# Decrease Your Motor Operating Temperature by Up to 50°C

Heat robs a motor of power and shortens its life. Our thermally conductive epoxy and silicone encapsulants help manage that heat, which enables you to increase the power density of your motor and extend its life. In fact, our studies have shown a temperature decrease of up to 50°C or an increase in power output up to at least 30% when using our materials. Not sure what's the best solution for your application? We can help you select the correct material for your application that aligns with your cost targets and optimize your process to improve performance.





## **ENCAPSULANTS**

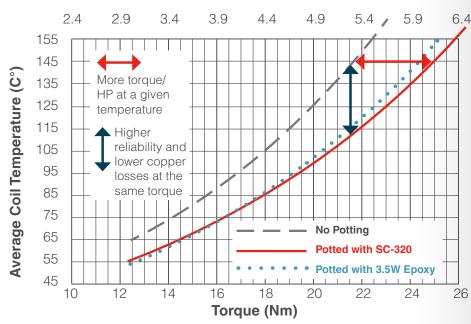
Our encapsulants provide a robust thermal interface between the stator winding and heat sink, and these encapsulants are not only highly thermally conductive but also low in viscosity, enabling them to flow into fine gaps. Furthermore, their high Tg allows for Class H and N ratings with no thermal stress cracks.

**Increase Power:** Get more torque or horsepower from the same size motor, or get the same amount of power from a smaller motor.

**Improve Performance:** We have optimum encapsulants that facilitate optimum heat transfer because of their high thermal conductivity and low viscosity.

**Extend Life:** Keep your motor running at lower temperatures, thereby lengthening its service life.

# **Motor Output Power (HP)**





#### **ENCAPSULANTS**

PRODUCT	CHEMISTRY	THERMAL CONDUCTIVITY (W/mK)	VISCOSITY (cps)	SHORE HARDNESS
THERMOSET SC-305	Silicone	0.7	4000 @ 25°C	A60
THERMOSET SC-309	Silicone	1.0	3600 @ 25°C	A45
THERMOSET SC-315	Silicone	1.5	3400 @ 25°C	A60
THERMOSET SC-252	Silicone	2.5	10,000 @ 25°C	A60
THERMOSET SC-320	Silicone	3.2	22,500 @ 25°C	A60
THERMOSET SC-324	Silicone	4.0	22,000 @ 25°C	A50
THERMOSET EP-2000	Ероху	1.9	1300 @ 60°C	D85
THERMOSET EP-3500	Ероху	3.5	11,700 @ 60°C	D90

- Two-Component
- Room Temperature & Heat Cured Solutions
- Electrically Isolative

## **ABOUT LORD CORPORATION**

LORD Corporation is a diversified technology and manufacturing company developing highly reliable adhesives, coatings, motion management devices, and sensing technologies that significantly reduce risk and improve product performance. For more than 90 years, LORD has worked in collaboration with our customers to provide innovative oil and gas, aerospace, defense, automotive and industrial solutions. With world headquarters in Cary, N.C., LORD has approximately 3,100 employees in 26 countries and operates 19 manufacturing facilities and 10 R&D centers worldwide. LORD actively promotes STEM education and many other community engagement initiatives. For more information, visit http://www.lord.com.

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