

# Product Data Sheet

**A.C. Motors**  
**ALLGUARD<sup>®</sup>**  
*Motor Quality System*



- **Polyrex EM™ Grease (Exxon)**
- **New pulse resistant and abrasion resistant wire**
- **100% solids polyester varnish on all frames**



# Product Overview

U.S. Electrical Motors now offers our new ALLGUARD Motor Quality System on all low voltage NEMA frame motors. This system combines the industry's best motor winding protection with the latest advancements in motor bearing lubrication.

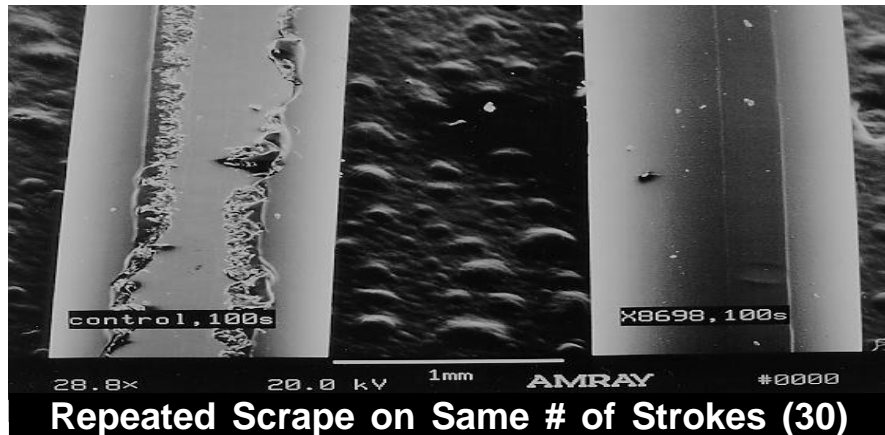
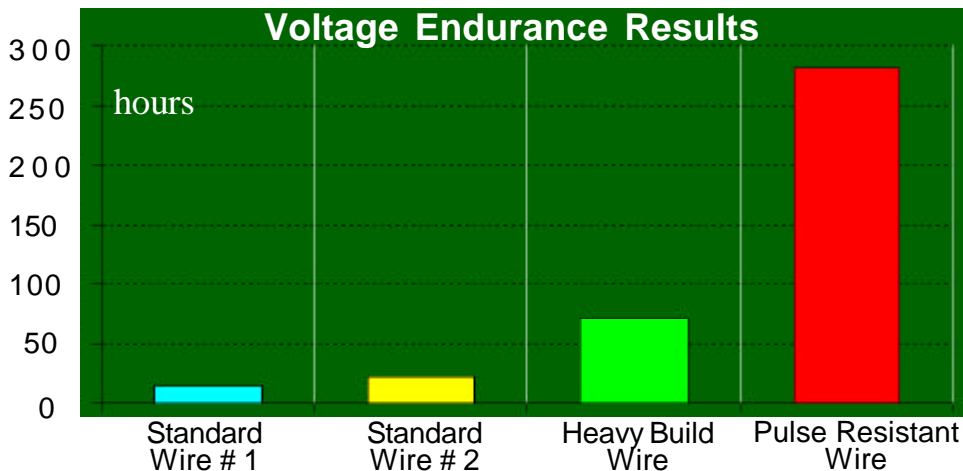
The winding on each low voltage U.S. Motor includes the next generation in pulse endurance wire for improved life. Plus, the wire now features a "Tough Coat" exterior that resists abrasions which can occur during normal winding processes and degrade the insulation properties.

Each winding is also treated with a 100% solids insulation material - on all frame sizes - for greater bond strength and moisture resistance.

In addition, U.S. Motors has now standardized on Exxon Mobil Polyrex EM grease for all grease lubricated bearings. This new and improved lubricant is specifically designed for the conditions associated with electric motor bearings. It provides longer life at higher loads and temperatures, has low noise properties and has good low temperature starting capabilities.

