

## Test the AK4 G401 power supply, replace if it is defective

### Does this solve the problem?

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

- **Explanation**

Check the AK4:G401 for 24 VDC output and 230 VAC input.

If the input is good but the output is missing, then the power supply is bad and needs to be replaced. If the input is missing, troubleshoot the missing 230 VAC3.

If the output is good, check the AK4:K02 for 24VDC on terminal 3 and 4.

If you have voltage on 3 but not 4, *and* the turbine safety relay is OPEN, then everything is as it should be and the error is being falsely generated by the hub computer or by an error in communication.

If you have voltage on AK4:K02:4, and the turbine safety relay is OPEN, then there is an error causing the AK4:K02 to be closed when it shouldn't be.

PS ADC 5483R-3 10A-27 Part No: [188453](#)

BATTERY CHARGER ADC5483R/2 10A Part No: [188457](#)

## Check the AK4:K02 is in the proper state, replace if it is damaged

### Does this solve the problem?

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

- **Explanation**

It is fairly common for foreign objects to wedge the AK4:K02 closed. It is in a rotating part of the turbine and remains in one state for extended periods. If the K02 doesn't fully open when unpowered, it needs to be replaced.

CONT AL 93010 24V DC Part No: [60110379](#)

CLEANER F CONTACT 7039 400 ml Part No: [60039443](#)

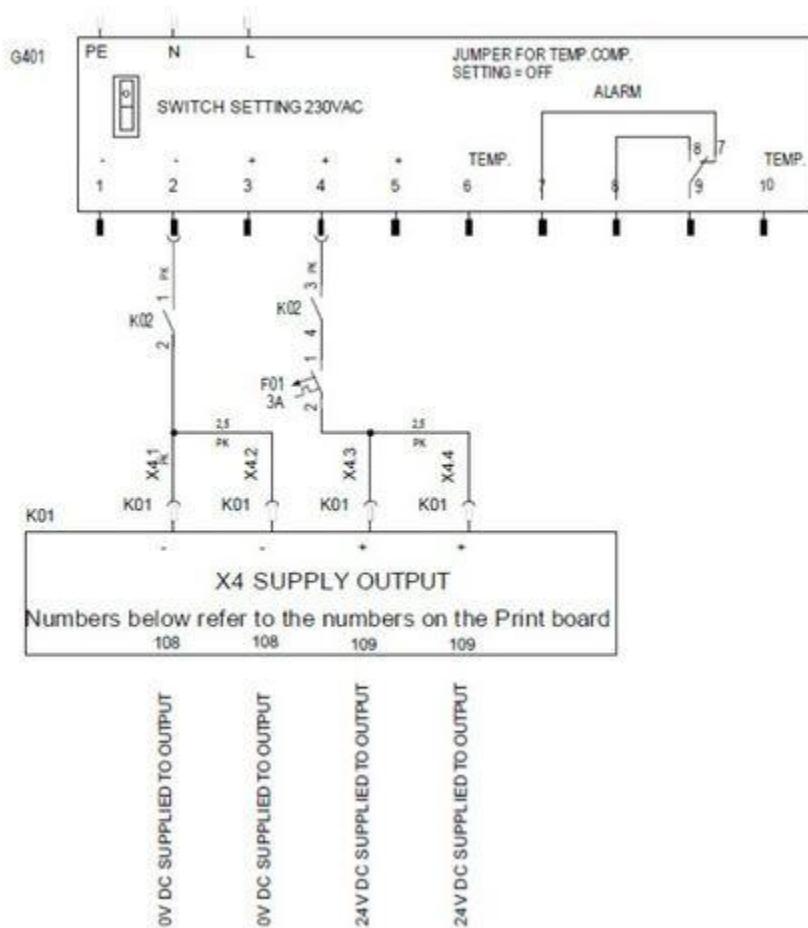
## Inspect the hub communication circuit

## Does this solve the problem?

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

- **Explanation**

The Safety Stop system disconnects the valve supply because, in an unpowered state, the valves will pitch the turbine to stop. It does this by removing coil voltage to the AK4:K02 which in turn separates the hub computer from the power supply in the AK4.



