Check the QN01 safety switch located by the slip ring

Does this solve the problem?

1] Yes

2] No

3] I don't know

- **Explanation**

If this alarm occurs after work was done in the hub or on the slip ring unit, check to make sure a tech has not left the safety switch open.

If the switch is locked out and tagged out, contact the person responsible before proceeding.

Verify that the switch wasn't left open for a good reason.

Only if it is safe to proceed, close the switch and retest the pitch system.

Check F18 overload relay

Does this solve the problem?

1] Yes

2] No

3] I don't know

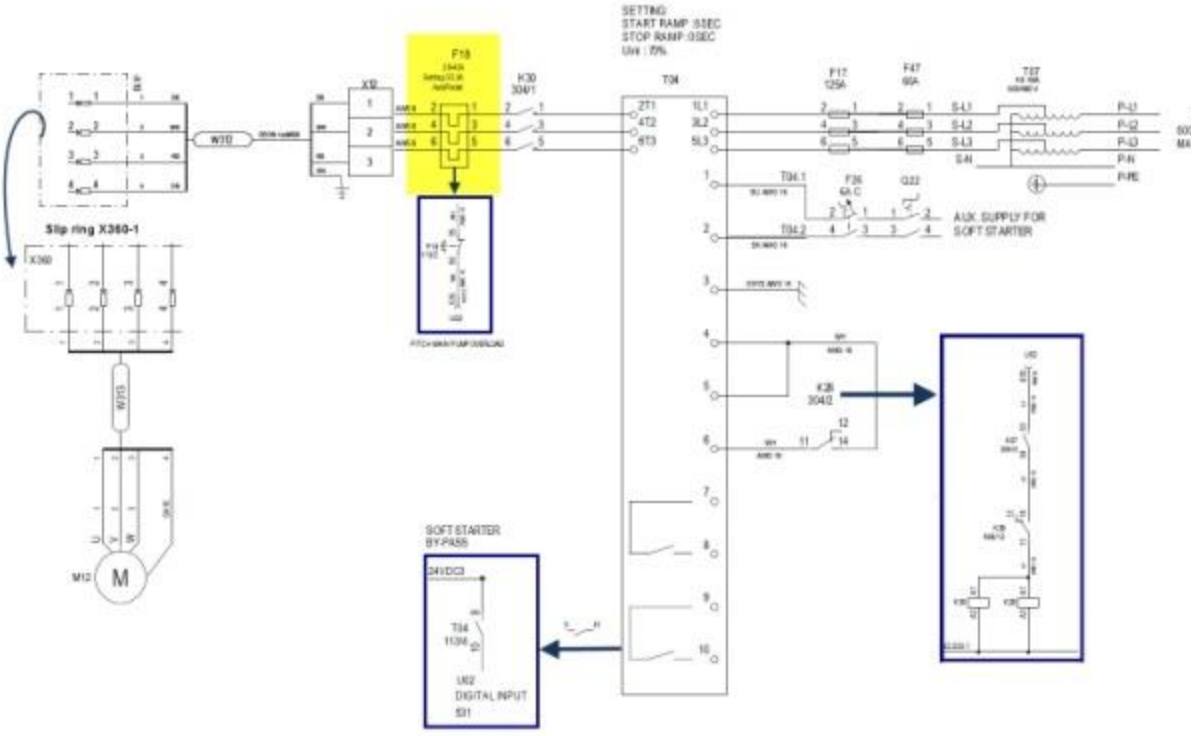
- **Explanation**

Does this turbine also have alarm 313 pitch main pump overload?

Verify the overload setting.

Overload should be set to about 36A, if it is not, refer to Service Message 136 (Doc#: 0022-8252)

While the pitch pump is starting to run, measure current draw between the F18 and the X12 terminal. If the current draw doesn't exceeded the set point on the overload relay (ignore inrush value) but the overload relay trips, then it is defective and needs to be replaced.