## ALLGUARD Wire Developments in all U.S. Electrical Motors

- Added to all products in June 2000
- Process and product improvement to standard pulse resistant wire
- Higher Temperature Pulse Endurance Performance
- Incorporation of "Tough Wire" Concepts

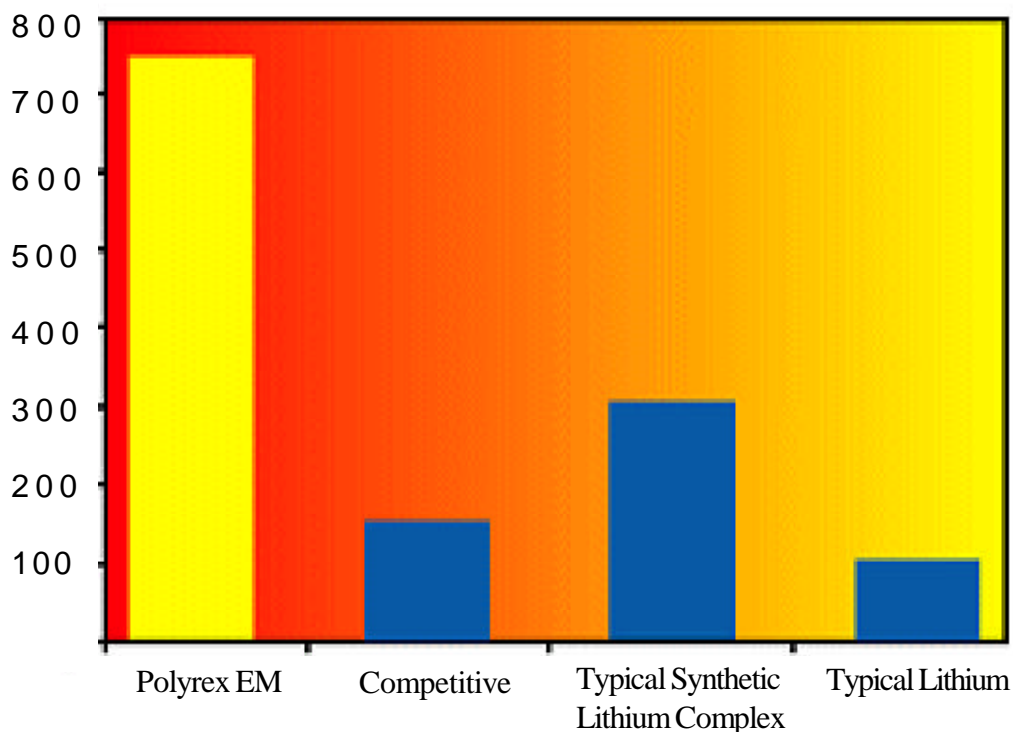


## Product Overview

**ALLGUARD Polyrex EM Grease** is a super-premium polyurea grease that is specially formulated for electric motor bearings that offers the following features and benefits...

- Outstanding long-life, high-temperature lubrication of ball and roller bearings
- Specially formulated for electric motor bearing lubrication
- Excellent mechanical shear stability
- Excellent corrosion resistance, even in the presence of salt water.

**ALLGUARD Super-premium Polyrex EM Grease** sets a new standard for long-life high temperature performance and is specially formulated for lubricating electric motor bearings. It exhibits outstanding lubrication life in bearings operating at high speeds and high temperatures. During ASTM D 3336 High-Temp Grease Life Test, POLYREX EM achieved a lubrication life of more than 700 hours at 177°C (350°F). More than four times better than a competitive polyurea grease and more than seven times better than conventional lithium-complex greases!



## Additional Features

### 100% Solids Polyester Varnish on all frames

U.S. Motors has always used high quality motor varnish systems. Now, 100% solids polyester varnish will be used on all frame sizes. The varnish has outstanding protection with features including...(with one dip & bake)

- 700 times NEMA required humidity resistance
- 2 times film build of water borne varnishes
- Approximately 5000 volt dielectric strength at 25°C
- 2 times the hot bond strength of epoxy varnish

### Future ALLGUARD Class Features

- Improved Paint
- Increased Balance Capabilities



#### Emerson Motors

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WWW Home Page: <http://www.usmotors.com>



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