

## To fix the Hat and sealing cover

### Does this solve the problem?

1] Yes

2] No

3] I don't know

- **Explanation**  
**IN THE Nacelle:**

Ensure mounting hat is fixed

Relevant documentation	
Description	DMS No.
Mounting Hat on Yaw Motor	<a href="#">0004-5922</a>
Sealing Nacelle Cover	<a href="#">0004-7508</a>

Relevant spare parts	
Description	Item No.
KIT SET FOR YAW MOTOR PROTEC	<a href="#">883141</a>
COVER PL. CPL. AT MAIN SHAFT V82 -LEFT	<a href="#">60111602</a>
COVER PL CPL AT MAIL SHAFT V82 -RIGHT	<a href="#">60111603</a>



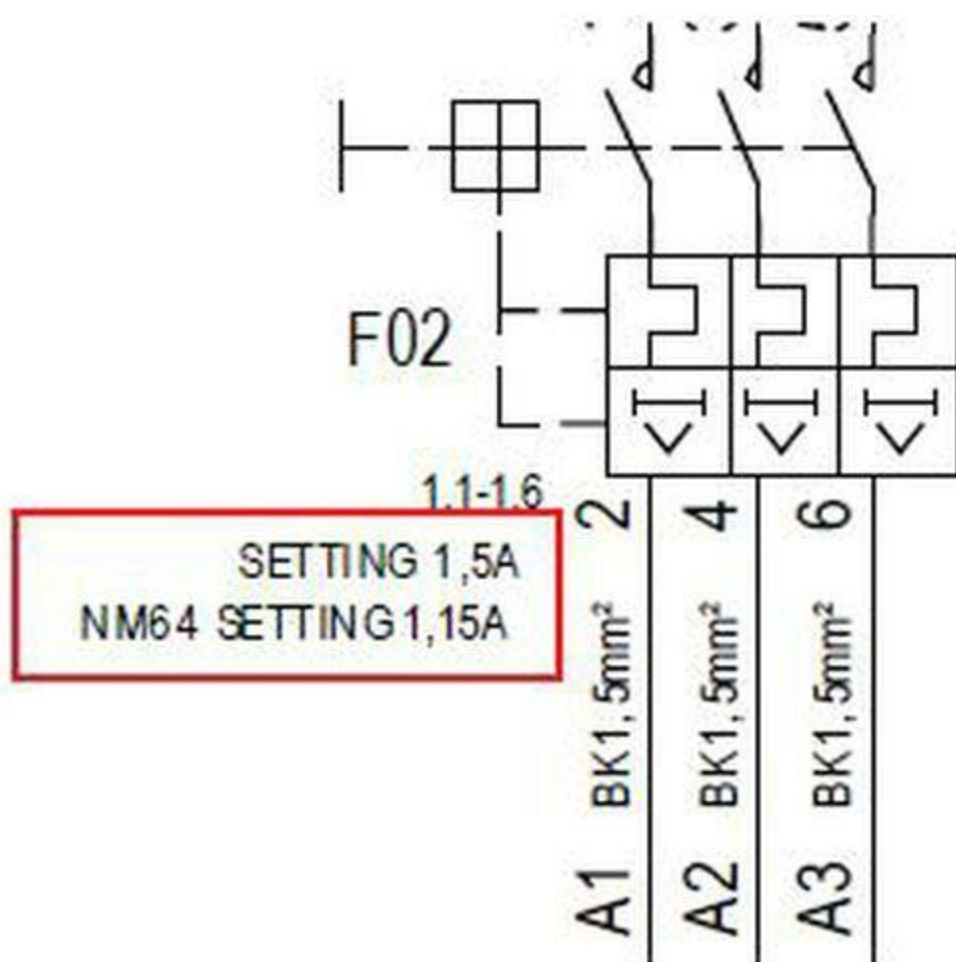


**Replace the MCB**

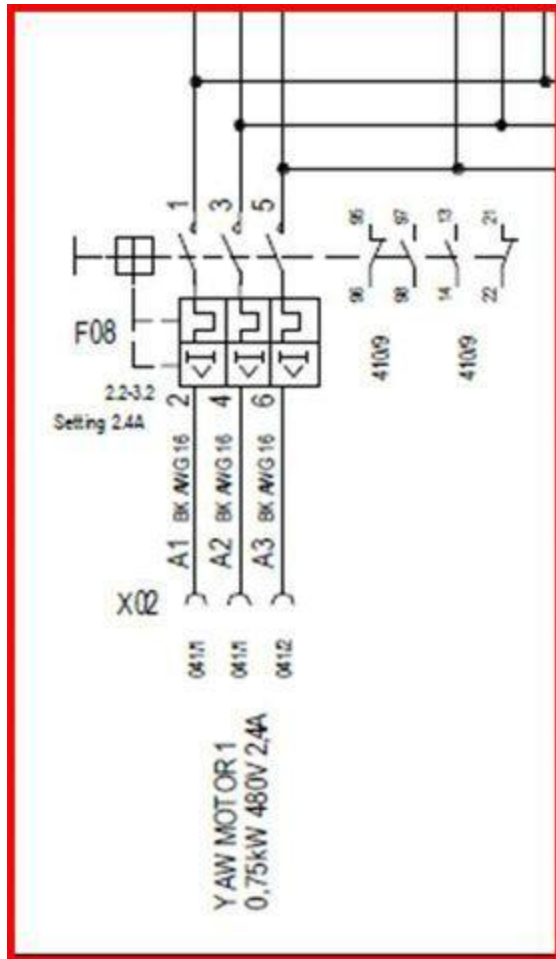
**Does this solve the problem?**

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

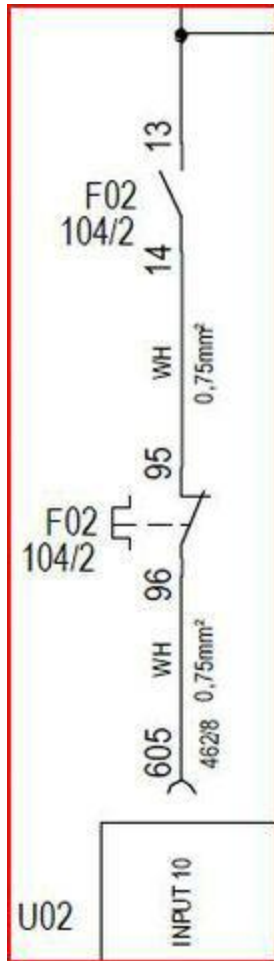
- **Explanation**  
50 Hz



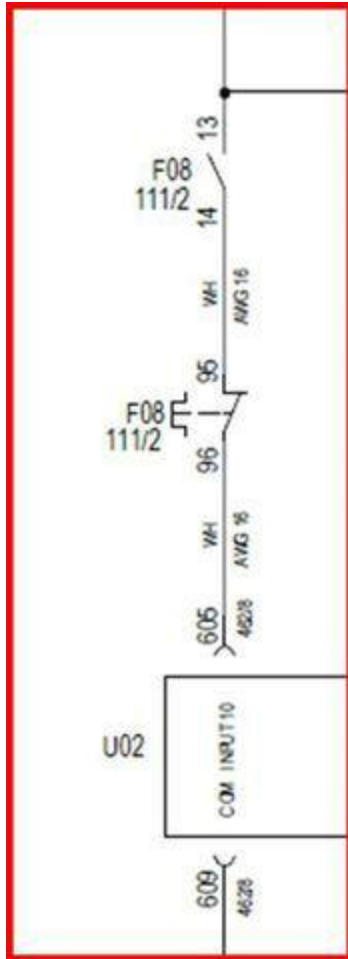
60Hz



50 Hz



60 Hz



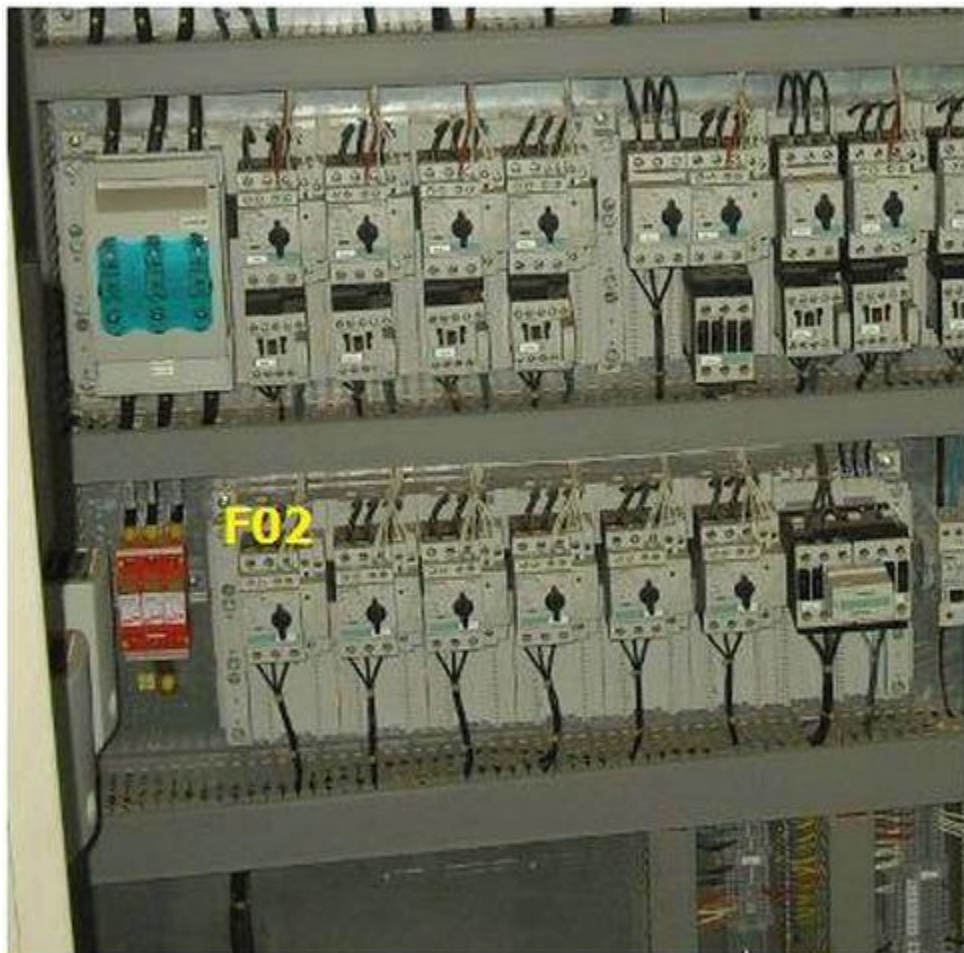
#### IN THE AT2 CABINET:

- Check the INPUT/ OUTPUT voltage (F02)
- 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.

Relevant documentation	
Description	DMS No.

Replacement of Electrical parts in Control Panels	<a href="#">0001-8388</a>
Risk Assessment	<a href="#">0001-8390</a>

Relevant spare parts	
Description	Item No.
CB 3RV1121-1AA10 1.1-1.6A	<a href="#">60004746</a>
CB 3RV1121-1DA10 2.2-3.2A	<a href="#">60004749</a>
AUX CONTACT 3RV1901-1E	<a href="#">60004778</a>





## Replace yaw Motor

Does this solve the problem?

