

UL TECHNICAL GUIDANCE DOCUMENTS

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Product Category (CCN): NITW

Standard Number: UL 508A

Standard Title: Standard for Industrial Control Panels

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Subject: Use of Components Certified Under NITW2 in Industrial Control Panels

GUIDANCE:

This TGD provides the guidance necessary to determine the acceptability of components covered in the category NITW2 based on information included with the certification of the component and taking into account the conditions in the end-use application. This TGD also applies to cUL Industrial Control Panels covered under the CCN: NITW7.

NITW2 components that are not specifically described in Table C.1.1 (Formerly Table SA1.1) of UL 508A are suitable for use without Procedure description provided the following conditions are satisfied:

1. NITW2 components shall be used in accordance with their ratings and other application information included with their UL Certification. This information shall be made readily available by the end-use equipment manufacturer.
2. NITW2 components shall be installed per the manufacturer specifications. This shall be verified from installation instructions provided with the product or by the NITW2 component manufacturer.
3. The Conditions of Acceptability (CofA) included with the UL Certification for the NITW2 component shall be reviewed by UL staff. Manufacturers shall request these CofAs from their component providers as part of pages from the Component Recognition Report or they shall be obtained from the NITW2 component certification Procedure in the UL Intranet.
4. If a CofA requires additional end-product evaluation (e.g. testing), the component shall NOT be accepted without Procedure description. The following are examples of CofAs that require the component to be Procedure described:

a) Use in specific ambient conditions, such as:

- The use of the component in ambient temperatures in excess of 25°C shall be investigated,
- The component is for use in a 25°C maximum ambient, or
- The component must be used in an ambient temperature less than 40° C.

b) Component testing (e.g. Temperature, Dielectric, etc[mldr]) shall be conducted in the end use.

c) Mechanical performance testing (e.g. Ball Impact Test, Flame Test, Environmental Type Testing, etc.) shall be considered in the end use application. (Applies to all Mechanical Testing per UL 746C, and Environmental Testing per UL 50E).

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- d) RFI/EMI shielding required for proper component operation has not been evaluated.
- e) Instructions and warning markings should be provided (if the contents of the required markings are not specifically described in the CofA).
- f) The suitability of mounting pressure compensation devices on the enclosure shall be evaluated in the end use application.
- g) Strain relief and push back relief evaluations have not been conducted and shall be considered in the end use application.
- h) The acceptability of the mating between a component mounted through an opening in an enclosure and the enclosure wall shall be determined in the end use application.
- i) Test circuits for GFCI receptacles have not been evaluated and no GFCI capabilities are assumed.
- j) The GFCI receptacles do not meet the requirements of UL 508A appendix B for ground fault protection of an unevaluated component.

If there is uncertainty as to how any CofA is satisfied, especially CofA's that are not described in the above examples, UL staff qualified in the end-product category shall be consulted.

RATIONALE FOR GUIDANCE:

There are many types on components certified under the category NITW2. Many of these components have conditions of acceptability that can be determined to be satisfied with application information for the component readily available and without the need for additional evaluation (e.g. testing) when used in a specific application in an industrial control panel. In these situations, it is not necessary to describe in the UL Certification Report / Procedure the means to satisfy the condition(s) of acceptability. The acceptability of a component can be determined each time it is used in a specific application in an industrial control panel using guidelines which insure the correct application and use of the component.

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