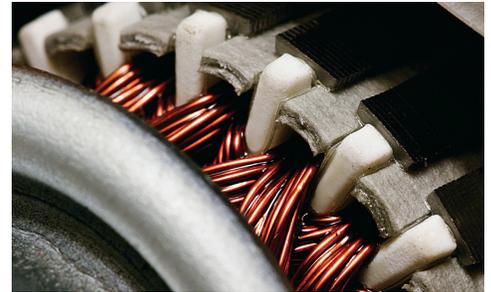


Industrial Motor Listing Program

New UL standard covers field installed motors



With the publication of the Standard for Safety for Rotating Machines — General Requirements, ANSI/UL 1004-1, UL is offering its Listing service for larger industrial motors.

Previously all UL certified motors were Recognized Components rather than Listed machines, except for some special duty motors; motors for hazardous locations and fire pump motors. The new UL program evaluates and, if the machine meets the requirements, ultimately certifies such motors as being suitable for field installation, thus eliminating many of the concerns AHJs raised about approving the installation of Recognized Component motors in the field.

These Listed motors are covered under the Motors product category (PRGY), which can be accessed in the Online Certifications Directory at www.ul.com/database. This category covers three phase motors that are:

- Intended to be field installed in unclassified locations in accordance with Article 430 of the National Electric Code® (NEC),
- 5 horsepower and larger, and
- Classified as NEMA Medium or NEMA Large as defined in NEMA Standard MG-1, “Motors and Generators”.

Previously many of these types of motors were Recognized Components rather than Listed machines. Recognized Component motors have only been evaluated for factory installation into products where the suitability of the combination is determined by UL. They may also be incomplete in

certain constructional features. For example a Recognized Component motor may have energized live parts accessible to the user, and rely on the end product enclosure to prevent the user from contacting live parts. Similarly a Recognized Component motor may not include wiring terminals or compartments that comply with National Electrical Code® (NEC) requirements for field installation, since they may be factory connected to internal product wiring that is not required to comply with NEC requirements.

In September 2008 the first edition of the Standard for Safety for Rotating Machines — General Requirements, ANSI/UL 1004-1 was published. It includes requirements that are appropriate for field installed motors,

including construction requirements that address:

- Protection of ventilation openings,
- Accessibility of uninsulated live parts,
- Field wiring compartments, terminals, and spacings, and
- Equipment grounding considerations.

In addition, the standard includes a series of performance tests, including mechanical and strain relief tests, designed to ensure the equipment is suitable for installation in the field.

The markings for Motors complying with ANSI/UL 1004-1 requirements include a UL Listing Mark and “Electric Motor”. For authorities having jurisdiction (AHJs) the benefits are obvious. No more uncertainty about what aspects of the motor were investigated, and the peace of mind of knowing that the motor has been third party certified for field installation by the most recognized and trusted safety organization in the world.