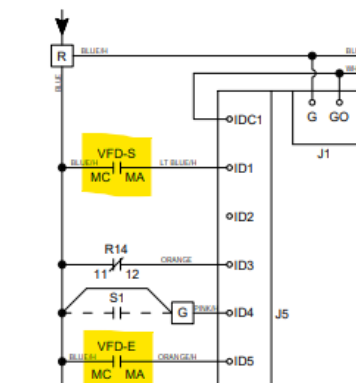


Frequently Asked Questions

What does “Supply/Exhaust Fan 1 Run Status Not Proven” mean?

The Supply/Exhaust Fan 1 Run Status Not Proven alarms occurs when the unit's Carel c.pCO controller is expecting proof that the applicable fan is running and fails to see this feedback on its programmed input. The VFDs are responsible for proving run status to the controller via their programmed internal relay contacts.

- For most units, the contact for supply fan proving is labeled VFD-S and the contact for exhaust fan proving is labeled VFD-E. These contacts will feed into inputs on the Carel controller (Example: ID1 and ID5 in the example below).
 - o The Carel input associated with each fan's run status can vary from unit to unit.
- In the example below, the contacts on the supply and exhaust fan VFDs for run status are MC and MA.
 - o The actual contacts used on the drive can vary from one unit to the next based on drive model.
 - o These contacts are programmed in the VFD to close when the drives' output frequency exceeds the proving frequency.
 - In a Yaskawa VFD, this proving frequency is the *Speed Agreement Detection Level* parameter (often, L4-01, which is generally set by default to 15hz).
 - This means that whenever the VFD is outputting a frequency of at least 15Hz, the contact is closed.



- Depending on the unit's design, the inputs associated with run status could be looking for voltage, or dry contact closure. Use the unit's wiring diagram to determine what closes your unit's inputs.
 - o An input being fed by Terminal Block R will be looking for 24VAC for closure.
 - o An input being fed by Terminal Block C (neutral) will be looking for dry contact closure.

Example

In the example below, Terminal Block R has 24VAC. When each VFD sees its output frequency is above 15hz, they close their MC/MA contacts and 24VAC is passed to ID1 (supply) and ID5 (exhaust). When the controller sees 24VAC on the applicable terminal, the fan's run status has been proven, and no alarm is triggered. When voltage is lost on the applicable terminal, and there is a call for that fan to run, the alarm is activated.