1] Yes

2] No

3] I don't know

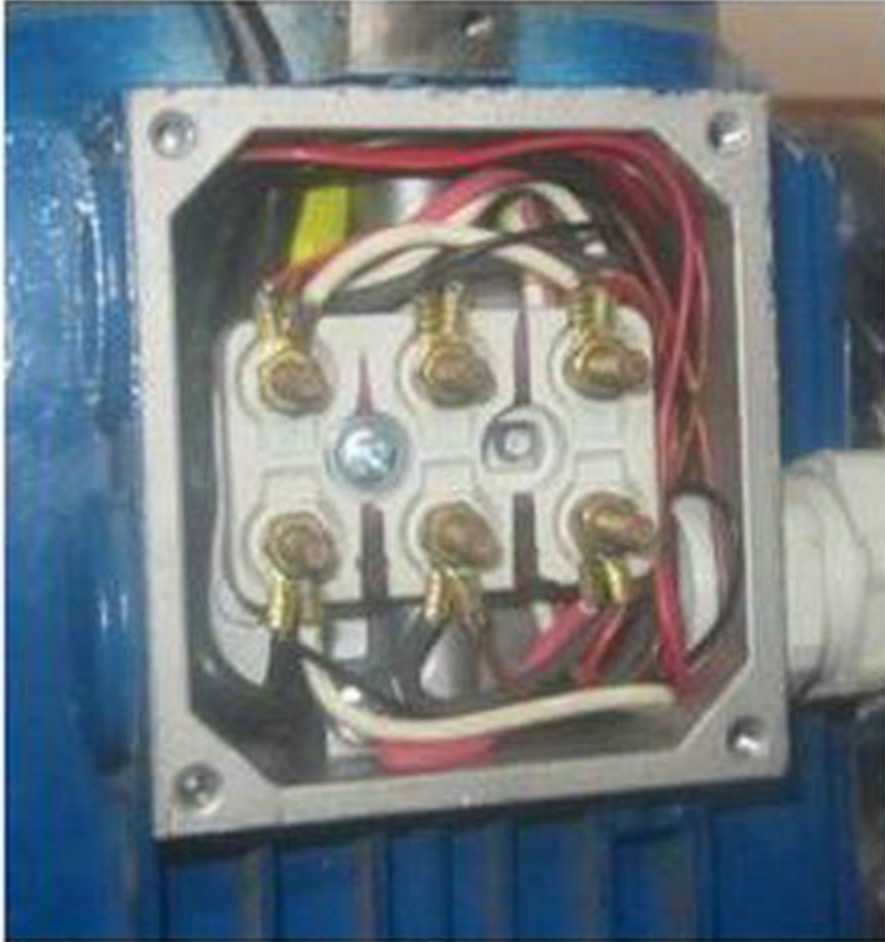
- **Explanation**

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

Yaw motor



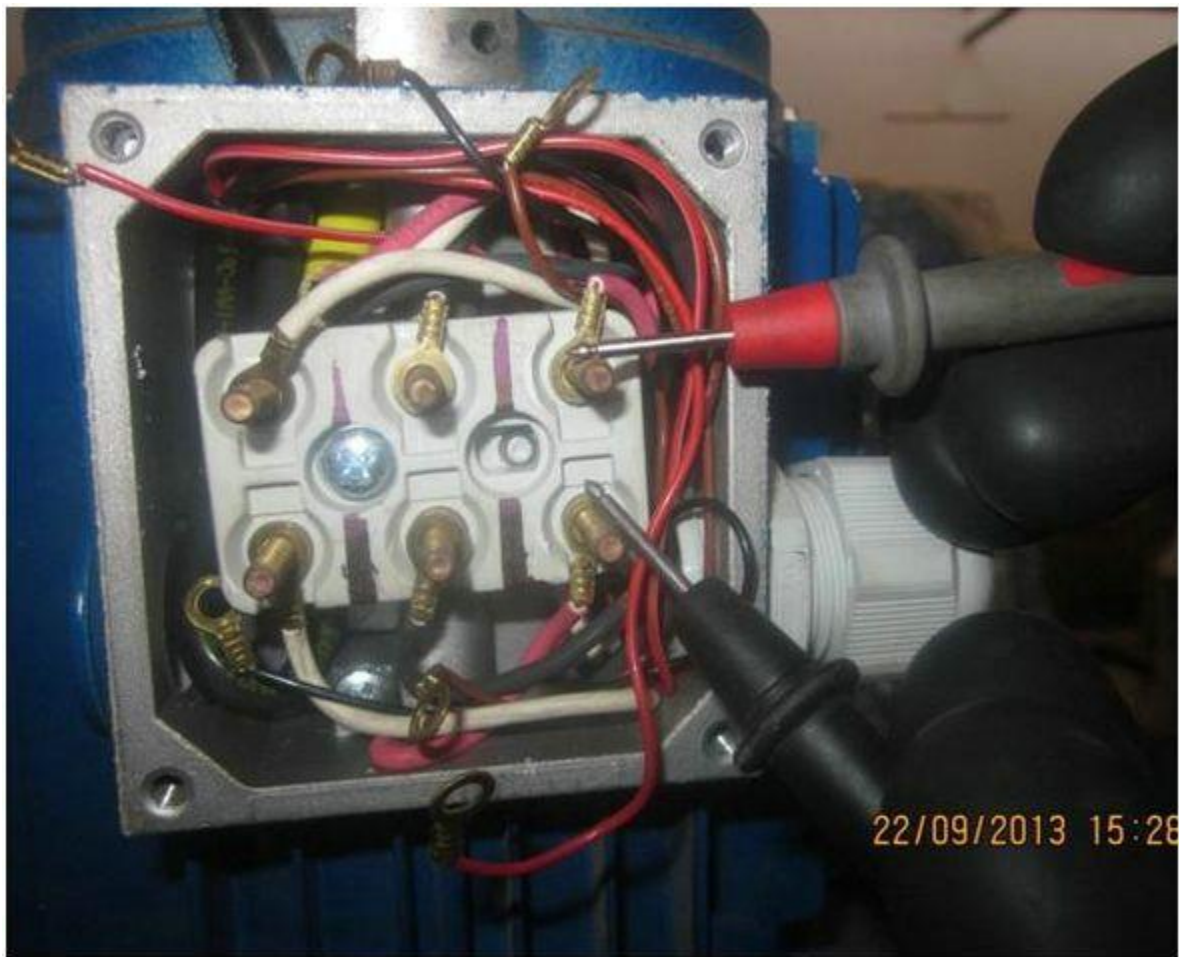
Yaw motor connection:



