

Frequently Asked Questions for the Transition from UL 508 to UL 61010-1 and UL 61010-2-201



FAQ LIST

- 1. What is the transition from UL 508 to UL 61010-1 and UL 61010-2-201 and why is it being done?
- 2. Which Standard(s) are involved?
- 3. Which UL Category Control Numbers (CCNs) are affected?
- 4. Are the requirements for Programmable Controllers being removed from UL 508?
- 5. <u>How will UL 61010-1 and UL 61010-2-201 be implemented? What is the transition schedule?</u>
- 6. Will there be a UL Industry File Review (IFR) for Programmable Controllers currently certified to UL 508?
- 7. How will Programmable Controllers evaluated to UL 508 be identified from products evaluated to UL 61010-2-201 (and UL 61010-1)?
- 8. How will this transition affect end-product standards that currently reference UL 508 for Programmable Controllers?
- 9. Will Programmable Controllers evaluated to UL 61010-1 and UL 61010-2-201 be accepted in the field?
- 10. <u>How will manufacturers of Programmable Controllers evaluated to UL 508 be made</u> aware of this transition?
- 11. Do the national differences of UL 61010-1 and UL 61010-2-201 make it equivalent to UL 508? Specifically, is a Programmable Controller certified to UL 508 able to be certified to UL 61010-1 and UL 61010-2-201) without further investigation?
- 12. <u>Since UL 61010-1 and UL 61010-2-201 are harmonized with IEC 61010-1 and UL 61010-2-201</u>, does compliance to UL 61010-1 (and UL 61010-2-201) represent compliance with IEC 61010-1 and UL 61010-2-201 or vice versa?
- 13. <u>How will this transition affect UL's Data Acceptance Program (DAP) participants that currently have Programmable Controller tests from UL 508 in their scope of tests?</u>
- 14. <u>Can customers download copies of UL 61010-1 and UL 61010-2-201 free of charge from the UL Standards website?</u>
- 15. When can UL begin issuing certification to UL 61010-1 and UL 61010-2-201?
- 16. Would Programmable Controllers evaluated to UL 61010-1 and UL 61010-2-201 be accepted when installed within an UL 508A Industrial Control Panel?
- 17. Since the requirements in UL 61010-2-201 is identical to IEC 61010-2-201, would Programmable Controllers need to comply with the EMC, Functional Safety and IP requirements of the Standard?
- 18. <u>Is it acceptable to use a Programmable Controller that has been certified to UL 508</u> when the intended accessory has been certified to UL 61010-1 and UL 61010-2-201 or vice versa?
- 19. How will Programmable Controllers provided with an enclosure be evaluated?
- 20. What if a UL HazLoc customer does not want to have UL 61010-2-201 and UL 61010-1 used as the applicable unclassified (ordinary) locations requirements in support of a their UL HazLoc Programmable Controller certification under UL CCN: NRAG? Can they continue to have UL 508 used?



1. What is the transition from UL 508 to UL 61010-1 and UL 61010-2-201 and why is it being done?

The Programmable Controller Industry has requested harmonization of requirements with respect to Programmable Controller related standards. UL, in collaboration with members of industry for the Standard for Industrial Control Equipment, UL 508, has changed the safety standard used for Programmable Controllers from UL 508 to UL 61010-1 and UL 61010-2-201. This combination will be used for the certification of products.

Note, ANSI/UL 61131-2, Programmable Controller – Part 2: Equipment Requirements and Test, will not be used for UL certification for Programmable Controllers after the Transition date.

2. Which Standards are involved?

For the United States, the combination of UL 61010-1 and UL 61010-2-201 will be primary safety Standards used for certification for Programmable Controllers. Note, UL 61010-2-201 is based on IEC 61010-2-201. UL has adopted this part 2 from the IEC Standard with no National Differences. UL 61010-2-201 was published in January 2014.

For Canada, Programmable Controllers may be certified to CSA C22.2 No. 142, CAN/CSA-E61131-2 or the combination of CSA C22.2 No. 61010-1 CSA and C22.2 No. 61010-2-201. CSA has adopted this part 2 from the IEC Standard with no National Differences. CSA 61010-2-201 was published in April 2014.

