

# Powerline Technician Harmonized Level 2

## ACRONYMS AND ABBREVIATIONS

TERM	MEANING
A	ampere
AC	alternating current
CSA	Canadian Standards Association
DC	direct current
DVI	digital voltage indicator
G & B.	grounding and bonding
IEEE	Institute of Electrical and Electronic Engineers
kV	kilovolt
kVA	kilovolt-ampere
MK II	Mark 2 switchgear
SF6	sulfur hexafluoride
UC	underground cable
UDD	underground distribution drawing
V	volt
VA	volt-amp
VCI	voice cable identifier
XLPE	cross-linked polyethylene

### NOTE

Do **not** bring this document to your exam.  
These acronyms and abbreviations will be included in the exam reference materials.

**FORMULAS**

$I = \frac{kVA \times 1000}{V}$	$G.L. = \sqrt{\text{Anchor distance}^2 + \text{Pole height}^2}$
$B.T. = \frac{\text{Conductor tension}}{\text{Measured distance}} \times \text{Bisect line} \times 2$	$S.T. = \frac{\text{Weight}}{\text{No. of points (2)}} \times \frac{\text{Sling length}}{\text{Height}}$
$G.T. = \frac{\text{Bisect tension}}{\text{Anchor distance}} \times \text{Guy length}$	$G.T. = \frac{\text{Conductor tension}}{\text{Anchor distance}} \times \text{Guy length}$
$C.F. = \frac{\text{Bisect tension}}{\text{Anchor distance}} \times \text{Pole height}$	$C.F. = \frac{\text{Conductor tension}}{\text{Anchor distance}} \times \text{Pole height}$
$C.T. = \frac{\text{Conductor weight per ft. or m} \times (\text{Span length})^2}{8 \times \text{Sag}}$	
$P.T. = \text{Conductor weight} \times \frac{\text{Saddle distance to conductor}}{\text{Saddle distance}}$	
$C.W. = \frac{\text{Span A} + \text{Span B}}{2} \times \text{Weight of conductor per ft. or m}$ <p>When moving a conductor, apply design factors as follows:                      Long Span (250 ft. or 75 m &amp; over): Design Factor 1.5                      Short Span (Under 250 ft. or 75 m): Design Factor 2</p>	
$P = \frac{\text{Weight of object} + (10\% \text{ Weight of object} \times \text{No. of sheaves rope passes})}{\text{Mechanical advantage}}$	

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