

CTL DECISION SHEET

Standard(s)- (year and edition): IEC 60730-1, ed 3, 1999, Am. A1:2003	Sub clause(s): 24.1	Sheet n°: DSH 587
Subject: Transformer intended to supply power to a safety extra low voltage circuit (SELV)	Key words: Transformer, SELV	Decision approved during the CTL Plenary Meeting 2006

Question:

Sub-clause 24.1 prescribes that “Transformers intended to supply power to a safety extra-low voltage circuit (SELV) shall be of the safety isolating type and shall comply with the relevant requirements of IEC 61558-2-6.”.

This prescription does not allow the use of other types of transformers not covered by IEC 61558-2-6. In case of testing of an electronic control with an integrated switch mode power supply (SMPS) intended to supply power to a safety extra low voltage circuit (SELV), what requirements shall be applied?

Decision:

The transformer shall comply with the relevant requirements of IEC 61558-2-17 for safety relating transformers.

The entire switch mode power supply circuit (with the exception of the transformer) shall fulfil the requirements of IEC 60730-1 and relevant Annex H.

Explanatory notes:

It should be noted that in general an integrated switch mode power supply shall be in line with the requirements of the upcoming new IEC/TC 96 standard IEC 611582-16 “Particular requirements for switch mode power supply and transformers for switch mode power supplies”. However this new standard is currently being prepared as a CDV and the standard is expected to be printed at the end of 2006.

So this DSH has to be considered again after the relevant IEC standard is published.