Voltage Drop Calculator

Southwire

Voltage Drop Calculator

Desired Solution:	Conductor Size	
Phases:	Single	
Conductor:	Aluminum	
Installation:	Direct Buried	
Voltage:	240	volts
Maximum voltage drop:	3	%
Length of cable run:	150	feet
Conductor Size:	---	
Current:	100	amps

Solution:
1 conductor(s) per phase utilizing a 1/0 kcmil Aluminum conductor will limit the voltage drop to 2.6% or less when supplying 100 amps for 150 feet on a 240 volt system.

For Engineering Information:

- 120 Amps Rated ampacity of selected conductor
- 0.21 Ohms Resistance (Ohms per 1000 feet)
- 0.044 Ohms Reactance (Ohms per 1000 feet)
- 7.2 volts maximum allowable voltage drop at 3%
- 6.25 Actual voltage drop loss at 2.6% for the circuit
- 0.9 Power Factor

Clear Calculate

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