Spare Parts:

60004588 RELAY TH 3RU11364FB0 2840A

Check the softstarter while starting the pitch system

Does this solve the problem?

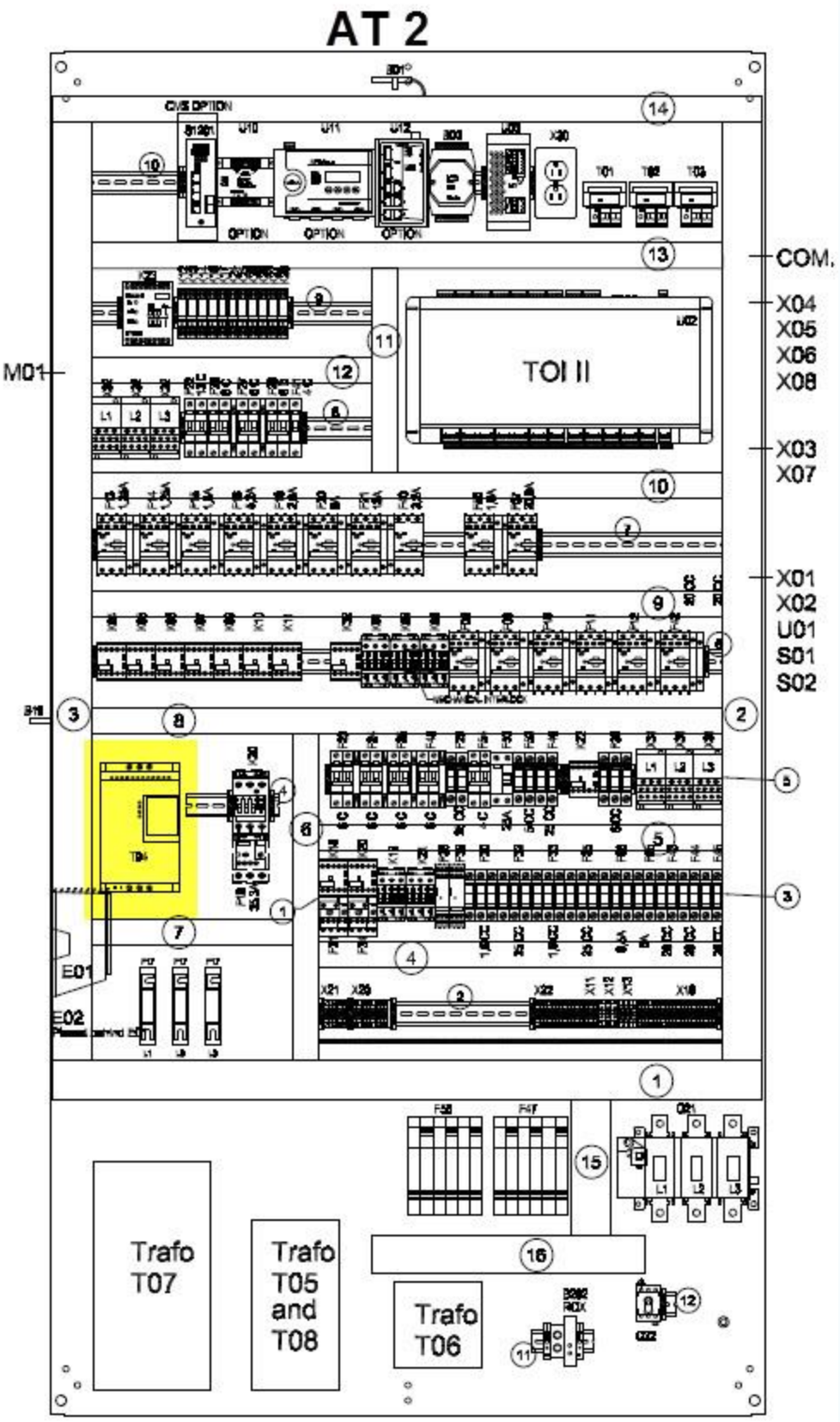
1] Yes

2] No

3] I don't know

- **Explanation**

The softstarter protects the main pitch pump circuit by limiting the peak power when starting. It is located in the lower left quarter of the AT2 cabinet. See image.



