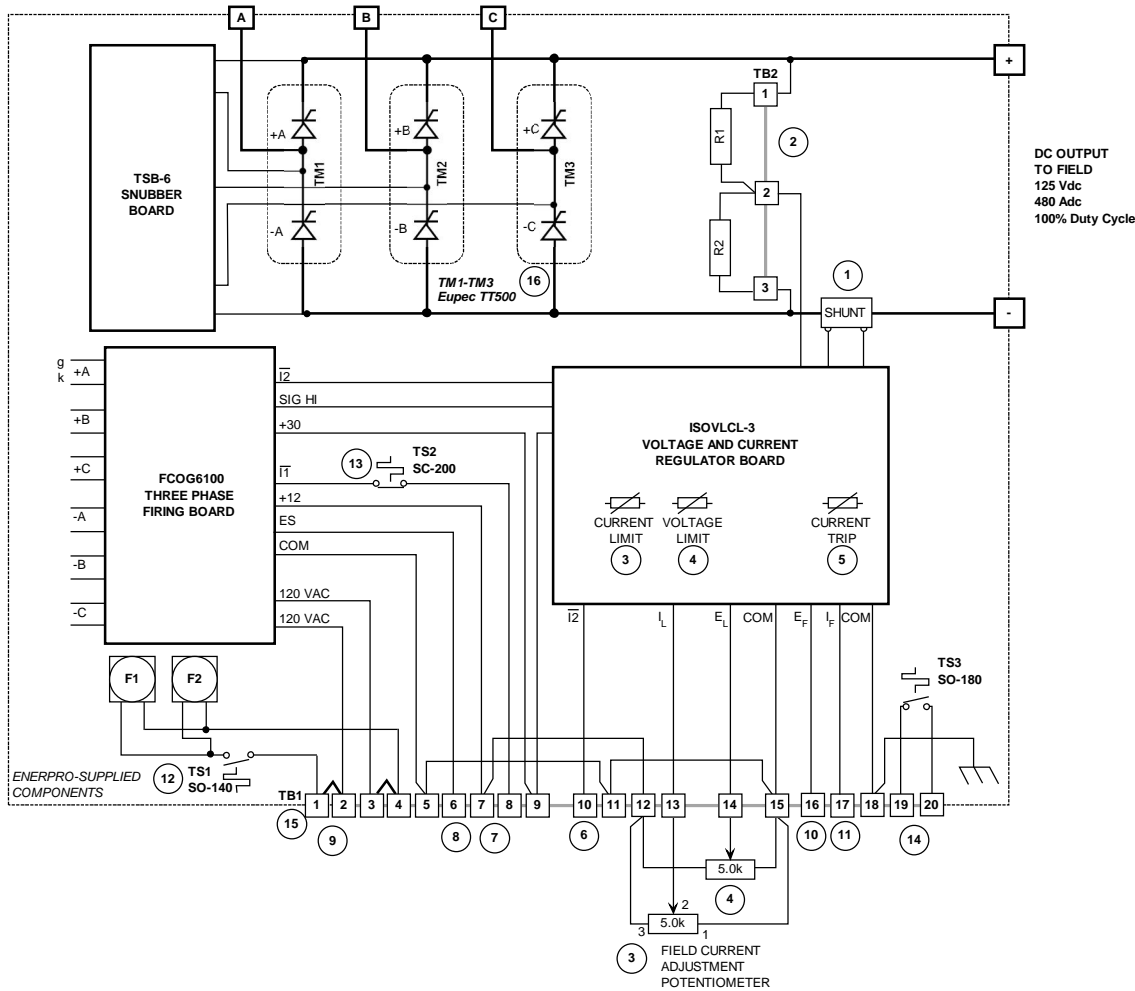


AC INPUT VOLTAGE: 106 Vac/60 Hz
85 kVA XFMR



NOTES

1. Current shunt is 500 A:50 mV
2. R1 and R2 ratio provides 0-4 VDC full scale voltage feedback.
3. Adjust FIELD CURRENT LIMIT trimpot for the desired maximum field current according to the current reference applied at TB1-13.
4. Adjust the VOLTAGE LIMIT trimpot for the desired maximum voltage according to the voltage limit reference applied at TB1-14.
5. Adjust CURRENT TRIP trimpot for the desired load current trip threshold.
6. Open a dry contact between TB1 positions 10 and 11 to soft-start the rectifier. SCR firing will enable and the output voltage will ramp from zero to the command value according to the soft-start time constant as installed on the FCOG6100 board. Close the dry contact to soft-stop the rectifier. The rectifier output will ramp from the command value to zero after which time SCR firing is inhibited.
7. Close a dry contact between TB1-7 and 8 to instantly enable SCR firing. Open contact to inhibit.
8. Attach enable status relay (24 V coil) between TB1 positions 6 and 9. Relay coil is energized when an enable command is active and phase loss fault is absent.
9. Apply 120 Vac control power between TB1-1 and 3.
10. 0-2 V full scale isolated voltage readback located between TB1-16 and 18.
11. 0-2 V full scale isolated current readback located between TB1-17 and 18.
12. Heat sink cooling fans activate at 140 F (60 C) via bimetallic switch TS1 (NO).
13. SCR firing instantly inhibits at 200 F (93 C) via bimetallic switch TS2 (NC).
14. Alarm contact closes at 180 F (82 C) via bimetallic switch TS3 (NO).
15. Place numerical tags on TB1 upside down relative to normal orientation per customer request. Unit will be oriented vertically in cabinet with TB1 at the top.
16. Total SCR dissipation at 480 Adc is 1.0 kW for three TT500 modules.
17. Application: three-phase converter for synchronous motor excitation. AC input voltage is derived from a 85 kVA 575:106 Vac transformer, the maximum output voltage is 125 Vdc at 480 A (60 kW) corresponding to an apparent power draw on the transformer of approximately 68 kVA.

*This drawing is for reference only.
Please use the "Configure Your Assembly" link, then
"Download Order Form" to specify your requirements.*

ENERPRO	
CONNECTION DIAGRAM: TYPICAL REGULATED THREE PHASE CONVERTER, 480 A	
E2370	
SIZE: b	SHEET 1 OF 1