

Replace the F03/F09 MCB

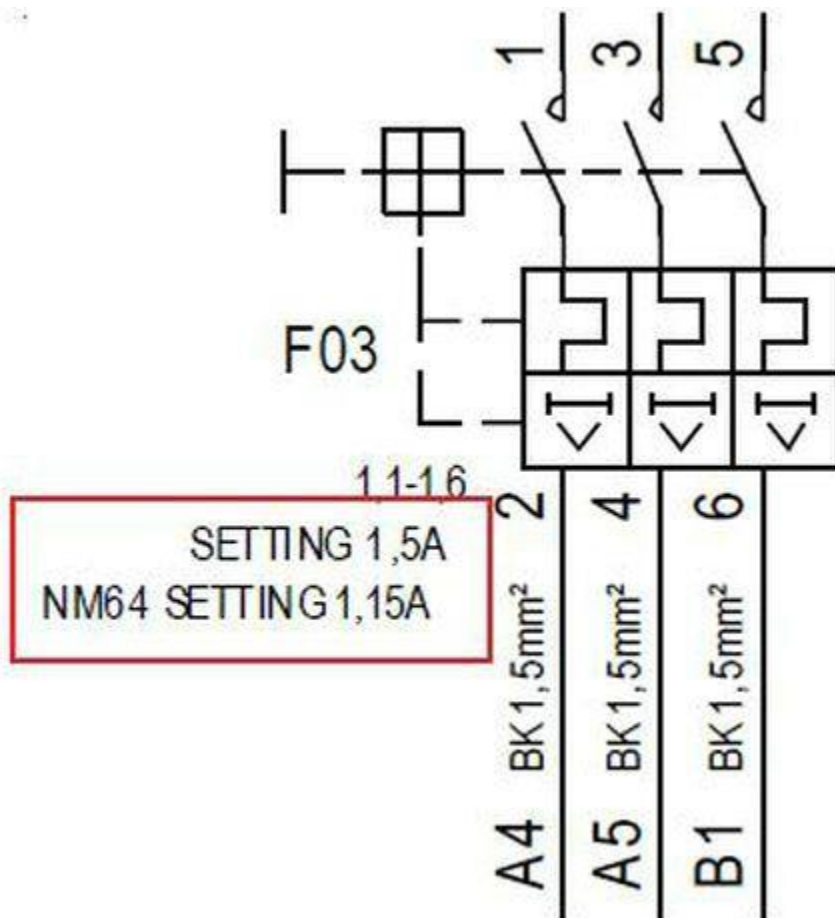
Does this solve the problem?

1] Yes

2] No

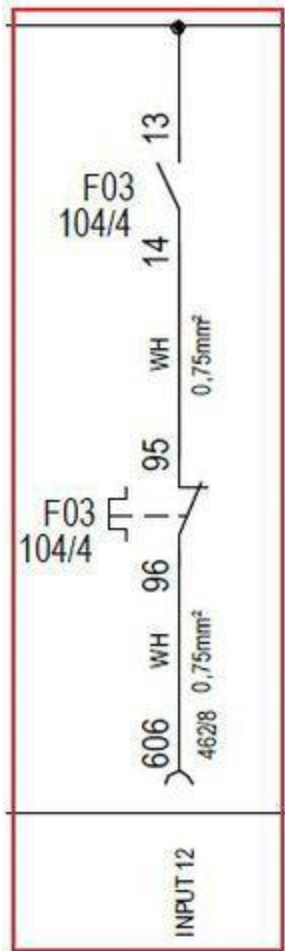
3] I don't know

- **Explanation**
50 Hz

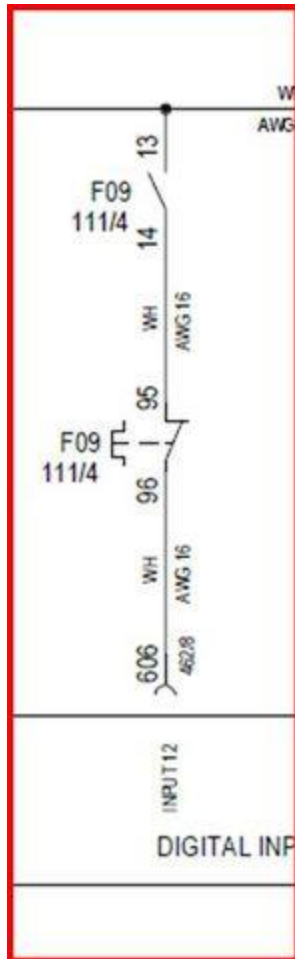


60Hz





60 Hz



IN THE AT2 CABINET:

- Check the INPUT/ OUTPUT voltage(F03= 50Hz-F09= 60Hz)
- Check the MCB function.
- Check the MCB continuity.
- Check the required current setting in the MCB
- Check for loose connection in the terminals and cable condition.
- Check the Auxiliary relay function input to TOI.

Refer Documents:

- Replacement of Electrical parts in Control Panels (WKI [0001-8388](#))

- Risk Assessment ([0001-8390](#))

Vestas Item No:

- Item no for MCB (50 Hz) - 60004746
- Item no for MCB (60 Hz) - 60004749
- Item no for auxiliary Relay - 60004778

Components View in AT2 Panel:



Replace yaw motor/magnetic coil

Does this solve the problem?

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

- **Explanation**

- Check for any loose connection in the terminal box:
- Remove the STAR/ DELTA connections and check the Winding /coil resistance value

Yaw motor



Yaw motor connection:



Remove the Yaw brake magnetic coil connection

And Measure the resistance value of the motor windings and magnetic coil.

Measure phase to phase and phase to earth on all windings.



The resistance value should be $>1\text{M}\Omega$.