If the alarm is active and you measure 0 VDC on the AK4:K01 terminal 109, then the error is being falsely generated by the hub computer or by an error in communication.

All of the following could attribute to a hub communication error:

Slip ring connector plug (X360-4), slip ring wiring, dirty slip ring surface, shorting on slip ring brushes.

Cleaning procedure for slip ring unit Doc: [0001-4933](#)

## Check the Hub hatch override contactors

### Does this solve the problem?

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

- **Explanation**

If the AN1:K04 and AN1:K03 are closed, then the hub hatch override circuit is bypassing the safety and emergency relay to provide hub valve supply.

Try connecting the Hub Hatch override pendant and cycle the override button a few times to exercise the contactors. If the alarm persists, replace the contactors.

If the contactor coils are actually powered up and the override pendant is NOT connected, then there is a mistake in the wiring that needs to be corrected.

CLEANER F CONTACT 7039 400 ml Part No: [60039443](#)

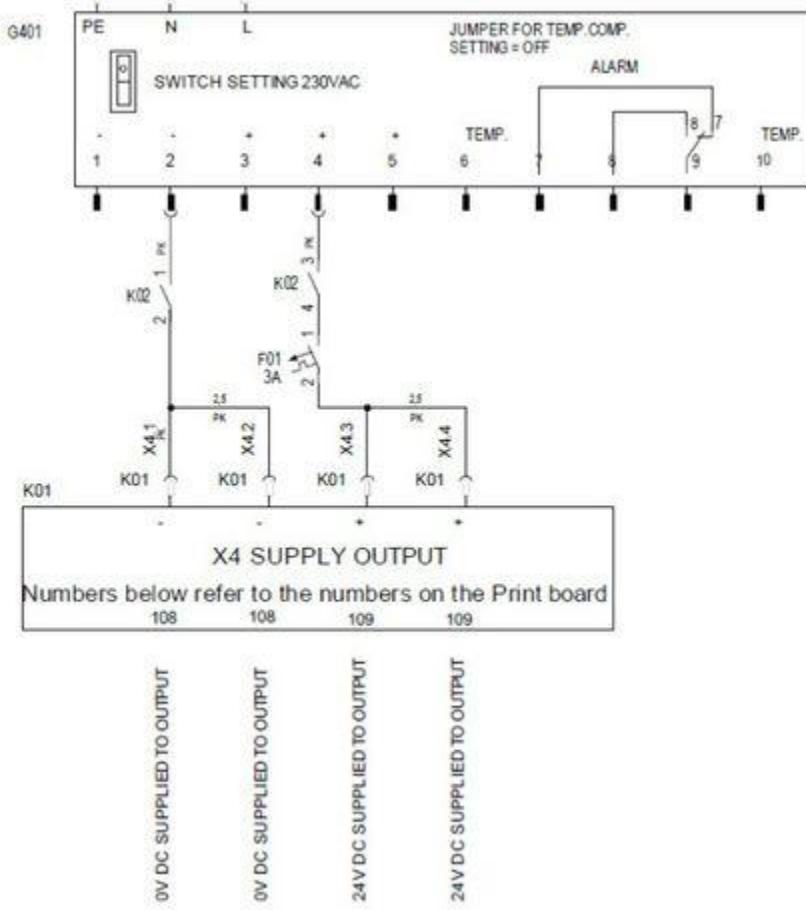
## Test for the signal at the Hub computer

### Does this solve the problem?

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

- **Explanation**

The Safety Stop system disconnects the valve supply because, in an unpowered state, the valves will pitch the turbine to stop. It does this by removing coil voltage to the AK4:K02 which in turn separates the hub computer from the power supply in the AK4.



If the alarm is active and you measure 0 VDC on the AK4:K01 terminal 109, then the error is being falsely generated by the hub computer or by an error in communication.

Check the hub computer connectors for loose or broken connections before replacing it.

Hub Computer Evo II part number [51701801](#)