Verify settings on the soft starter. Start ramp should be set to 6 sec and stop ramp should be set to 0.

Is the F18 set to 30 Amps? (only for 60Hz)

Does this solve the problem?

1] Yes

2] No

3] I don't know

- **Explanation**
  ****Only for 60Hz turbines****

  The setting for the F18 was changed from 30A to 36A in 2008. Check to see if this was done on your turbine. It may be faulting because the overload is just set too low.

Service message Doc#: 0022-8252

Check the Fuses in Position F17 in the AT2 cabinet

Does this solve the problem?

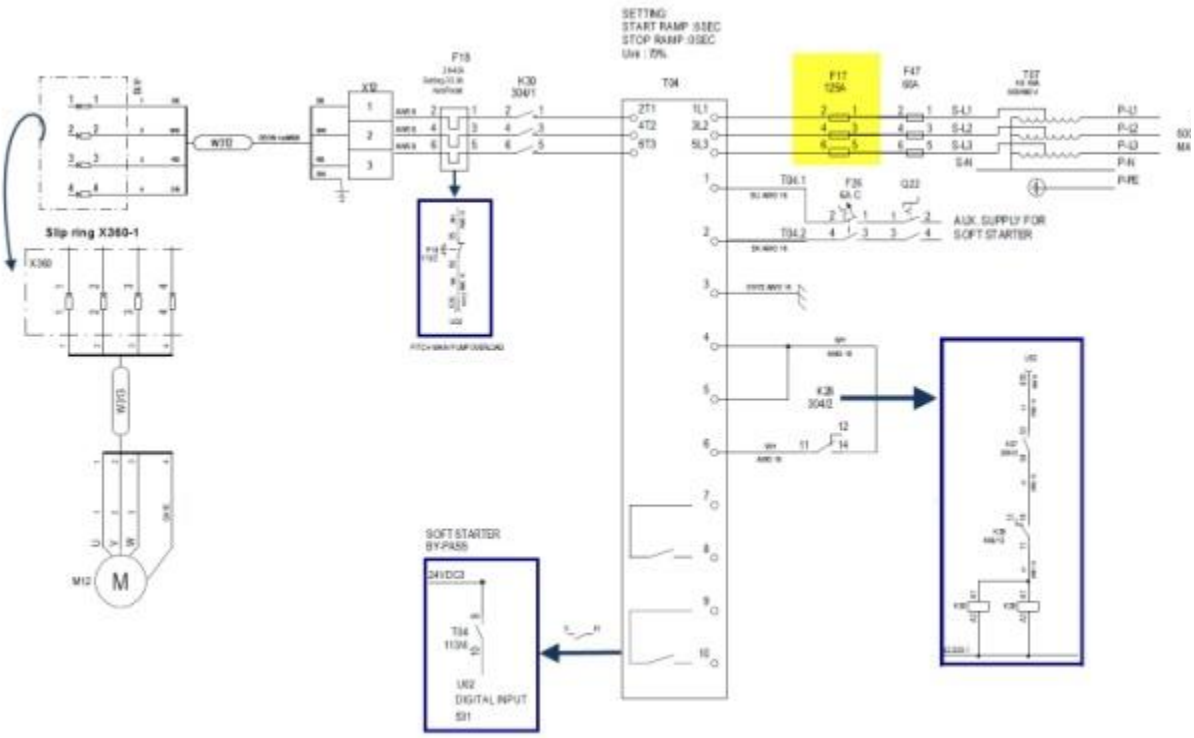
1] Yes

2] No

3] I don't know

- **Explanation**

  Use a multimeter to check the 125 Amp fuses in position F17. Replace any that you find bad.



