READY TO INSPECT — FIELD CHECKLIST

Motor control center (MCC) quarterly maintenance checklist

A quarterly motor control center 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 NFPA 70B, NETA maintenance testing standards. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The facility electrician on the quarterly round, reading the MCC lineup energized without removing buckets. When: Every quarter, timed so motors are actually running and buckets read under load rather than sitting idle.

Before the round

- [ ] Buckets stay shut and PPE follows the arc-flash assessment
  No bucket door opened or unit withdrawn, faces scanned with doors shut or through any IR windows fitted, PPE from the site's arc-flash risk assessment, not the label alone.
  No photo required

- [ ] Bucket nameplates match the loads they feed
  Each unit's engraved or printed nameplate names the motor or feeder it serves, spares marked as spare, and the lineup's arc-flash label legible.
  1 photo required

Bucket status

- [ ] Each bucket's indicators and disconnect position read
  Run, off and trip indication matched to what the process actually wants running, no starter chattering, no bucket tripped and quietly left down.
  2 photos required

- [ ] Overload and heater settings checked against nameplate
  Overload setting read where visible without opening the bucket, or taken from the last outage record, against the motor's nameplate full-load amps, none bumped up to stop trips.
  1 photo required

- [ ] Pilot lights and lenses checked where fitted
  No dead lamp or cracked, missing or wrong-colored lens, push-to-test used where the unit has it, and failed lamps listed for replacement.
  No photo required

- [ ] Bucket doors closed and latched across the lineup
  Every door shut with all its fasteners engaged, none propped or held by a single latch, and empty spaces covered by their blank plates.
  1 photo required

Heat and ventilation

- [ ] Lineup scanned for connection and starter heat
  Thermography or a non-contact scan across bucket faces and accessible terminations, no starter or lug reading hot against the rest of the lineup.
  2 photos required

- [ ] Enclosure ventilation and filters clear
  Any cooling vents or filters on the MCC clear of dust and lint, room airflow reaching the lineup, no bucket running warm from a blocked vent.
  1 photo required

- [ ] Room temperature read at the lineup
  Temperature at the MCC recorded and compared with the equipment's ambient rating and the last round, room cooling running, no condensation on the enclosure.
  1 photo required

Interlocks and safety

- [ ] Door and rack interlocks intact
  Bucket door interlocks operating and not defeated, handles engaging the disconnect, no bucket that can be opened or racked live.
  1 photo required

- [ ] Handle padlock provisions free to take a lock
  Each operating handle's padlock hasp moves freely, not bent, painted over or blocked, so the unit can be locked off when work calls for it.
  1 photo required

Findings and follow-up

- [ ] Recent overload trips reviewed with the operators
  Operators asked which motors tripped since the last round, repeat trips tied to a bucket and flagged for cause instead of being reset again.
  No photo required

- [ ] Defects reported to the owner by bucket number
  Each tripped unit, hot reading, dead lamp, damaged interlock or overload change not traced to a work order handed to the owner by bucket number for repair or the annual outage.
  No photo required