Corona Resistant Stator RTD

Overview
Motor manufacturers that use variable speed drives for flexibility and high performance can experience corona related problems. PWM inverters can create high voltage spikes exceeding 1600 volts. Minco has answered the call with a corona resistant RTD. This RTD is specifically designed for the latest generation of variable frequency drives for AC motors. Minco uses special materials and manufacturing techniques to create an RTD that is virtually corona-proof, eliminating the need for expensive reactors or filters for the sensors.

- Designed for AC motors with variable frequency drives (VFD)
- Proprietary design* resists detrimental effects of corona
- Protect expensive motors with an inexpensive overtemperature warning system
- Tested to 10,000 VAC without failure
- Widths from 0.305" to 1.25"
- Lengths from 7" to 30"

Specifications - Model S8025
Temperature: 180°C (356°F); Class H.
Thickness: 0.030" (0.075" max. thickness over lead bulge).
Length: 7" to 30".
Width: 0.305" to 1.25" (2 and 3 lead models); 0.344" to 1.25" (4 lead models).
Leadwires: 2, 3, or 4 AWG #22, stranded copper; PTFE or polyimide insulation.
Element: Platinum; 100 Ω ±0.5% at 0°C; 0.00392 TCR.
Body material: Polyimide, corona resistant.
Dielectric strength: Body: 8000 VRMS at 60 Hz; Leads and leadwire exit (0.5" into body): 5000 VRMS at 60 Hz.

S8025 Model Number
PA Sensing element
PA = Platinum, 100 Ω ±0.5%, 0.00392
120 Body length:
Specify in 0.1" increments
(Example: 120 = 12.0")
Minimum = 70; maximum = 300
T Leadwire insulation:
T = PTFE
K = Polyimide
500 Body width:
Specify in 0.001" increments
(Example: 500 = 0.500")
Minimum = 305 (2 and 3 lead models)
Minimum = 344 (4 lead models)
Maximum = 1250
Z Number of leads per element:
Y = 2 leads
Z = 3 leads
X = 4 leads
36 Lead length in inches
F Leadwire configuration
F = Flat
T = Twisted
S8025PA120T500Z36F = Sample part number

Notes:
* Patent pending
** Reducing the effects of corona on motor windings is the responsibility of the motor manufacturer

Specifications subject to change