15140 INTERCOASTAL DR.

Dammon Engineering

Available Fault Current Calculation

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Utility Fault Current 37,000 amperes

kVA =
E = 480

I = kVA x 1000 = trans. FLA
E x 1.732

trans. FLA = 0

I_{sca} = trans. FLA x 100 x PF / transformer Z =

PF =
Z =

I_{sca} = ampere short-circuit current RMS symmetrical.

I_{sca} = 0 amperes

Point to Point Method

Three Phase 480/277

Length (distance) FEET — L = 350 — Copper in Nonmetallic Raceway

'f ' factor = 1.732 x L x I / N x C x E L-N

(ASC) I_{sca} = 37,000

conductors per phase N = 1

Phase conductor constant C = 26,706 **Phase Conductor** 500 kcmil

Volt Line to Line E_{L-L} = **480** Volt

f = 1.750

Neutral conductor constant C = 26,706 **Neutral Conductor** 500 kcmil

Multiplier Volt Line to Neutral E_{L-N} = **277** Volt

f = 4.548

M = 1 / 1 + f

Line to Line M = 0.364

Line to Neutral M = 0.180

Fault Current at Service Equipment

I_{sca} x M = fault current at terminals of main disconnect **L- L =** → **13,456 amperes**

I_{sca} x M = fault current at terminals of main disconnect **L- N =** → **6,669 amperes**

Fault Current from **Service Equipment to MDP Panel** — Copper in Nonmetallic Raceway

Three Phase

Three Phase Feeder

Length (distance) L = 10

'f ' factor = 1.732 x L x I / N x C x E L-N

(ASC) I_{sca} = 13,456 Phase 6,669 Neutral

conductors per phase N = 1

Phase conductor constant C = 26,706 **Phase Conductor** 500 kcmil

Volt Line to Line E_{L-L} = **480** Volt

f = 0.018

Neutral conductor constant C = 26,706 **Neutral Conductor** 500 kcmil

Volt Line to Neutral E_{L-N} = **277** Volt

Multiplier f = 0.016

M = 1 / 1 + f

Line to Line M = 0.982

Line to Neutral M = 0.985

Isca x M = fault current at terminal of the panel L- L = 13,216 amperes

Isca x M = fault current at terminal of the panel L- N = 6,567 amperes

Calculation does not include motor contribution