

### Wait for conditions to improve

#### Does this solve the problem?

1] Yes

2] No

3] I don't know

- **Explanation**

This alarm may be caused by poor environmental conditions like unusual wind speeds, frequent wind direction shifts etc. If the environmental conditions are poor, wait for the conditions to improve and reset the turbine.

### Check the condition of the yaw system

#### Does this solve the problem?

1] Yes

2] No

3] I don't know

- **Explanation**

#### IN THE NACELLE:

Check that the yaw system is properly working, manually test the yaw system CW and CCW.

Check for any abnormal noises or function in the system.

### Replace the defective wind sensor

#### Does this solve the problem?

1] Yes

2] No

3] I don't know

- **Explanation**

#### IN THE NACELLE:

If the fault is intermittent and occurring often



Set up the TAC data-logger to trigger on fault 219 and record wind direction and speed for both sensors. If signal is consistently missing at the exact same time from both sensors then it is likely a problem with communication between the TAC controller and the sensor.

Remove connector on the wind sensors and check for signs of moisture/corrosion/damage.

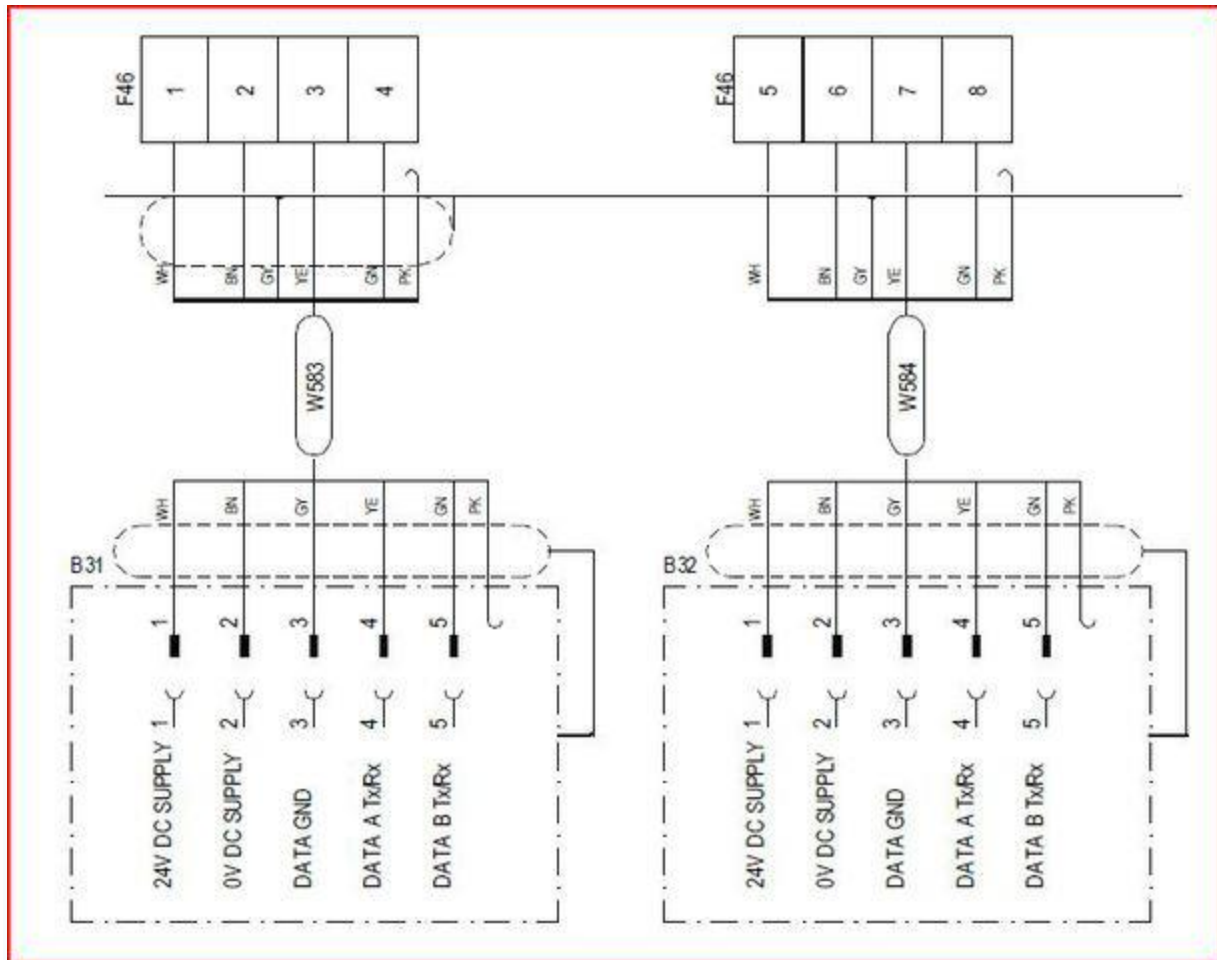


If the cable or plug has been damaged or shows signs of corrosion that cannot be repaired, replace the respective cable with a new one.

Part number for cables:

**60093757 Cable -W583 NM30t.**

**60093759 Cable -W584 NM30t.**



Check the wind direction signal in the TAC computer.

Observe the wind direction for any deviation from both sensors.



Part number for FT sensor:

60111943- WIND SENSOR US FT702LT V7-10

CIM: [2675](#)

106510 - WIND SENSOR US FT702LT V22

SWI [0010-1892](#) - FT sensor Fault finding Procedure



If replacing the FT sensor, ensure that it meets the firmware requirements mandated in DMS [0028-9335](#) and [0029-1332](#).

**NOTE:** To upgrade the sensor firmware, the sensor will be connected directly to a PC with firmware installed from the Vestas Software Portal.

If the FT sensor does not appear to be shorted, check the F46 varistor box for a failed varistor. Remove the wires from the varistor box and remove it from the housing.

#### **Varistor box F46:**

**Part number for Varistor: 51706201 VARISTOR BOX X8**

Both wind sensor 1 (left) and wind sensor 2 (right) use varistor box F46. Terminals 1-4 (top and bottom) are for wind sensor 1 and 5-8 (top and bottom) are for wind sensor 2.



If the cable is mounted tight and it pulls in the sensor connector, it must be connected so that it is not pulling the plug.

Press the clip on top and bottom of the varistor box and remove varistor assembly from housing:



The varistor box is made up of eight varistors and has provisions for 16 wire connections (protection for 8 signals)

Cable plug and protective boot:



Proper instillation of protective boot:





Check the connections at the ICP RS485 repeaters (K21 & K22) in the AN1. Check for loose wires and plugs or corrosion at the repeater.



If there is no communication on one sensor, switch the ICP RS485 repeaters to see if the communication returns. If communication returns when the repeaters are switched, replace the faulty repeater. Item number:

**60004933 - RS485/RS485 REPEATER I-7510 ICP**