

DECISION SHEET

Standard(s)- (year and edition): IEC 60601-1:1988 Ed.2 Am1+Am2	Sub clause(s): 20.2 B-d and B-e	Sheet n°: DSH-428
Subject: Insulation between an F-type applied part and enclosure	Key words: F-type, applied part, enclosure	Confirmed by CTL at its 39th meeting, in Cologne
<p>Question:</p> <p>1) Different interpretations may occur about whether to use B-d or B-e to state the correct insulation level between an F-TYPE APPLIED PART and the ENCLOSURE.</p> <p>2) B-e refers to “voltages stressing the insulation”.</p> <p>What is a hazardous voltage stressing an insulation?</p> <p>Decision:</p> <p>B-d is always applicable for a F-TYPE APPLIED PART. U equals maximum RATED SUPPLY VOLTAGE; or, 250V for INTERNALLY POWERED EQUIPMENT. BASIC INSULATION required.</p> <p>In addition B-e is also applicable if there is a voltage in the F-TYPE APPLIED PART. U equals the voltage stressing the insulation in NORMAL USE including earthing of any PATIENT CONNECTION.</p> <p>Explanatory notes:</p> <p>B-d insulation is required for F-TYPE APPLIED PARTS.</p> <p>B-e insulation is required for F-TYPE APPLIED PARTS containing internal voltages, with a reference voltage equal to the internal voltage.</p> <p>The second sentence in the statement in 20.3 concerning the reference voltage between an F-TYPE APPLIED PART and the ENCLOSURE, applies to B-d only and not to B-e.</p>		