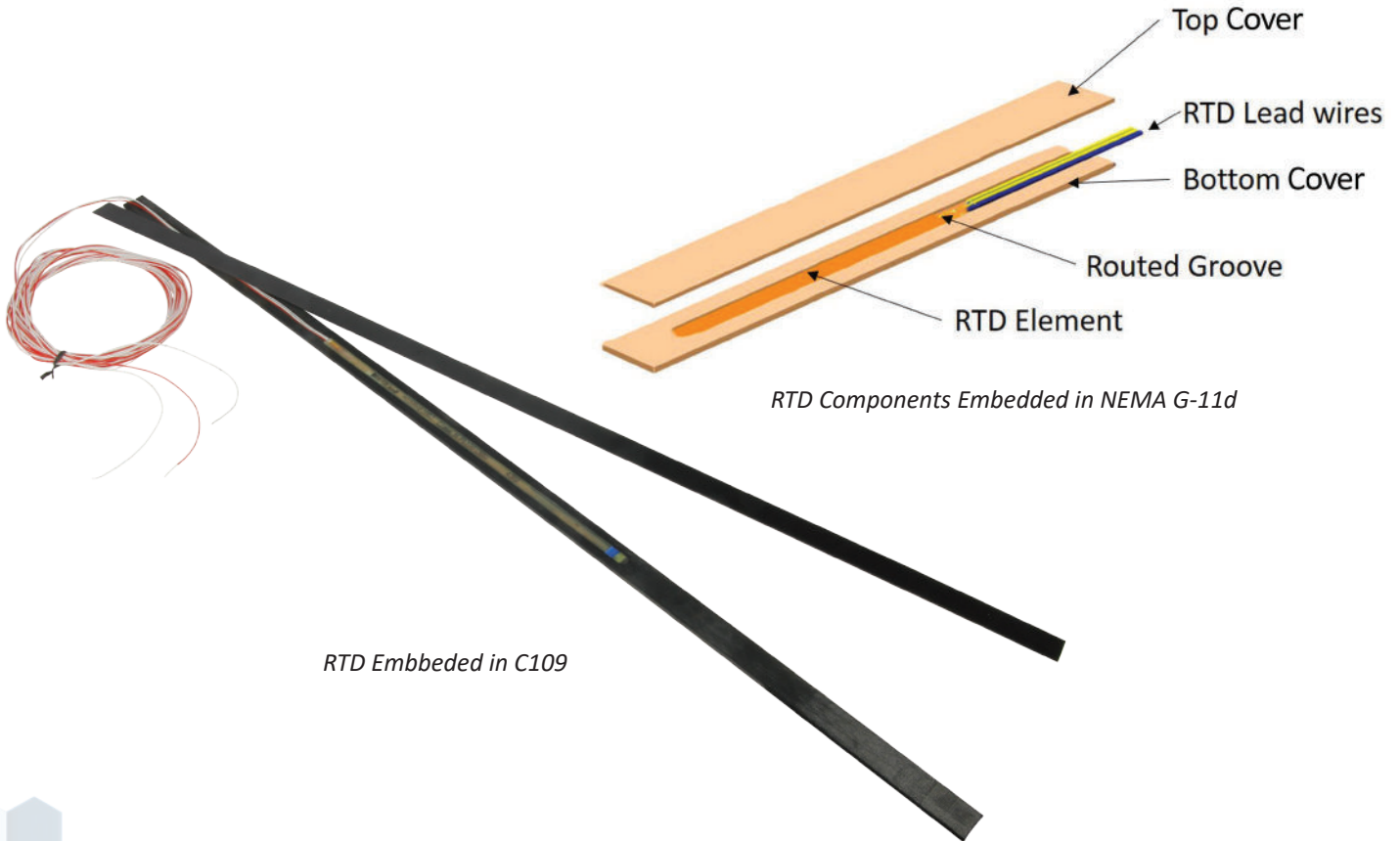


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## Resistance Temperature Detectors (RTDs)

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



### 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<sub>RMS</sub> @60Hz for 1 minute between lead wire and enclosure body.

All of the information, suggestions and recommendations pertaining to the properties and uses of the products herein are based upon tests and data believed to be accurate; however, the final determination regarding suitability of any material described herein for the contemplated, the manner of such use, and whether the use infringes any patents is the sole responsibility of the user. There is no warranty, expressed or implied, including, without limitation warranty of merchantability or fitness for a particular purpose. Under no circumstances shall we be liable for incidental or consequential loss or damage.