Unsuccess Example Shortcircuit Withstand Calculation Report

This document shows the calculation results of shortcircuit withstand on specified busbar arrangement

Project info:

Project name	Unsuccess Example
System Voltage	440 V
System frecuency	60 Hz
Initial symmetric shorcirtuit current	65 kA

Calculation results:

Maximun magnetic force on mid-busbar	13336.9 N
Mechanical stress on busbars	456.37 MPa
Maximmun internal supports strength	5001.34 N
Maximmun external supports strength	16671.12 N

Conclusion

The arrangement proposed can NOT resist the shortcircuit event.
For better results, check if you can reduce de support distances and/or increase the phase distance.
Check if the width and thickness of busbar can are appropiate for the application

CAUTION: the failure of busbar arrangement could generate other system issues
and could be dangerous for the enviroment and staff

WARNING: these result are totally theoretical and maybe they not represent all the reality.
Consider others environment variables to make better approaches to the arrangement calculated

If you have any questions or issues about results please contact me:
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