



Cables in PVC trunking and busbars in PVC connection box with adequate clearance between pos and neg. No proximity to exposed metal, only possible ground fault near exposed metal such as inverter or MPPT casing? If busbar short Freedom Won breaker breaks overcurrent.

Bear in mind in an ungrounded system the use of an overcurrent fuse/breaker on both positive and neg does not remedy this scenario either. So if the regulations require both pos and neg to be fused this is only for isolation purposes during maintenance and have no bearing on overcurrent fault scenarios. Bear in mind if the exposed metal in question is arbitrary and not grounded even system grounding won't catch this problem

Fault currents are invited with a grounded system for early detection, whereas in ungrounded systems it takes a 2nd ground fault for fault currents and therefore lower probability but less likely to be detected, especially on only the first ground fault.

If all cables are insulated and then insulated again by PVC trunking is it acceptable to propose ground faults are negated by the fact that the installation operates under Class II standard (double insulated) and therefore system grounding is not required? Although the proximity of exposed metal at the inverter and MPPT remains in question.