From Utility to Swbd-MDP

Utility Transformer Characteristics

Phasing: Three Phase
Line-To-Line Voltage: 480 Volts
Line-To-Neutral Voltage: 277 Volts
FLA: 2,406 Amps
KVA: 2000 kVA
Impedance: 2%
Voltage Variance Factor: x1.1
Impedance Variance Factor: x1

Circuit Characteristics

Conduit Material: Nonmagnetic
Conduit Footage: 100'
Conductor Arrangement: Single Conductors
Conductor Material: Aluminum
Conductors per Phase: 2
Phase Conductor Size: #500
Neutral Conductor Size: #500

Motor Contribution

Total Motor FLA: 1,250 Amps
Motor Contribution Factor: x4

Available Short-Circuit Current

At Utility Transformer Primary: Infinite
At Utility Transformer Secondary: 137,330 Amps
Phases at Distribution Equipment: 70,684 Amps
Neutral at Distribution Equipment: 52,977 Amps

Additional Information
(Approximations based on above 3-Phase L-L-L values)

Available Short-Circuit Current -
Phase-Phase (L-L): 61,495 Amps
Phase-Ground (L-G): 35,342 Amps
Phase-Neutral (L-N): 35,342 Amps
Phase-Ground (L-G) near transformer: 70,684 Amps
Phase-Neutral (L-N) near transformer: 70,684 Amps

Arcing Fault Values for Sustained Arcs -
3-Phase (L-L-L) Arcing Fault: 62,909 Amps
Phase-Phase (L-L) Arcing Fault: 52,306 Amps
Phase-Ground (L-G) Arcing Fault: 26,860 Amps