

COOLPOLY® THERMALLY CONDUCTIVE PLASTICS

FOR ELECTRIC MOTORS & COIL WOUND DEVICES

CoolPoly thermally conductive injection molding grade thermoplastics are ideally suited for electric motor components, motor encapsulation and other coil wound devices (e.g. solenoids, chokes, transformers, ignition coils, inductors). Conventional plastics are thermal insulators that tend to trap heat and increase winding and motor temperature. Increased temperatures result in reduced motor performance (e.g. power, efficiency) and decreased lifetime. Elevated temperatures also require higher rated component materials or higher electrical insulation system ratings.

Thermally conductive plastics used for motor encapsulation and motor components provide heat sinking, heat conduction and heat dissipation that effectively lowers the device temperature. Design engineers often use the heat dissipation to achieve greater power or efficiency at the same operating temperature.



Encapsulated motors and motor components using thermally conductive plastics provide:

- LOWER WINDING AND PART TEMPERATURES
- INCREASED EFFICIENCY
- BALANCE CONTROL
- INCREASED LIFE
- ENVIRONMENTAL PROTECTION

CoolPoly D3604 is used to encapsulate electric motors and coil windings for various automotive and industrial applications.