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

- Check the incoming cable from Control panel (+AT2) to motor box (+AN4), in some cases broken wires have been found (at the loop) inside the W309. There are spare wires in W310 and wires have to be moved for the motor in the terminals of +AT2/+AN4. Remember to mark old wires in both ends as defect. Spare wires







+AN4 connection Terminal:



**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

Relevant documentation	
Description	DMS No.
Mounting Hat on Yaw Motor 6	<a href="#">0004-5922</a>
V82/NM82 Replacement of Yaw Motors	<a href="#">0011-5166</a>



Replacement of Yaw Gear Unit	<a href="#">0010-5073</a>
SWI for yaw lock	<a href="#">0002-8965</a>

Refer the below Doc:

- Keep the yaw motor safely
- Check the gear unit oil level (if its needed top up as per procedure)
- Master Reset the WTG and Switch on yaw controller.
- To make ensure yaw gear rotate or not.
- To ensure rotate the yaw gear unit and listen abnormal noise of any kind.
- If not rotate the yaw gear unit or create abnormal noise, change the yaw gear unit as per WKI.
- To ensure yaw gear unit bed bolt torque value as per I & S data

Relevant spare parts	
Description	Item No.
Yaw gear Bonfiglioli 709T4F 0,	<a href="#">60103371</a>

Picture view yaw gear:



**Replace the defect Tower TOI unit**

**Does this solve the problem?**

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

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• **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:



Pin	Signal	Pin	Signal
200	24VDC	4038	SPARE
201	0VDC	4039	SPARE
202	SPARE	4040	SPARE
203	SPARE	4041	SPARE
204	SPARE	4042	SPARE
400	SPARE	4043	SPARE
401	SPARE	4044	SPARE
402	SPARE	4045	SPARE
403	SPARE	4046	SPARE
404	SPARE	4047	SPARE
405	SPARE	4048	SPARE
406	SPARE	4049	SPARE
407	SPARE	4050	SPARE
408	SPARE	4051	SPARE
409	SPARE	4052	SPARE
410	SPARE	4053	SPARE
411	SPARE	4054	SPARE
412	SPARE	4055	SPARE
413	SPARE	4056	SPARE
414	SPARE	4057	SPARE
415	SPARE	4058	SPARE
416	SPARE	4059	SPARE
417	SPARE	4060	SPARE
418	SPARE	4061	SPARE
419	SPARE	4062	SPARE
600	SPARE	4063	SPARE
601	SPARE	4064	SPARE
602	SPARE	4065	SPARE
603	SPARE	4066	SPARE
604	SPARE	4067	SPARE
605	SPARE	4068	SPARE
606	SPARE	4069	SPARE
607	SPARE	4070	SPARE
608	SPARE	4071	SPARE
609	SPARE	4072	SPARE
610	SPARE	4073	SPARE
611	SPARE	4074	SPARE
612	SPARE	4075	SPARE

### Observation Points:

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

Relevant documentation	
Description	DMS No.
Replacement of Electrical parts in Control Panels	<a href="#">0001-8388</a>
Risk Assessment	<a href="#">0001-8390</a>

### Relevant spare parts

Description	Item No.
TOI-II INTERF NM1500 TOWER	<a href="#">51701501</a>