

C57.19.100, IEEE Guide for Application of Power Apparatus Bushings

Add the following section

9.3. Application of Outdoor Bushings in Indoor Locations

Bushings designed for outdoor application can also be applied indoors however the following should be considered;

- a) The rating of bushings is assigned at an ambient air temperature not exceeding 40 °C, and the average temperature of the ambient air not exceeding 30 °C in any 24 hour period. These limits may be exceeded in the indoor locations. If it should be determined that the ambient air temperatures will exceed the allowable temperature, the user may either select a bushing with higher rating or accept a moderate degree of accelerated aging.
- b) The environmental contamination should be reviewed. If the ventilation system allows the air from the outdoors to circulate freely indoors without any filtration, contaminants present outdoors will also be present indoors and will be deposited on the bushing. However unlike outdoor bushings where the contaminants are washed away by rain, the contamination level on indoor bushings will keep increasing. The user may select bushings with higher creepage distance and institute maintenance programs to include bushing insulator cleaning.

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