Spare parts for F17:

60005348 FUSE SEMI 700V 125A AR IEC/UL

60005360 AUX CONT MS7V F DIODE FUSE

60005370 FUSE HOL F DIODE FUSE 000 200A

Replace the defect relay - K16

Does this solve the problem?

1] Yes

2] No

3] I don't know

- **Explanation**

  Check for loose connection at the relay K16 terminal (point11, 12, 14).

If the relay is defective replace with new.

Spare parts	
Description	**Item No.**
RELAY RT424024 8A 24V 2P	60004513

Replace defect Aux contact - Q10

Does this solve the problem?

1] Yes

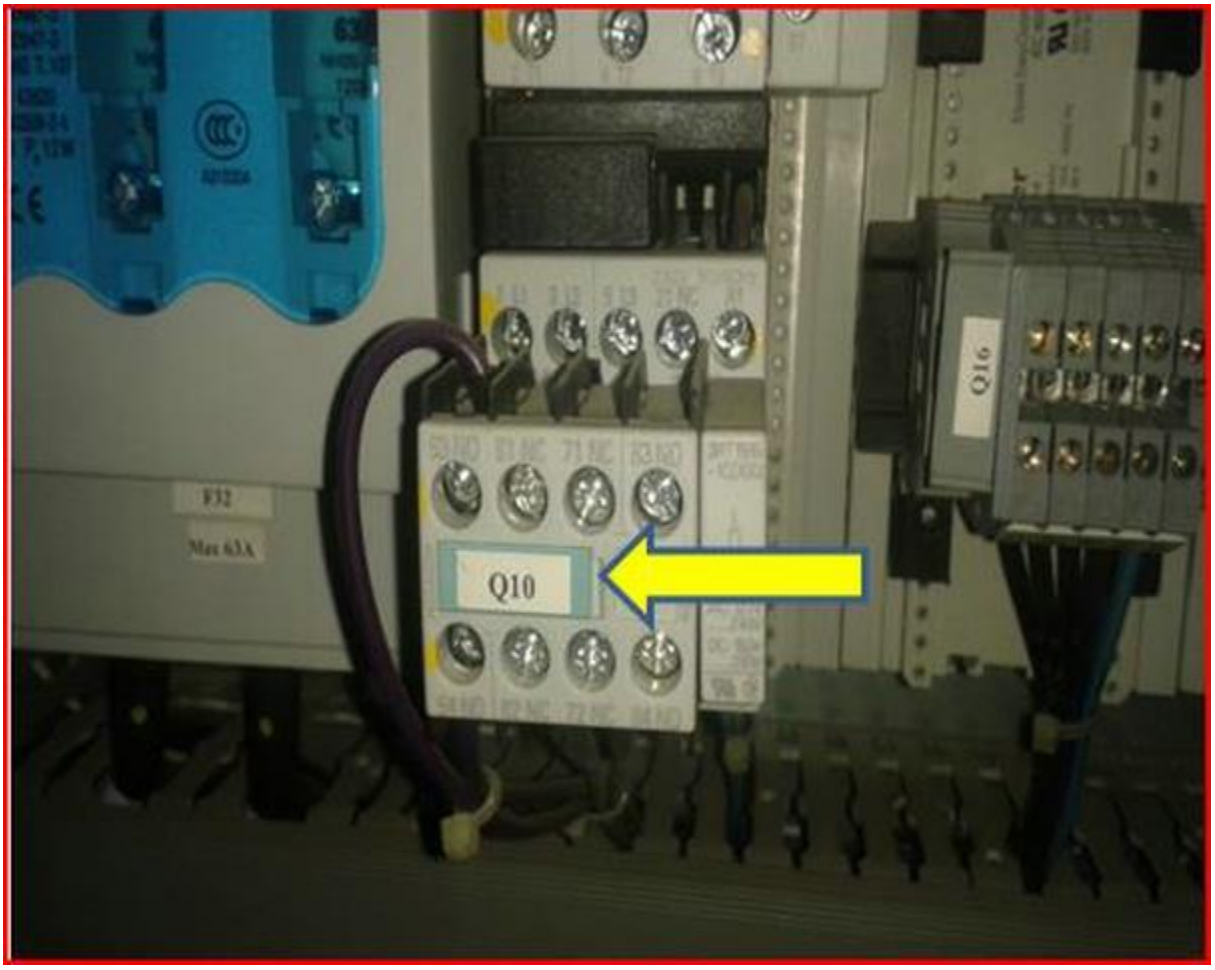
2] No

3] I don't know

- **Explanation**

Check for any loose connection at the Pitch feeder pump aux contact Q10 terminal

(point 53 and 54)



If the Q10 Aux contact is defective replace with new.

Spare parts	
Description	**Item No.**
AUX CONTACT 3RH1911-1FA22	60004433

Replace the defect contactor- Q13

Does this solve the problem?

1] Yes

2] No

3] I don't know

- **Explanation**

Check for any loose connection at the contactor Q13 terminal (A1 and A2) and Aux contact terminal (point13 and 14).

If the contactor is defective, replace with new.

Relevant documentation	
Description	**DMS No.**
SWI - Replacement of electrical parts in control panels	0001-8388

RA - Replacement of electrical parts in control panels	0001-8390

Spare parts	
Description	**Item No.**
CONT 3RT10341AL20 230V 50/60HZ	60004413
AUX CONTACT 3RH1921-1FA22	60004444

Test the whole circuit for open

Does this solve the problem?

