

Turbine will reset when grid power returns

Does this solve the problem?

- 1] Yes
- 2] No
- 3] I don't know

- **Explanation**

Due to a fault in the grid one of the three phases has dipped below the low voltage alarm set point. When the issue is resolved the voltage will come back up and the turbine will reset. If this drop in voltage is unexpected (i.e. not due to a planned outage) then investigate the cause.

Repair or replace the transformer

Does this solve the problem?

- 1] Yes
- 2] No
- 3] I don't know

- **Explanation**

1. Measure voltage at the primary and secondary sides of the transformers +AT2:T02, 2 and 3. If all primary side voltages are the same, then all secondary side voltages should also be the same. If any of the secondary voltages are different, the transformer is defective and must be replaced.



2. If the primary side voltages are different, the secondary side voltages should be at least consistent. For example, If L1, L2 and L3 voltages were 350, 348 and 351 the secondary voltages should be around 19, 18 and 20 volts. If the secondary voltage on L2 was 10 volts, that would be an inconsistent reading and would show a defective transformer. This can be difficult to diagnose.

Item	Item No.
T02 600V p/n	60006920
T02 690V p/n	60006925

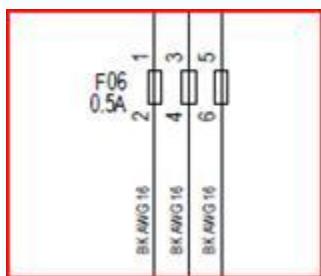
Repair or replace faulty component

Does this solve the problem?

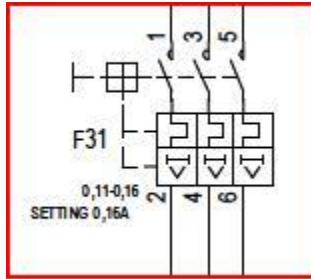
- 1] Yes
- 2] No
- 3] I don't know

- **Explanation**

1. If voltage to the primary side of the +AT2:T02 is abnormally low compared to the other two transformers then investigate the circuit up to the T02.
2. Check the F06 fuse (60Hz) or the F31 breaker (50Hz) for voltage. If voltage is not present or is out of the ordinary then investigate the fuse/breaker and replace if defective.

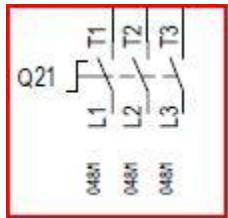


or

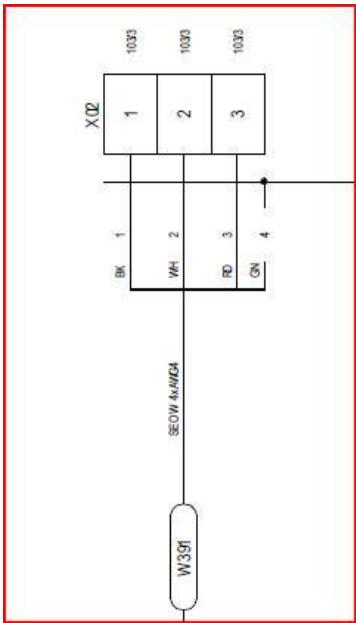


3. Check for voltage at terminal +AT2:X31.L2.11. If voltage is not present or out of the ordinary then inspect and repair the connection at the terminal.

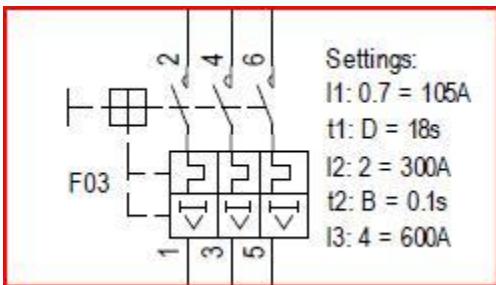
4. Check for voltage at +AT2:Q21.T2 and L2. If there is no voltage here the turbine will likely have other alarms. Inspect the Q21 visually, and by measuring for continuity across the terminals T1 and L1 with the switch closed. WARNING-this must only be done with power to the switch off.



5. Check for voltage at +AT1:X02.2. If voltage is not present repair the connection at the terminal.



6. Check for voltage at breaker +AT1:F03.3 and F03.4. If voltage is present at 4 but not at 3 then the F03 is defective. If no voltage is present at either point then the issue is either at the main transformer or in the grid. Take actions appropriate for your site to repair.



Item	Item No.
F06 Fuse p/n	60005379
F31 Breaker p/n	60004648

F03 Breaker p/n	<u>60005662</u>
-----------------	---------------------------------

Upload software or replace TAC

Does this solve the problem?

1] Yes

2] No

3] I don't know

- **Explanation**

1. Check for voltage at the TAC computer terminal P1.9. If there is no voltage there then the wiring between that terminal and the TAC is defective and must be repaired.
2. If voltage at the TAC is as expected (about 19 volts for a 600V turbine and 18.5 volts for a 690V turbine) and the voltage is still displayed low or abnormal on the TAC then first reload turbine software into the TAC computer. If that does not fix the problem then change the TAC.

TAC computer p/n [51707301](#)