

DECISION SHEET

Standard(s)- (year and edition): IEC 60601-1:1988 Ed.2 Am1+Am2	Sub clause(s): 19, 19.2 c)	Sheet n°: DSH-420
Subject: Enclosure leakage current caused by external voltage	Key words: Enclosure, leakage current, external voltage	Confirmed by CTL at its 39th meeting, in Cologne
<p>Question:</p> <p>Since INTERNALLY POWERED EQUIPMENT has no reference to earth, the ENCLOSURE LEAKAGE CURRENT flowing between different parts of the ENCLOSURE will not be affected by an external voltage applied between earth and a SIGNAL INPUT or SIGNAL OUTPUT PART. Therefore the ENCLOSURE LEAKAGE CURRENT for INTERNALLY POWERED EQUIPMENT caused by such a voltage, should be measured as for CLASS II EQUIPMENT with MD1 between the ENCLOSURE and earth according to Figure 18. Further, the external voltage to be applied should be specified in Sub-clause 19.4 g) 3), in a similar way as in Sub-clause 19.4 h) 8) and Figure 25 (Measurement of the PATIENT LEAKAGE CURRENT flowing from the APPLIED PART to earth, caused by an external voltage between earth and any SIGNAL INPUT or SIGNAL OUTPUT PART), except that supply frequency does not apply for EQUIPMENT with an internal battery.</p> <p>Decision:</p> <p>To clarify this issue, Sub-clause 19.4 g) 3) should read :”and INTERNALLY POWERED EQUIPMENT are tested for ENCLOSURE LEAKAGE CURRENT flowing between the ENCLOSURE and earth and also between different parts of the ENCLOSURE (measuring device applied as MD1 and MD2 in Figure 18).”</p> <p>Explanatory notes:</p> <p>.</p>		