1] Yes

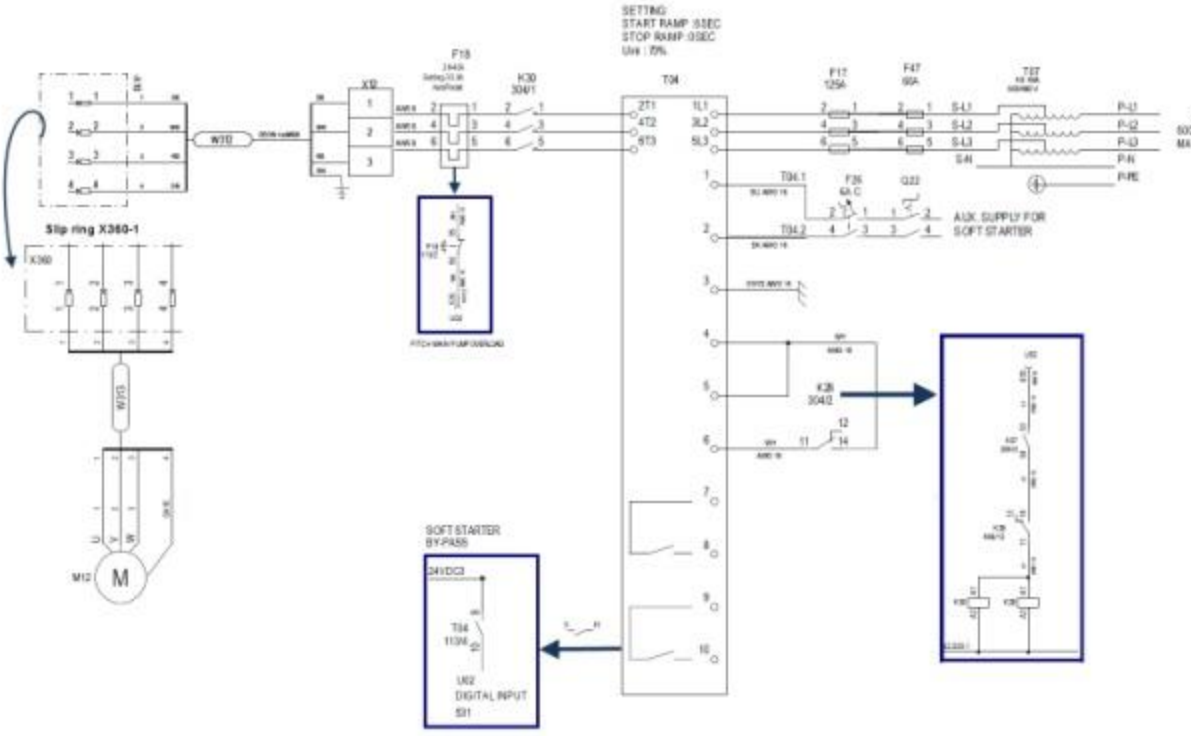
2] No

3] I don't know

- **Explanation**

With the circuit unpowered, use a multimeter to check for continuity throughout the circuit. You can cross wires in the motor box in the hub and check most of the circuit from the K30.

If you find an open, move your test points closer together in the circuit until you locate the exact location of the open.



Check the main pitch pump motor

Does this solve the problem?

