Formal Interpretation

NFPA 20

Stationary Pumps for Fire Protection

2010 Edition

Reference: 10.4.3, 10.4.4
F.I. 83-1

Question 1: Is it the intent to allow continuous 300 percent of full load current electrical overloading of the fire pump feeder circuits, including transformers, disconnects or other devices on this circuit?

Answer:

a) Relative to protective devices in the fire pump feeder circuit, such devices shall not open under locked rotor currents.

b) Relative to the isolating means and the circuit breaker of the fire pump controller, it is the intent of 10.4.3 to permit 300 percent of full load motor current to flow continuously through these devices until an electrical failure occurs. [This statement also applies to the motor starter of the fire pump controller, but this device is not in the feeder (see Section 3.3).]

c) Relative to all devices other than those cited above, refer to NFPA 70 for sizing.

Question 2: If the answer to Question 1 is no, what is meant by "setting the circuit breaker at 300 percent of full load current"?

Answer: The phrase "setting the circuit breaker at 300 percent of full load current" means that the circuit breaker will not open (as a normal operation) at 300 percent of full load current. It does not mean that the circuit breaker can pass 300 percent of full load current without ultimately failing from overheating.

Question 3: What is meant by "calibrated up to and set at 300 percent" of motor full load current?

Answer: Question 2 answers the "set at 300 percent" of motor full load current. "Calibrated up to 300 percent" of motor full load current means that calibration at approximately 300 percent is provided by the manufacturer of the circuit breaker.

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