



NFPA 99 + NFPA 70B for Electrical Distribution Systems

Facility Types Covered: Hospitals, medical centers, industrial and commercial buildings where reliability and safety of electrical distribution is critical.

NFPA Requirement	Description / Intent	CTM365 Continuous Thermal Monitoring Compliance Method	Compliant?
NFPA 99 §6.9.2.1.1	Facilities shall have a <i>documented electrical preventive maintenance (EMP)</i> program for all electrical distribution equipment serving patient care areas.	CTM365 forms the backbone of a documented EMP, detailing permanently installed sensor points, monitoring parameters, alert logic, review frequency, and corrective-action workflows.	<input checked="" type="checkbox"/>
NFPA 99 §6.9.2.1.2	An <i>alternate maintenance program</i> is permitted if reliability is maintained or improved.	CTM365 provides continuous condition-based monitoring, proven to detect thermal anomalies far earlier than annual IR scans, meeting or exceeding baseline reliability.	<input checked="" type="checkbox"/>
NFPA 99 §6.9.2.2 / Annex A.6.9	Requires periodic inspection, testing, and servicing of distribution equipment.	CTM365 provides <i>24/7 continuous inspection</i> —real-time trending and automated thermal analytics eliminate gaps between periodic inspections.	<input checked="" type="checkbox"/>
NFPA 99 §6.9.3	Inspection/test/maintenance reports must be documented and retained.	All CTM365 events, trends, and reports are stored electronically and exportable as PDF/CSV for AHJ or internal review.	<input checked="" type="checkbox"/>
NFPA 99 §6.9.4	Corrective action must be taken when deficiencies are found.	CTM365 alarm workflows link to maintenance procedures, automatically flagging and timestamping events for corrective response.	<input checked="" type="checkbox"/>
NFPA 70B §9.2.3.1	Condition-based techniques (e.g., continuous thermal monitoring) may replace periodic inspections if effectiveness is proven.	CTM365 implements permanent sensors with calibrated MQTT communication output, continuous trending, and documented alarm verification.	<input checked="" type="checkbox"/>
NFPA 70B §9.2.4 / §9.3	Maintenance data must be trended and analyzed to support reliability-based maintenance decisions.	CTM365 automatically logs and trends thermal data, providing analytics dashboards for degradation patterns and predictive maintenance.	<input checked="" type="checkbox"/>
NFPA 70B §11.3.4	Equipment condition shall be monitored for abnormal heating and recorded.	Each CTM365 sensor provides direct contactless surface temperature of critical connections—recorded continuously in compliance with NFPA 70B and NFPA 99	<input checked="" type="checkbox"/>
NFPA 70B §11.7	Infrared or equivalent thermal inspection is required at intervals or continuously.	CTM365 is the permanent equivalent of IR thermography, providing nonintrusive, continuous temperature readings without interruption.	<input checked="" type="checkbox"/>
NFPA 70B §4.2.2	EMP must include inventory, schedule, and documentation of maintenance activities.	CTM365 integrates with CMMS/SCADA for full traceability: equipment ID, alarm history, service logs, and maintenance verification.	<input checked="" type="checkbox"/>