

		<b>LOVAG DECISION SHEET (LDS)</b>		N°[LDS203]
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References	Standard(s) (incl. year)	[IEC 60947-3: 2010+A1:2012+A2:2016 ]		Subclause(s): 8.3.3.3
	Subject	[Making and breaking capacities Test values and conditions ]	Submitted by: Lab. IK01 (Intek)	Date: 09/04/2019 [
Question	<p>It is good technique to install at the terminals of the supply bridge diodes a snubber RC circuit to prevent reverse voltage peaks on the diodes causing damage to them (there is nothing about the matter in the standard); we have, in this case also, found different test results depending on whether these RC circuits are present or not (in fact they also cut the overvoltage of the circuit-breaker in test and play a function similar to shunt resistance).</p>			
Analysis	<p>The representatives of the laboratories around the table agree that the inserted filter has the goal to protect the power supply system (the snubber "cuts" the peaks of reverse voltage that can damage the bridge diodes).</p> <p>At the same time and taking into account the typical slope of reverse voltage across a diode, it is suggested to use a filter that does not introduce changes to the product testing behavior.</p>			
Decision	<p>It is suggested to insert a filter with a sufficiently fast cutoff slope,( e.g. up to 1 <math>\mu</math>s).</p> <p>In this way the power supply diodes will be "protected" without affecting the conditions of opening characteristics of the product under test, whose critical slope is much more slow.</p>			
Date:		Prepared by: Lab. IK01 (Intek)	Approved by:	