

## What generator do you need?

*(Rough guide only)*

1 KVA = 4 AMPS  
 1 KVA = 800 WATTS (In theory 1000 WATTS)  
 740 WATTS = 1 HP

Generators should give 3 times rated output on start.

### TWO TYPES OF LOAD

1. **RESISTIVE** = Constant (e.g. almost anything with brushes, lighting)  
 Measure in KW
2. **INDUCTIVE** = Starting (e.g. capacitors, items with 'fly wheels',  
 ≈ bench, grinder, compressor.  
 Measure in KVA

*Compressor will use 6x normal draw to start (e.g. 1000 WATT unit needs 6000W to start (or 3000 generator - KVA to be safe)*

### 3 PHASE GENERATORS

**3 Phase AMPS - Refer to AMPS per phase**

Therefore divide KVA by 3 to get KVA per phase.

12KVA ÷ 3 = 4KVA per phase

### CONVERSIONS TO AMPS

<b>KVA x 1000 = WATTS</b>	<b>4 x 1000 = 4000W</b>
Divide WATTS / VOLTS = AMPS	4000 ÷ 240 = 16.67 AMPS

### GENERATOR OUTPUT CONVERSION = ESTIMATES ONLY

**Generator with:**  
**2HP motor** ≈ 1 KVA output  
**4HP motor** ≈ 2 KVA output  
 Speed = frequency, therefore 3000RPM – 50Hz

*Note: To avoid damage electronics may need smoother power than our standard 'builders generators' supply.*

*For more information please speak to the Hiredepot team.*