- Check the supply voltage R,Y ,B Winding
- To ensure operate the Motor and listen abnormal noise of any kind.

If magnetic coil failure, we can replace coil only

Refer documents:

- Yaw motor replacement WKI: [0011-5166](#)
- Service Work Instruction for Yaw Lock: [0002-8965](#)
- Service Work Instruction for Yaw System" [1000686](#) V08

Vestas Item No:

- Yaw motor : 60091176
- Yaw motor magnetic coil - 60120682 (AC BRAKE TYPE FA)
- Yaw lock assembly.:VT735237

Yaw motor magnetic coil



Check & adjust the yaw magnetic brake –Refer the Service Work Instruction for Yaw System” [1000686](#)

Replace the defective cable

Does this solve the problem?

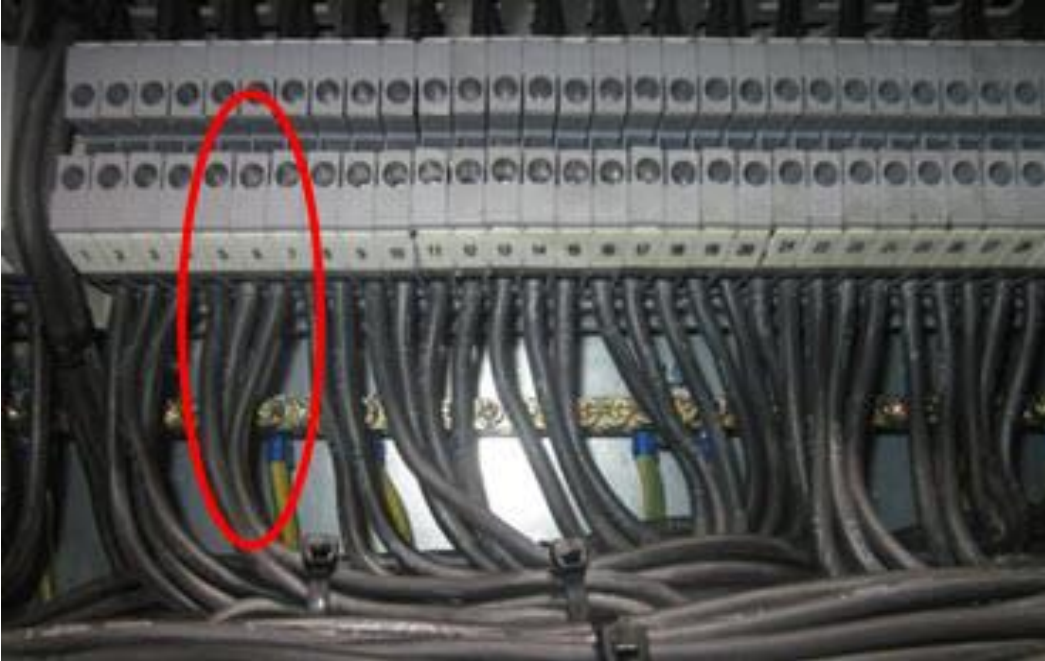
- 1] Yes
- 2] No
- 3] I don't know

- **Explanation**
Cable coming from +AN4 to yaw motor2 terminal box



- Check the incoming cable from Control panel (+AT2) to motor box (+AN4)
- Check the cable connection from motor box(+AN4) to Yaw motor 2 terminal box (W301)

+AN4 connection Terminal:



Replace the defect Tower TOI unit

Does this solve the problem?

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

• **Explanation**

INPUT 525-613

- Main bearing pump overload
- Nacelle fan overload
- Yaw brake pump overload
- Pitch feeder pump o.load
- Pitch main pump overload
- Pitch softstarter feedback
- UPS load protected
- UPS battery fault
- External alarm 2
- Service key
- Safety relay feedback
- Yaw motor 1 overload
- Yaw motor 2 overload
- Yaw motor 3 overload
- Yaw motor 4 overload
- Yaw motor 5 overload
- Off-line filter pump overload
- Gear oil heater overload
- Yaw motor 6 overload

TOI Controller:



TOI 2 INPUT INTERFACE	PAGE	24VDC	0VDC	SPARE	SHIELD	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE	SHIELD	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE	SHIELD	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE	SHIELD	EXTERNAL ALARM2	LOW PRODUCTION	SERVICE KEY	EMERGENCY RELAY FEEDBACK	0VDC	YAW MOTOR 1 OVERLOAD	YAW MOTOR 2 OVERLOAD	YAW MOTOR 3 OVERLOAD	YAW MOTOR 4 OVERLOAD	0VDC	YAW MOTOR 5 OVERLOAD	OFF-LINE FILTER PUMP OVERLOAD	SPARE
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201	4038																																											
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Observation Points:

- Change the TOI if no signal from TOI
- To check tightness of the connection.

Reference Documents:

- Replacement of Electrical parts in Control Panels ([0001-8388](#))
- Risk Assessment ([0001-8390](#))

Vestas Item No:

51701501

Replace the defect Yaw Gear unit

Does this solve the problem?

1] Yes

2] No

3] I don't know

- **Explanation**
IN THE NACELLE:

- Remove the yaw motor with connection

Refer the below Doc:

1. [0004-5922](#)
2. [0011-5166](#)

- Keep the yaw motor safely
- Check the oil level in gears. If necessary, top up yaw gears with correct type of oil.
- Operate the yaw gear and observe the any kind of abnormal sound.
- Ensure yaw gear rotate or not.
- If not rotate the yaw gear unit or create abnormal noise, change the yaw gear unit as per WKI.

Refer Documents:

- Replacement of Yaw Gear Unit WKI: [0010-5073](#) V00

Vestas Item no: 60103371

Picture view yaw gear:

