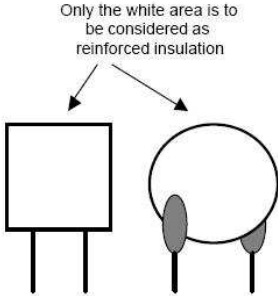


## CTL DECISION SHEET

<b>Standard(s):</b> IEC 60950-1:2001 IEC 60950-1:2005	<b>Sub clause(s):</b> 1.5.7.2 (IEC 60950-1:2001) 1.5.6 (IEC 60950-1:2006)	<b>No.</b>	<b>Year</b>
		738	2009
<b>Subject:</b> Insulation properties of housing of subclass Y capacitors		Developed by ETF 2 Question 68	
<b>Key words:</b> - subclass Y capacitor - housing - insulation		<b>Decision approved at the 46<sup>th</sup> CTL Plenary Meeting 2009</b>	
<p><b>Question:</b></p> <p>Capacitors complying with IEC 60384-14 are permitted to bridge certain levels of insulation. Does the housing of such capacitors provide this same level of insulation?</p> <p>Example: A subclass Y1 capacitor is permitted to bridge double or reinforced insulation. Is it permitted that this capacitor housing serves as double or reinforced insulation to other circuit parts, such as a transformer core?</p> <p><u>Decision:</u></p> <p>Housings of IEC 60384-14 subclass Y capacitors are considered to provide insulation levels as specified in IEC 60950-1 (e.g. Table 1D for 2<sup>nd</sup> ed.) with the exception of the areas near to the leads.</p> <p><u>Explanatory Notes:</u></p> <ol style="list-style-type: none"> <li>Reference is made to OSM/EE decisions 95/9 and 97/1 for EN 60950-1:2001 for sub-clause 1.5.7.1:                     <div style="margin-left: 20px;"> <p>The enclosures of Y1 capacitors are considered to comply with the requirements for reinforced insulation with the exception of the area near to the leads where the insulation becomes thinner</p> <div style="text-align: center;"> <p>Only the white area is to be considered as reinforced insulation</p>  </div> </div> </li> <li>Note - Voltage test levels in IEC 60384-14 &amp; 603084-1 on external insulation are sometimes slightly lower for some applications than those required by IEC 60950-1 for solid insulation. For practical purposes, the</li> </ol>			

decision is valid because (a) the external insulation of the IEC 60384-14 capacitors are subjected to a relatively robust “voltage proof” testing (per Table 3/Test c of 60384-1, and Table 10 of IEC 60384-14) and (b) the capacitors meet the 'component standard' requirements for such insulation and use.

3. The decision does not only apply to subclass Y1 capacitors, but also to other types as for example specified in Table 1D of IEC 60950-1:2005.
4. Housing of such capacitors shall not be user accessible or exposed to undue mechanical stress, which could degrade the insulating properties of the housing material.