



**BALTIMORE AIRCOIL COMPANY**

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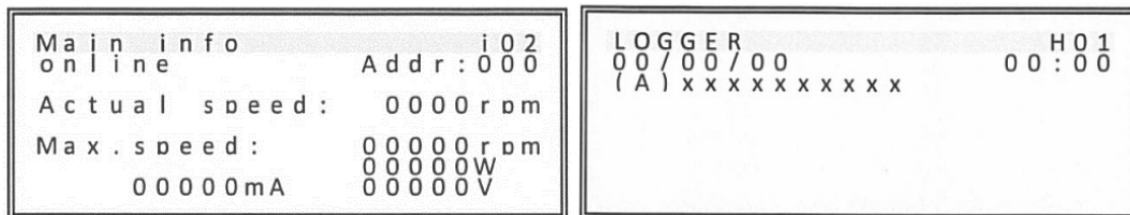
# TROUBLE SHOOTING DAMBASSINAS EC FANS

In case an EC fan fails, the fan signals an alarm message via the Carel PCO5. BAC needs the following information to determine the root cause for the failure:

## 1) IDENTIFY THE DEFECTIVE EC FAN

It is important for us to determine the fan address of the defective fan.

Take pictures of the alarm screen, the info screen from the main loop (i<sub>xx</sub>) and the alarm log (H<sub>xx</sub>).



Also indicate the position of the defective EC fan on the certified print of the unit.

## 2) VISUAL CHECK

Visually check the EC fan. What does it do?

- ⇒ Does the EC fan run at a constant speed (30 Hz)?
- ⇒ Does it stand still?
- ⇒ Does it turn backwards, stop and then turns backwards again? This phenomenon can be caused by the airflow from the other EC fans.

## 3) CHECK THE POWER SUPPLY TO THE EC FAN

Is the circuit breaker (F<sub>xx</sub>) inside the electrical cabinet ON?

If so, open the terminal box on top of the EC fan and measure the supply voltage directly between terminals L1-L2-L3. You should measure 3x 400 Volts.


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**4) CHECK THE MODBUS COMMUNICATION ON THE EC FAN**

Check the Modbus communication wiring on the fan. Possibly there is a wire loose!

Each terminal contains 2 wires which are interconnected by a cable shoe. Make sure that the cable shoes are tight and the cables are properly inserted inside the terminals.



Measure the resistance between terminals NC and C. Is this an open contact or a closed contact?

Finally, check the power supply to the fan control electronics: measure the voltage between the +10VDC output and GND. You should measure 10 Volt DC.