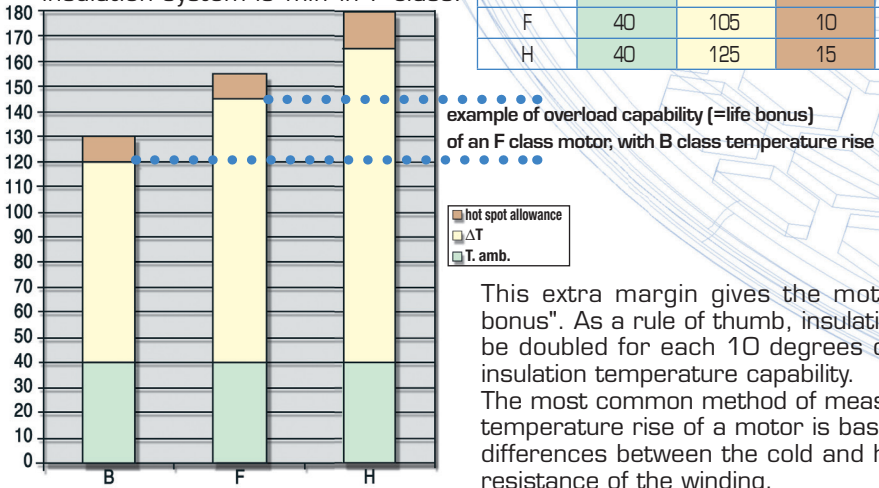
temperature rise ΔT:

The temperature rise "ΔT" is the change in temperature of the entire winding of the motor, including the wire placed deep inside the stator slots, when it is being operated at full load.

For example: if a motor is located in a room with a temperature of 40°C, and then is started and operated continuously at the rated power, the winding temperature would rise from 40°C to a higher temperature. The difference between its starting temperature and the final inner elevated temperature, is the ΔT. Almost all our motors are designed to offer a temperature rise of B class or even lower, while their insulation system is min in F class.

Class	amb T (°C)	ΔT (°C)	hot spot allowance (°C)	Tmax (°C)
A	40	60	5	105
E	40	75	5	120
B	40	80	5	130
F	40	105	10	155
H	40	125	15	180



This extra margin gives the motor a "life bonus". As a rule of thumb, insulation life will be doubled for each 10 degrees of unused insulation temperature capability.

The most common method of measuring the temperature rise of a motor is based on the differences between the cold and hot ohmic resistance of the winding.