

TO OBTAIN	SINGLE PHASE*	THREE PHASE*
Kilowatts	$\frac{v \times I \times PF}{1000}$	$\frac{1.732 \times v \times I \times PF}{1000}$
kVA	$\frac{v \times I}{1000}$	$\frac{1.732 \times v \times I}{1000}$
Horsepower required when generator kW is known (if generator efficiency is unknown use 0.93)	$\frac{kW}{0.746 \times \text{Efficiency (Generator)}}$	$\frac{kW}{0.746 \times \text{Efficiency (Generator)}}$
kW input when motor HP is known (if motor efficiency is unknown use 0.85 x HP)	$\frac{hp \times 0.746}{\text{Efficiency (Motor)}}$	$\frac{hp \times 0.746}{\text{Efficiency (Motor)}}$
Amperes when motor HP known	$\frac{hp \times 746}{v \times PF \times \text{Efficiency}}$	$\frac{hp \times 747}{1.732 \times v \times PF \times \text{Efficiency}}$
Amperes when motor kW known	$\frac{kW \times 1000}{v \times PF}$	$\frac{kW \times 1000}{1.732 \times v \times PF}$
Amperes when motor kVA known	$\frac{kVA \times 1000}{V}$	$\frac{kVA \times 1001}{1.732 \times v}$