

Application Manual for NEMA Motors

Temperature Rise Standards

When operated at rated voltage and frequency, the temperature rise of the motor windings, above the ambient temperature should not exceed the values in the following table. Note that separate values are given for motors with a 1.0 service factor and 1.15 service factor. The values given in the table for 1.0 service factor are for motors operated at rated load or nameplate horsepower. The values given for 1.15 service factor are for motors operated at service factor load.

Insulation Class	Maximum Winding Temperature Rise °C						
	1.0 Service Factor				1.15 Service Factor		
	A	B	F	H	A	B	F
	60	80	105	125	70	90	115

Temperature rise values are by resistance method of determination when operated on a 60Hz utility sine wave.

Temperature rise values are based on a reference ambient temperature of 40°C.