

TOSHIBA INTERNATIONAL CORPORATION

RECOMMENDED Initial Temperature RTD Settings

	ALARM	<u>TRIP</u>
Stator RTD's (based on F insulation system)	155 deg.C	165 deg. C
Stator RTD's (based on H insulation system)	165 deg.C	175 deg. C
Bearing RTD's (Sleeve Bearings)	95 deg. C	100 deg. C
Bearing RTD's (Anti Friction) - 5811 & smaller	100 deg. C	110 deg.C
Bearing Anti-friction API designed / & 5812 larger	95 deg. C	100 deg. C

Alternate method of setting relay - if data from actual load & ambient is known:

This is for motors being specified as B rise by resistance and Class F insulation For motors specified B rise by Detector, the settings listed above can be reduced by 10 degree C

	ALARM	TRIP
Final Stator		
Settings	10 deg. + T MAX	20 deg. + T MAX
Final Bearing Settings	10 deg. + T MAX	15 deg. + T MAX

T MAX = Worse case ambient and load conditions, usually trend value during 1 year of operation

RECOMMENDED Vibration Settings

Initial settings Frame Vibrations (NEMA standard 0.15 in/s) Shaft Vibrations Displacement - NEMA 90 um specification	ALARM	TRIP
	0.22 in/s (5.5 mm/s)	0.35 in/s (8.9 mm/s)
	5.4 mil (137 um)	7.2 mil (183 um)

For API design motor, shaft vibration limits can be lowered by 20 um from above settings (70 um specification)

Note after initial start up the settings should be lowered to reflect actual installation :

Shaft vibration alarm setting shall be lowered to 1.8 x loaded vibration settings Shaft vibration trip setting shall be lowered to 2.8 x loaded vibration settings

For example: Motor running at 0.08 in/s = alarm set 0.14 in/s and trip 0.22 in/s

Revision 1 - Dated September 3, 2008 - Additional explanation of Vibration Settings in Field Revision 2 - Dated October 16, 2008 - Increase setting for A/F bearing - Non API motor

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