UL 2299

Outline of Investigation for Grounding Monitor Interrupters

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Summary of Topics

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INTRODUCTION

1 Scope

1.1 These requirements cover grounding monitor interrupters (GMI) that monitor the continuity of the grounding path of the electrical circuit to reduce the risk of electrical shock and intended for use in accordance with the NFPA 70®, *National Electrical Code*® (NEC®).

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1.2 A GMI is intended for use in circuits rated 150 Vac or less to ground.

1.3 These requirements cover devices where the grounding path impedance is not greater than the ungrounded conductors path impedance.

1.4 A GMI functions monitoring grounding continuity. If grounding does not exist when an attempt is made to start using the equipment, the device does not energize the circuitry connected to its load terminals and interrupts the circuit under conditions where grounding is lost during operation.

1.5 A Type I GMI monitors and interrupts the ungrounded conductors when grounding is lost. It may also monitor voltage potential present on the grounding conductor and interrupt the ungrounded and grounded conductors.

1.6 A Type II GMI with a switched equipment grounding interrupter meets requirements of a type I GMI, and has the ability to monitor and interrupt the grounding conductor when potential is present on the grounding conductor.

2 Glossary

2.1 For the purposes of this Outline of Investigation, the following definitions apply.

2.2 ACCESSIBLE PART – A part so located that it can be contacted by a person, either directly or by means of a probe or tool.

2.3 DOUBLE INSULATION – The insulation system resulting from a combination of functional and supplementary insulation.

NOTE: May differ from the IEC definition.

2.4 ENCLOSURE – A surrounding case constructed to provide a degree of protection against incidental contact with the enclosed equipment and to provide a degree of protection to the enclosed equipment against specified environmental conditions.

2.5 ENERGIZED PART – A part at some potential with respect to another part or to earth.

2.6 FUNCTIONAL INSULATION – The insulation necessary for the proper functioning of the device and for basic protection against electrical shock hazard.

NOTE: May differ from the IEC definition.

2.7 HOUSING – The integral envelope directly surrounding the circuit components of the GMI.

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