MARION DATA CENTER | GENERATOR ELECTRICAL SUMMARY

Source: Cummins/Onan planned maintenance inspections dated February 19, 2026. Electrical readings below are from no-load testing.

Verified unit identification and operating readings

Unit	Model	Serial	Measured output	Frequency	Speed
Gen 1	500.0DFEK-6133613	L080227722	220/127 V	60 Hz	1,800 RPM
Gen 2	500.0DFEK-7549485	L080227721	220/127 V	60 Hz	1,800 RPM
Gen 3	500.0DFEK-7548969	L080227721	220/127 V	60 Hz	1,800 RPM
Gen 4	DFEK	L100178281	220/127 V	60 Hz	1,800 RPM

Preliminary capacity assumptions - NOT verified by the inspection reports

Parameter	Per unit	All four units
Standby capacity (assumed DFEK 500 kW rating)	500 kW / 625 kVA	2,000 kW / 2,500 kVA
Power factor (assumed)	0.80	0.80
Full-load current at 220 V, 3-phase (calculated)	Approx. 1,640 A	Approx. 6,560 A*

*Combined current assumes all four generators operate in parallel on one 220 V bus; configuration is unverified. Current is based on I = 500,000 / (sqrt(3) x 220 x 0.8).

Additional inspection findings

All four units were tested without load for 30 minutes. Recorded DC battery voltages: Gen 1 27.5 V, Gen 2 27.6 V, Gen 3 27.5 V, Gen 4 27.5 V. The technician reported no issues and proper operation at the time of inspection.

Items requiring verification before electrical design or equipment procurement

Confirm nameplate kW/kVA and voltage configuration, actual phase/wiring, alternator amperage, generator main breaker ratings/settings, short-circuit characteristics, grounding, transfer switch ratings, and paralleling arrangement. Obtain original Cummins submittals and electrical one-line drawings.

Important: 220/127 V was recorded for all four units; do not assume 480/277 V. Gen 2 and Gen 3 reports list the same serial number; verify identification in the field. Gen 4 report lists only "DFEK" as its model, so its 500 kW capacity is especially unconfirmed.

Source reports: Gen 1 J2006056; Gen 2 J2006061; Gen 3 J2006067; Gen 4 J2030020 (pages 1-2 of each).