

CTL DECISION SHEET (DSH)

Standard(s) (incl. year)	Subclause(s)	Tracking No.	Year
IEC 60335-2-24: 2020	22.117	2199	2022
Category			
HOUS			
Subject	Keywords	Developed by	
Thermal insulation to be encased in and in contact with 5VA polymeric material	- Thermal insulation	ETF 1	

Question

A Case PBA (Printed Board Assembly) is located inside a refrigerating appliance. It is hooked and secured to metal plate through four (4) 1.5 mm² holes. The thermal insulation is located on the opposite side of these holes.

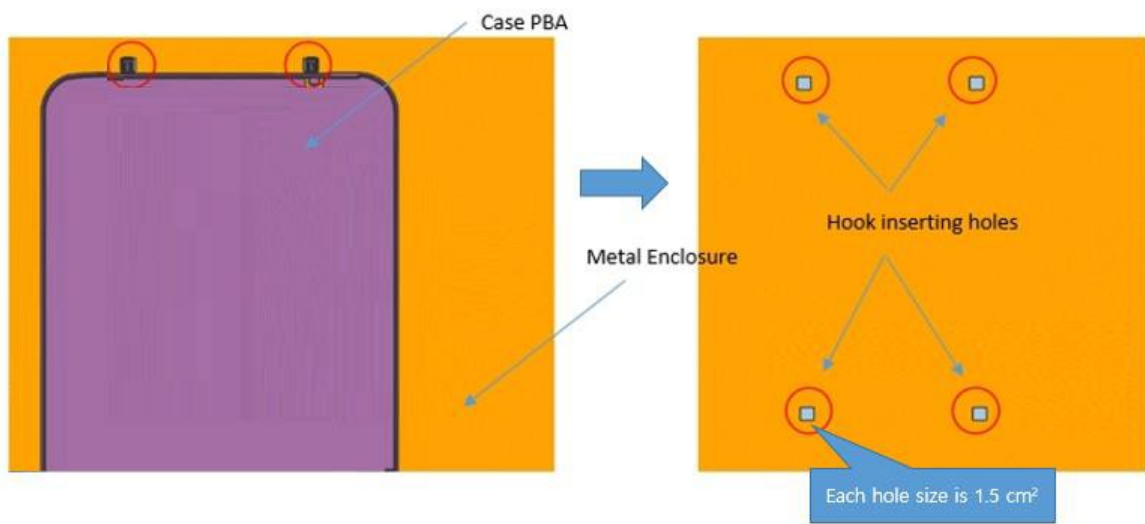
The Case PBA is therefore in contact with thermal insulation through four (4) 1.5 mm² holes that are located within 150 mm between each other.

If this metal plate thickness is not less than 0.2 mm and its melting point temperature is not less than 1 000 °C, which of the following requirements is correct regarding the 5VA rating of the Case PBA:

1. The Case PBA shall be 5VA rated because it is in contact with thermal insulation through these holes; OR
2. Based on the following excerpt of IEC 60335-2-24:2020, Clause 22.117, the Case PBA does not need to be 5VA rated even it is in contact with thermal insulation through the holes.

Excerpt from Clause 22.117:

A hole or the combined area of holes within 150 mm of each other shall not exceed 25 cm². The total combined area of the holes shall not exceed 125 cm². Holes up to 3 mm² and material that join overlapping metal parts are ignored.



Decision
The Case PBA needs not to be 5VA rated.
Explanatory notes
Justifications of this Decision is based on Clause 22.117: <ul style="list-style-type: none">- The metal plate thickness is not less than 0.2 mm and its melting point temperature is not less than 1 000 °C.- The area of holes and the location between them comply with the requirement of Clause 22.117. <p>The full Case PBA is not to be evaluated according to Clause 22.117 but to Clause 30.</p>