



ABB SOFTSTARTER DERATES

Description:

This document addresses the derating of ABB Softstarters for altitude and temperature.

Guide for derating for Altitude:

For PSR, PSE or PSTX drives the following formulas can be applied to determine the available current for altitudes requiring derate:

For altitudes of 3280 to 13123 Feet:

$$\% \text{ of FLA} = 100 - (X-3280)/480 \text{ (X = the required application height)}$$

-or-

For altitudes of 1000 to 4000 Meters:

$$\% \text{ of Ie} = 100 - (x-1000)/150 \text{ (X = the required application height)}$$

Guide for derating for Ambient Temperature:

-For PSR and PSTX softstarters for temperatures from 104 to 140 F - The derate for FLA is .44% per each degree above 104F or for temperatures from 40 to 60 C - The derate for FLA is .8% per each degree above 40 C.

- For PSE soft starters for temperatures from 104 to 140 F - The derate for FLA is .33% per each degree above 104F or for temperatures from 40 to 60 C - The derate for FLA is .6% per each degree above 40 C.

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