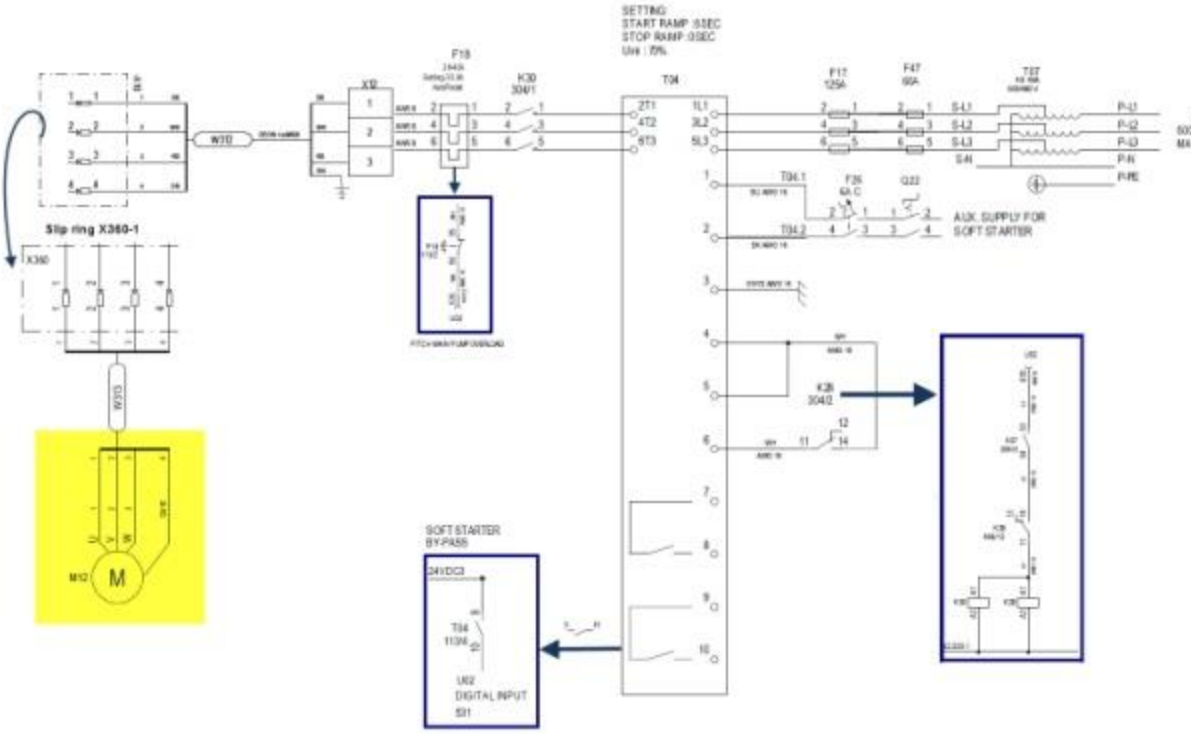
1] Yes

2] No

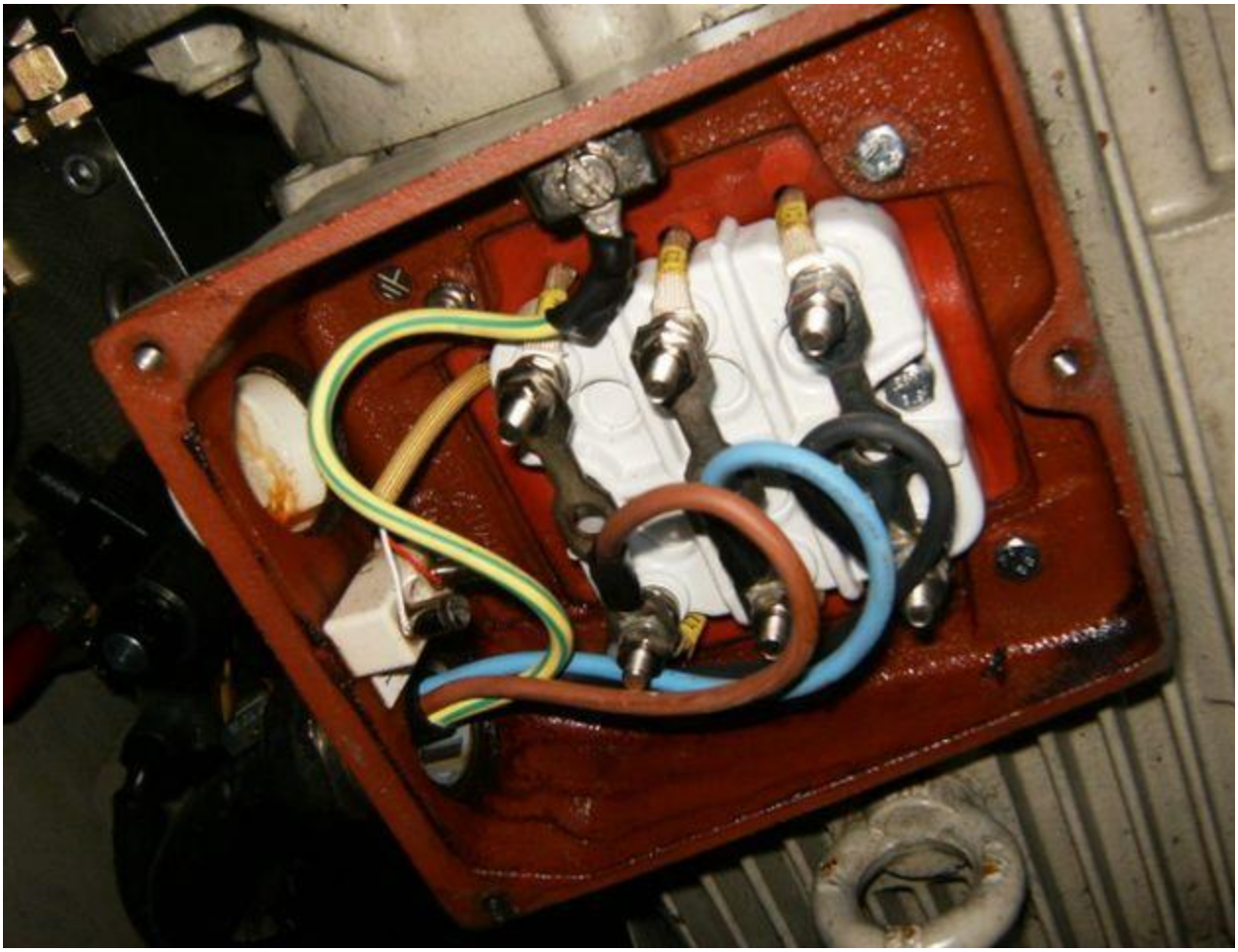
3] I don't know

- **Explanation**

  If the pitch main pump motor is suspected to be bad, perform a motor test on it. Replace if it is defective.



Also check all connections in the circuit for tightness. The motor leads may loosen over time.



Replacement of Pitch Pump Motor Doc#: 0001-3425