

FTLogo_small

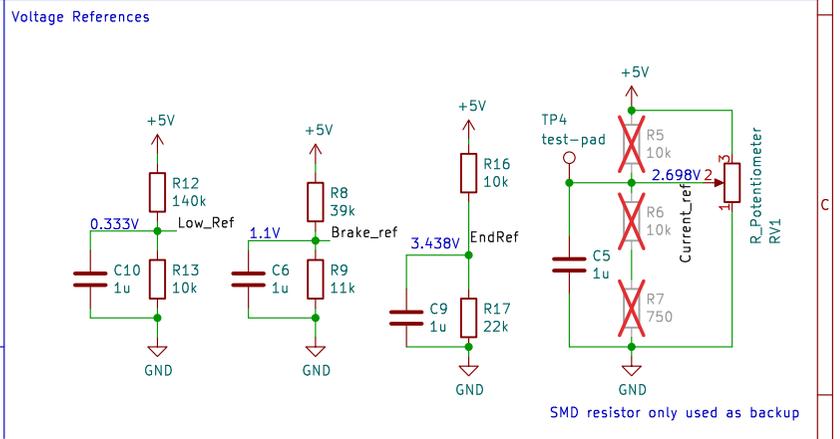

Power Limit = 5kW
 TS Maximum Voltage = 403V
 $5\text{kW}/403.2\text{V} = 12.401\text{A}$

Current Sensor Comparator Voltage (LEM HO 50-S):
 Sensor Offset: 2.5V
 Sensitivity = 0.016V/A (range: -125A-125A, output: 0.5V-4.5V)
 $\Rightarrow 2.5\text{V} + 0.016\text{V/A} \times 12.401\text{A} = 2.698\text{V}$

ADZ SME 200bar pressure sensor
 Ratiometric output from 0.5V-4.5V \Leftrightarrow 0..200bar
 $\Rightarrow 0.020\text{V/bar}$

Break Pressure Sensor Voltage:
 $0.5\text{V} + 30\text{bar} \times 0.020\text{V/bar} = 1.1\text{V}$

Error Latching is realized with the RC Combination R21 and C13.
 In case of an Error the open collector output of U1A is discharging C13 via a small resistor R21, causing U1B to open the Shutdown Circuit.
 If the Error is removed, C13 is charged via R20 in series with R21, resulting in a time delay of ~11.65s



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