3. Which UL CCNs (Category Control Numbers) are affected?

The following unclassified (ordinary) locations Programmable Controller CNNs are affected:

NRAQ: Programmable Controllers, Listed for United States

NRAQ2: Programmable Controllers, Recognized for United States

NRAQ3: Programmable Controller, UnListed Component for United States

NRAQ7: Programmable Controllers, Listed for Canada

NRAQ8: Programmable Controllers, Recognized for Canada

NRAQ9: Programmable Controllers, UnListed Component for Canada



The following hazardous (classified) locations, or HazLoc, Programmable Controller CNNs are affected:

NRAG: Programmable Controllers for Use in Hazardous Locations, Listed for United States

NRAG2: Programmable Controllers for Use in Hazardous Locations, Recognized for United States

NRAG7: Programmable Controllers for Use in Hazardous Locations, Listed for Canada NRAG8: Programmable Controllers for Use in Hazardous Locations, Recognized for Canada

NWGD: Programmable Controllers for Use in Zone Classified Hazardous Locations, Listed for United States

NWGD2: Programmable Controllers for Use in Zone Classified Hazardous Locations, Recognized for United States

NWGD7: Programmable Controllers for Use in Zone Classified Hazardous Locations, Listed for Canada

NWGD8: Programmable Controllers for Use in Zone Classified Hazardous Locations, Recognized for Canada

4. Are the requirements for Programmable Controllers being removed from UL 508?

Yes, after the adoption of UL 61010-2-201 and the UL established transition date of April 1, 2016.

5. How will UL 61010-1 and UL 61010-2-201 be implemented? What is the transition schedule?

After April 1st, 2016, all new Programmable Controllers investigations will need to comply with UL 61010-1 and UL 61010-2-201 for the UL mark. After April 1, 2016, all Programmable Controllers will need to comply with IEC 61010-1 and IEC 61010-2-201 for Europe.

<u>6. Will there be a UL Industry File Review (IFR) for Programmable Controllers currently certified to UL 508?</u>

No. The Standards Technical Panel for PLC's approved a UL proposal to apply the Continuing Certification Program for PLC's certified to United States and Canada. This means that PLC's already Listed or Recognized using UL 508 or UL 61131-2 can maintain their certifications after April 1, 2016, without further evaluation. UL 508 and UL 61131-2 can be used after April 1, 2016, only for alternate constructions of existing certifications. Submittals for new PLC's must be evaluated to UL 61010-1 and UL 61010-2-201 after April 1, 2016. There will be no Industry File Review (IFR) for PLC's.



7. How will Programmable Controllers evaluated to UL 508 be identified from products evaluated to UL 61010-1 and UL 61010-2-201?

In order to evaluate products to the new harmonized standard and in an attempt to differentiate between those products evaluated to UL 508 and those to the new standards, the guide card associated with UL's Category Control Number (CCN) for Programmable Controllers, NRAQ (including NRAQ2, NRAQ7, NRAQ8), will be revised to include the new harmonized Standards. Products evaluated using UL 61010-1 and UL 61010-2-201 will be separated in the individual listing cards from those that were evaluated using UL 508. For future reference, product Listing cards can be viewed on UL's Online Certifications Directory.

Regarding the guide cards associated with UL's Category Control Numbers (CCNs) for HazLoc Programmable Controllers, NRAG and NWGD (including NRAG2, NRAG7, NRAG8, NWGD2, NWGD7, NWGD8), these CCNs will also be revised to include the new harmonized Standards as the applicable unclassified (ordinary) locations requirements. HazLoc products evaluated using UL 61010-1 and UL 61010-2-201 will have the standard, standard edition, and any revised date if applicable, of the unclassified (ordinary) locations standard used as part of the UL HazLoc investigation recorded in the Report and not in the individual listing cards. No revisions to the individual HazLoc listing cards will be associated with this transition.

8. How will this transition affect end-product standards that currently reference UL 508 for Programmable Controllers?

Product standards that currently reference UL 508 will be revised to include UL 61010-1 and UL 61010-2-201. It is not anticipated that this transition will have a significant impact on end-product standards resulting in the need for an Industry File Review.

9. Will Programmable Controllers evaluated to UL 61010-1 and UL 61010-2-201 be accepted in the field?

Products investigated to UL 61010-1 and UL 61010-2-201 are intended for installation in accordance with NFPA 70 (NEC) just as are products evaluated to UL 508. The CCNs are not changing and the product identity markings are the same. It is not anticipated that this transition will result in field issues regarding acceptance of products evaluated to the harmonized standards.

10. How will manufacturers of Programmable Controllers evaluated to UL 508 be made aware of this transition?

Over the course of the next years leading up to April 1st, 2016, UL will periodically issue bulletins to industry reminding them of the on-going transition. Bulletins will also be published on the <u>UL 508 Transition webpage</u>.



11. Do the national differences of UL 61010-1 and UL 61010-2-201 make it equivalent to UL 508? Specifically, is a Programmable Controller certified to UL 508 able to be certified to UL 61010-1 and UL 61010-2-201 without further investigation?

No. The harmonization committee chose to adopt the IEC requirements, which are different from UL 508 in a number of areas. This makes the requirements of UL 61010-1 / UL 61010-2-201 and UL 508 not equivalent.

12. Since UL 61010-1 and UL 61010-2-201 are harmonized with IEC 61010-1 and UL 61010-2-201, does compliance to UL 61010-1 (and UL 61010-2-201) represent compliance with IEC 61010-1 and UL 61010-2-201 or vice versa?

