PULS' Position Paper on EN 62368-1

The replacement of EN 60950-1 and EN 60065 by the successor standard EN 62368-1 in the Official Journal of the EU starting on 20th December 2020 may create uncertainty among users. This is partly because other harmonized standards have emerged at the same time, which have advantages over the successor standard EN 62368-1 in specific areas of application. You can read more about this in the two PULS white papers "UL 61010 replaces UL 508 for industrial power supplies", "EN 61010 – New standard for power supplies in industrial applications" or in the "ZVEI Guideline: Selection of safety standards for power supplies", all which can be obtained from our website (www.pulspower.com).

In the Official Journal of the EU, these standards deal with the electrical safety of equipment in compliance with the Low Voltage Directive. The scope of this directive includes electrical equipment for use at a nominal voltage greater than 50Vac or 75Vdc. Devices such as DC/DC converters, redundancy modules, DC UPS, electronic fuses are only affected if they are supplied with voltages higher than 50Vac or 75Vdc.

Only the EN 60950-1 will be replaced, but CB certificates and CB reports according to IEC 60950-1 will remain valid and are an important building block for international certifications. They are beneficial in many countries that do not yet recognize the successor standard.

It is also important to realize that concerns about the safety of equipment that was tested to the replaced standards are unnecessary. The reason for replacing the standards is to merge them into one common standard and to introduce a new safety approach, the hazard-based approach or "Hazardous Based Concept".

The main area of application for PULS DIN-Rail devices is in industrial environments. The new standard created for this purpose is EN/IEC/UL/CSA 61010-2-201, which has the highest priority for PULS. EN 61010-2-201 is also listed in the Official Journal of the EU as a harmonized standard and can therefore be used with an accepted presumption of conformity in the EU Declaration of Conformity to assess the safety objectives of the Low Voltage Directive.

However, there are other areas of application where EN 61010-2-201 may not be sufficient or where users' expectations are moving towards the successor standard EN 62368-1. Actually, this had nothing to do with the rules for "placing products to the EU market", but is an additional specification that must be agreed between the manufacturer and user.

To meet these expectations, PULS can offer a CB report in accordance with IEC 62368-1 for a comprehensive range of their power supplies. The focus is on devices that have been newly developed or on devices that have been introduced in recent years. The plan is to be able to offer an equivalent device for each power class and output voltage. Newly released devices already take into account the "specialties" of EN 62368-1. Devices tested according to EN 62368-1 are listed below. If you need further assistance, please contact PULS.

With older devices the situation is a bit more challenging as the EN 62368-1 requires some, although not many, changes to the devices. These will result in changes on the specified characteristics of the devices. The PULS aim is to avoid compatibility problems with the many existing applications as much as possible. Announcing a product change could have serious consequences for many customers who may be forced to re-qualify their design.

PULS would also like to reference section 4.1.1 of EN 62368-1, which permits the use of subassemblies to IEC 60950-1 without further assessment (expressed in simple terms). In many cases, there could also be the possibility to issue an EU Declaration of Conformity according to EN 62368-1 for a complete system, even if a power supply according to IEC 60950-1 is used.

Devices with existing CB certificate in accordance with IEC 62368-1:

- PIM36.241
- PIM60.121, PIM60.125, PIM60.241, PIM60.245
- PIM90.241, PIM90.245, PIM90.245-L1
- PIC120.241C, PIC120.242C, PIC120.241D
- PIC240.241C, PIC240.241D
- PIC480.241C, PIC480.241D, PIC480.481D
- CP5.121, CP5.241, CP5.241-S1, CP5.241-S2, CP5.242, CP5.481
- CP10.241-S2, CP10.241-R1, CP10.241-R2
- CP20.241, CP20.241-S1, CP20.241-S2, CP20.241-V1, CP20.241-R1, CP20.241-R2, CP20.242, CP20.481

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