[Industrial Control Equipment Relating to Hazardous Locations] Industrial Control Panels Relating to Hazardous Locations, NRBX

<u>See General Information for Industrial Control Equipment Relating to Hazardous</u>
Locations

GENERAL

This category covers industrial control panels relating to Class I and II, Division 1 and 2 and Class III hazardous locations, which are factory-wired assemblies of industrial control equipment such as motor controllers, switches, relays and auxiliary devices. The panels may include disconnect means and motor branch-circuit-protective devices. These panels and assemblies are additionally marked if intended for applications such as industrial machinery (including metalworking machine tools, power press controls, and plastic injection molding machinery), crane or hoist control, service equipment use, flame control of fossil-fuel-burning equipment (including incinerators, kilns and drying ovens), marine use, air conditioning and refrigeration equipment.

Industrial control panels relating to hazardous locations are intended for installation in unclassified locations. They are provided with:

- intrinsically safe field wiring as indicated on the product, for field-installed circuit extension into a Division 1 or Division 2 hazardous (classified) locations, or
- nonincendive field wiring as indicated on the product, for field-installed circuit extension only into a Division 2 hazardous (classified) location.

For intrinsically safe field wiring, the energy level available in the hazardous location under normal and abnormal conditions is sufficiently low as not to cause ignition of the specified explosive atmospheres. To maintain the low energy levels, it is necessary that the intrinsically safe and associated equipment be installed and interconnected in accordance with the instructions provided. The intrinsically safe field-installed circuit extensions must be routed in a separate raceway or otherwise reliably segregated from all power and other circuit wiring in accordance with ANSI/NFPA 70, "National Electrical Code" (NEC). This routing or segregation precludes excessive currents and voltages from being impressed on the intrinsically safe circuit, rendering it nonintrinsically safe.

For nonincendive field wiring, the energy level available in the hazardous location only under normal conditions is sufficiently low as not to cause ignition of the specified explosive atmospheres. To maintain the low energy levels, it is necessary that the nonincendive and associated equipment be installed and interconnected in accordance with the instructions provided. The nonincendive field-installed circuit extensions must be routed in accordance with the NEC.

The investigation of industrial control panels relating to hazardous locations does not include investigation of the associated equipment.

LIMITED-PRODUCTION EQUIPMENT

This category also covers single pieces of equipment or equipment manufactured in a limited quantity under a single production run in accordance with UL's Limited Production Certification Program. This limited-production equipment meets all of the same requirements as equipment that may be produced under continuous production runs, except there is no ongoing surveillance (UL Follow-Up Service), since subsequent UL-certified production does not continue after the single run. UL certification is based on the serial number or other discrete identifier of the limited-production equipment, and not based on any model number. A UL Certificate of Compliance is also issued (see **UL CERTIFICATE** below).

PRODUCT IDENTITY

One of the following product identities appears on the product:

Enclosed Industrial Control Panel Relating to Hazardous Locations

Industrial Control Panel Relating to Hazardous Locations

The words "Hazardous Locations" may be abbreviated "Haz. Loc." or "HazLoc."

RELATED PRODUCTS

See:

Elevator Control Panels Relating to Hazardous Locations (FSSA)

Elevator Control Panels for Use in Hazardous Locations (FSNA)

Industrial Control Panels for Use in Hazardous Locations (NNNY)

ADDITIONAL INFORMATION

For additional information, see Equipment for Use in and Relating to Class I, II and III, Division 1 and 2 Hazardous Locations (AAIZ).

REQUIREMENTS

The basic unclassified locations standard used to investigate products in this category is <u>ANSI/UL 508A</u>, "Industrial Control Panels."

The basic hazardous (classified) locations standard used to investigate products in this category is ANSI/UL 698A, "Industrial Control Panels Relating to Hazardous (Classified) Locations," or ANSI/UL 121201, "Nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations."

UL MARK

The Certification Mark of UL on the product is the only method provided by UL to identify products manufactured under its Certification and Follow-Up Service. The <u>Certification Mark</u> for these products includes the UL symbol, the words "CERTIFIED" and "SAFETY," the geographic identifier(s), and a file number.

Alternate UL Mark

The Listing Mark of UL on the product is the only method provided by UL to identify products manufactured under its Listing and Follow-Up Service. The Listing Mark for these products includes the UL symbol (as illustrated in the Introduction of this Directory) together with the word "LISTED," a control number, and the product name "Industrial Control Panel Relating to Hazardous Locations" or "Enclosed Industrial Control Panel Relating to Hazardous Locations."

UL CERTIFICATE

A UL Certificate of Compliance is issued for limited-production equipment investigated under UL's Limited Production Certification Program. Issuance of a UL Certificate of Compliance indicates that UL has investigated a sample of the equipment and determined that it complies with the applicable requirements of this category. Each Certificate of Compliance is valid only for the individual units covered by the investigation and certification by UL.

At a minimum, each Certificate contains the following information:

- Certificate number
- Certificate issue date
- Report reference
- Responsible company name and address
- Limited-production equipment serial number/discrete identifier
- Applicable standards

UL, in performing its functions in accordance with its objectives, does not assume or undertake to discharge any responsibility of the manufacturer or any other party. UL shall not incur any obligation or liability for any loss, expense or damages, including

incidental or consequential damages, arising out of or in connection with the use, interpretation of, or reliance upon this Guide Information.

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The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Certified and covered under UL's Follow-Up Service. Always look for the Mark on the product.

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