No. Due to the national differences in UL 61010-1, the requirements of neither standard can fully be considered representative of the other. However, because the harmonization committee took the steps to adopt a significant number of the IEC requirements, compliance to both standards can be done under a single representative investigation which would be require significantly less effort.

13. How will this transition affect UL's Data Acceptance Program (DAP) participants that currently have Programmable Controller tests from UL 508 in their scope of tests?

Because there are some differences between test requirements of UL 508 and UL 61010-1 and UL 61010-2-201, participants of UL's Data Acceptance Programs for UL 508 will be required to have an assessment to add both UL 61010-1 and UL 61010-2-201 to their scope. Note, testing that is witnessed at a customer's facility shall also comply with UL 61010-1 and UL 61010-2-201's technical requirements and in addition to UL's DAP (for WTDP) requirements. A bulletin with more information will be sent to participants of UL's DAP in the near future. Please contact your local UL Product Safety Representative for more information.

14. Can customers download copies of UL 61010-1 and UL 61010-2-201 free of charge from the UL Standards website?

Current UL Applicants/Subscribers can download UL 508 free of charge on the UL Standards website. However, customers are unable to view or download UL 61010-1 or UL 61010-2-201 free of charge due to the ANSI copyright agreement for IEC Standards. Copies of these Standards are available for purchase on the COMM 2000 website.



15. When can UL begin issuing certification to UL 61010-1 and UL 61010-2-201?

UL is now accepting product submittals to UL 61010-1 and UL 61010-2-201 for North America certification.

In addition,

- UL is now accepting product submittals to CSA C22.2 No. 61010-1 CSA and C22.2 No. 61010-2-201 for Canada.
- UL is now accepting product submittals to IEC 61010-1 and IEC 61010-2-201 and is able to issue CB certifications as well as other global certifications.

Please contact your local representative for additional information or visit us at www.ul.com to submit your request.

16. Would Programmable Controllers evaluated to UL 61010-1 and UL 61010-2-201 be accepted when installed within an UL 508A Industrial Control Panel?

Yes, Programmable Controllers evaluated to UL 61010-1 and UL 61010-2-201 are suitable for use within a Listed UL 508A Industrial Control Panel. These controllers are intended for installation in accordance with NFPA 70 (NEC) just as are Programmable Controllers evaluated to UL 508. The CCN (Category Control Number) for Programmable Controllers (NRAQ) is not changing and the product identity markings are the same. UL 508A currently allows the use of NRAQ devices that are investigated to UL 508. Future plans are in place to also include a reference to UL 61010-1 and UL 61010-2-201 in UL 508A.

Additionally, a Programmable Controller shall comply with the enclosure construction and performance requirements in UL 508A if it completes opening in the final enclosure.

17. Since the requirements in UL 61010-2-201 is identical to IEC 61010-2-201, would Programmable Controllers need to comply with the EMC and Functional Safety requirements of the Standard?

No, only the safety requirements are applicable. Only the safety requirements from IEC 61131-2 and were used to create UL 61010-2-201. Therefore, UL/IEC 61010-1 and UL/IEC 61010-2-201 contains the requirements for certification in the US and Europe.

18. Is it acceptable to use a Programmable Controller that has been certified to UL 508 when the intended accessory has been certified to UL 61010-1 and UL 61010-2-201 or vice versa?

Yes, provided the UL 508 Programmable Controller is able to maintain certification after April 1st, 2016.



19. How will Programmable Controllers provided with an enclosure be evaluated?

Programmable Controllers provided with an enclosure will need to be evaluated and marked with a Type rating in accordance to UL 50, The Standard for Enclosures for Electrical Equipment, Non-Environmental Considerations, and UL 50E, The Standard for Enclosures for Electrical Equipment, Environmental Considerations. Additionally, enclosures will also need to be evaluated and marked with an IP rating in accordance to IEC 60529, Degrees of Protection provided by Enclosures (IP Code).

20. What if a UL HazLoc customer does not want to have UL 61010-2-201 and UL 61010-1 used as the applicable unclassified (ordinary) locations requirements in support of a their UL HazLoc Programmable Controller certification under UL CCN: NRAG? Can they continue to have UL 508 used?

Between now and the UL established transition date of April 1, 2016, UL 508 can continue to be used as the applicable unclassified (ordinary) locations requirements in support of UL HazLoc Programmable Controller certifications under UL CCN: NRAG. After the UL established transition date of April 1, 2016, only UL 61010-2-201 and UL 61010-1 will be used. However, there are many UL HazLoc CCNs other than NRAG that reference UL 508 as the applicable unclassified (ordinary) locations requirements, and that will not be impacted by this transition. Consideration can be made as to the possibility of transferring a UL HazLoc certification from NRAG to one of these other HazLoc CCNs, if appropriate. However, such a transfer would preclude the involved product from being referred to as a UL certified programmable controller.