CMGT 235 – Electrical and Mechanical Systems

Homework #25 – Size OCP and Conductor for a Continuous Load

Due: 11/17/2022 Points: 20

Note: Size the overcurrent device in accordance with NEC 215.3 and 240.6(A). Select the conductor to comply with NEC 215.2 AND Table 310-15(B) 16 (75°C) **SHOW ALL CALCULATIONS**

1. What size feeder **overcurrent protection device** and **conductor** (CU, THHN) are required for a 9.0 KW load on a 120/240V panelboard (75°C terminals) using 120 V single phase voltage?

2. What size feeder **overcurrent protection device** and **conductor** (CU, THHN) are required for a 9.0 KW load on a 120/240V panelboard (75°C terminals) using 240 V single phase voltage?

3.	What size feeder overcurrent protection device and conductor (CU, THHN) are required for a 9.0 KW load on a 277/480V panelboard (75°C terminals) using 277 V three phase voltage?
4.	What size feeder overcurrent protection device and conductor (CU, THHN) are required for a 9.0 KW load on a 277/480V panelboard (75°C terminals) using 480 V three phase voltage?