Information

Electrical Formulae

To Obtain	Alternating Current		Direct Current
	Single-Phase	Three-Phase	
Kilowatts	$\dfrac{V \times I \times P.F.}{1000}$	$\dfrac{1.732 \times V \times I \times P.F.}{1000}$	$\dfrac{V \times I}{1000}$
KV.A	$\dfrac{V \times I}{1000}$	$\dfrac{1.732 \times V \times I}{1000}$	
Horsepower required when KW known (Generator)	$\dfrac{KW}{.746 \times EFF . (GEN)}$	$\dfrac{KW}{.746 \times EFF . (GEN)}$	$\dfrac{KW}{.746 \times EFF . (GEN)}$
KW input when HP known (motor)	$\dfrac{HP \times .746}{EFF . (Mot)}$	$\dfrac{HP \times .746}{EFF . (Mot)}$	$\dfrac{HP \times .746}{EFF . (Mot)}$
Amperes when HP known	$\dfrac{HP \times 746}{V \times P.F. \times EFF.}$	$\dfrac{HP \times 746}{V \times P.F. \times EFF. \times P.F.}$	$\dfrac{HP \times 746}{V \times EFF.}$
Amperes when KW known	$\dfrac{KW \times 1000}{V \times P.F.}$	$\dfrac{KW \times 1000}{1.732 \times V \times P.F.}$	$\dfrac{KW \times 1000}{V}$
Amperes when KV.A known	$\dfrac{KV.A \times 1000}{V}$	$\dfrac{KV.A \times 1000}{1.732 \times V}$	