

Variable frequency drive (VFD) quarterly maintenance checklist

A quarterly variable frequency drive round is short on purpose: it catches the wear items that fail between annual services. This checklist is sized for a tech with a phone. Every item says what to look at and the photo that proves the round happened. Work is commonly verified against NEC (NFPA 70), manufacturer's published instructions. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The controls or electrical tech on the quarterly round, working at the drive without opening the power section. When: Every quarter, usually walked with the motors and starters it feeds in the same mechanical room or MCC lineup.

Cooling

- ☐ **Cooling fan running and moving air**
Fan spinning freely at speed, air moving across the heatsink, no bearing rumble or blade contact noise. 1 photo required
- ☐ **Intake filter and vents clear**
Filter checked for dust loading and cleaned or swapped, enclosure louvers and vents unobstructed. 1 photo required

Enclosure and environment

- ☐ **Enclosure and drive temperature checked**
Interior temperature read against the drive's ambient rating, no hot smell, no discoloration around the power section. 1 photo required
- ☐ **Dust and contamination inside the enclosure**
Surfaces and vents checked for dust, no conductive debris or moisture where the drive is mounted. 1 photo required

Faults and status

- ☐ **Fault and warning log read and recorded before clearing**
Recent faults and warnings read off the keypad and noted, repeated trips or overtemperature warnings flagged rather than just cleared. 1 photo required