Test run the turbine while monitoring for tower vibrations

Does this solve the problem?

1] Yes

2] No

3] I don't know

- **Explanation**

If this alarm is legitimate, there is something causing extra vibration that needs to be addressed. If the error is intermittent, consider causes that affect the turbine periodically.

Check the blade bearings and yaw bearing for smoothness of movement.

Listen to the gearbox while slowly increasing the RPMs. Abnormal noise or vibration should prompt you to perform a gearbox inspection.

Inspect the ballast tanks or counterbalance pendulum for nonconformities like leaks on the former or broken cables on the latter.

If the pitch accumulators are empty or defective, the pitch system may be operating with enough shock loads to trigger a lateral vibration. Perform a pitch test on each blade

Check accelerometer wire and terminations at the TAC84

Does this solve the problem?

1] Yes

2] No

3] I don't know

- **Explanation**

Check the vibration count in the alarm snapshot.

(Or) test run the turbine with the data logger monitoring channel 0401 ‘TAC84 Lateral Vibration 1 sec.’

If the oscillating signal is erratic or intermittent, the most likely cause is a loose connection someplace. Check the TAC84 socket and all wire termination there on.

If the accelerometer cable is broken, replace the whole sensor. When changing the sensor, remember to change the sensor calibration parameter in the TAC84 and write the number on the Panduit below the U7.

VS05E Accelerometer 12M Part: 51705401

Check the TAC84 module for correct parameters

Does this solve the problem?

1] Yes

2] No

3] I don't know

- **Explanation**
  If this is a new turbine or the TAC84 module has recently been replaced. There could be an incorrect parameter on the TAC84 module.

  Use the TAC 84 parameter list to verify.

  To access the TAC84 parameters through the service panel, go to configuration → set top sensor parameters → TAC84 tower lateral parameters

  TAC84 parameter settings Doc.: 0038-8880

  TAC84 user manual Doc.: 5002041

Check the B24 sensor

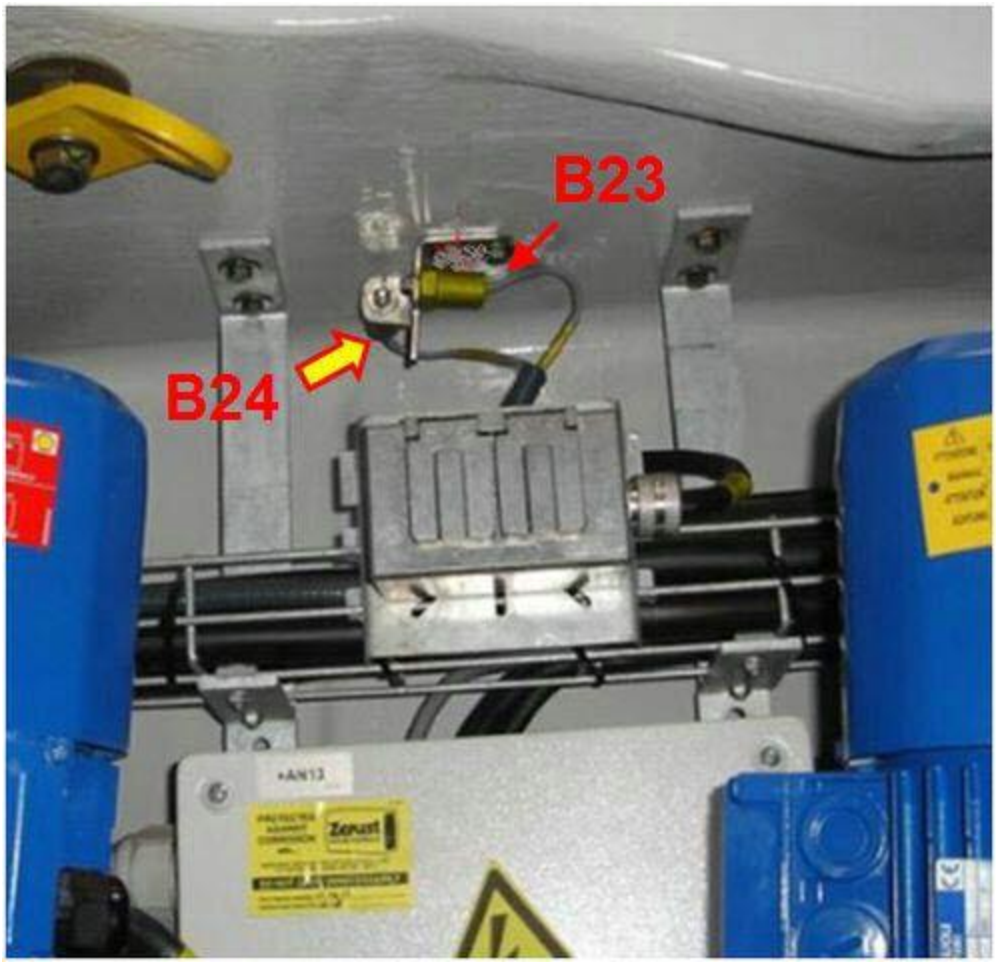
Does this solve the problem?

1] Yes

2] No

3] I don't know

- **Explanation**
  If the B24 and B23 sensor wires are switched, it will cause this alarm. Confirm that the lateral sensor wires runs to the U7 TAC84.



You can also validate the calibration number. It is a three digit number printed on the sensor wire and it should be stored as parameter 14 in the TAC module. This number should also be written on the Panduit cover under the TAC84 module.

To access the TAC84 parameters through the service panel, go to configuration → set top sensor parameters → TAC84 tower lateral parameters

Clear the alarms stored on the TAC84 after replacing the sensor.

TAC84 parameter settings Doc.: 0038-8880

VS05E Accelerometer 12M Part: 51705401

Check the U7 TAC84, replace if it is bad

Does this solve the problem?

1] Yes

2] No

3] I don't know

- **Explanation**

If you suspect the TAC84 itself is causing the alarm, check for loose wires on the RS485 communication cable and TAC84 backplane.

If the wires are all secure, you can replace the TAC84 with a known working one. If the turbine runs without alarm with the new TAC84 module, return the old one to vestas for testing and refurbishing.

TAC84 parameter settings Doc.: 0038-8880

TAC84 user manual Doc.: 5002041

TAC 84C VIB GUARD RS485 NMCS Part: 51700101

Wiring RS485 Part: 60012101