

## *iQ Series*

ULTRASONIC WELDING SYSTEM



HAND PROBE



AUTOMATED



PRESS

## AC Line Requirements for Dukane Ultrasonic Welders



### AC Power Requirements

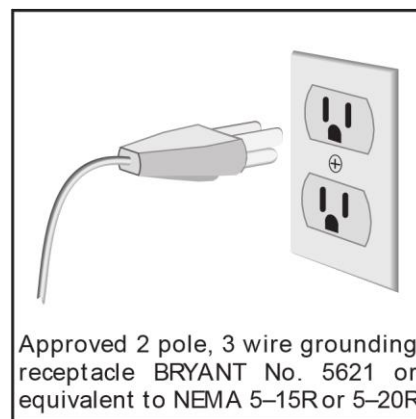
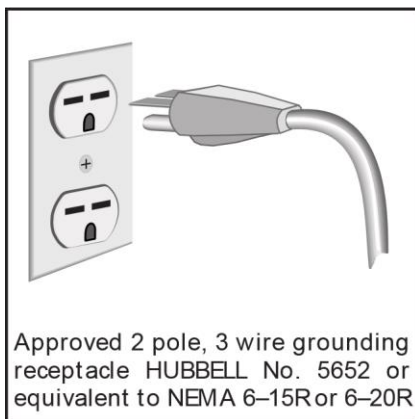
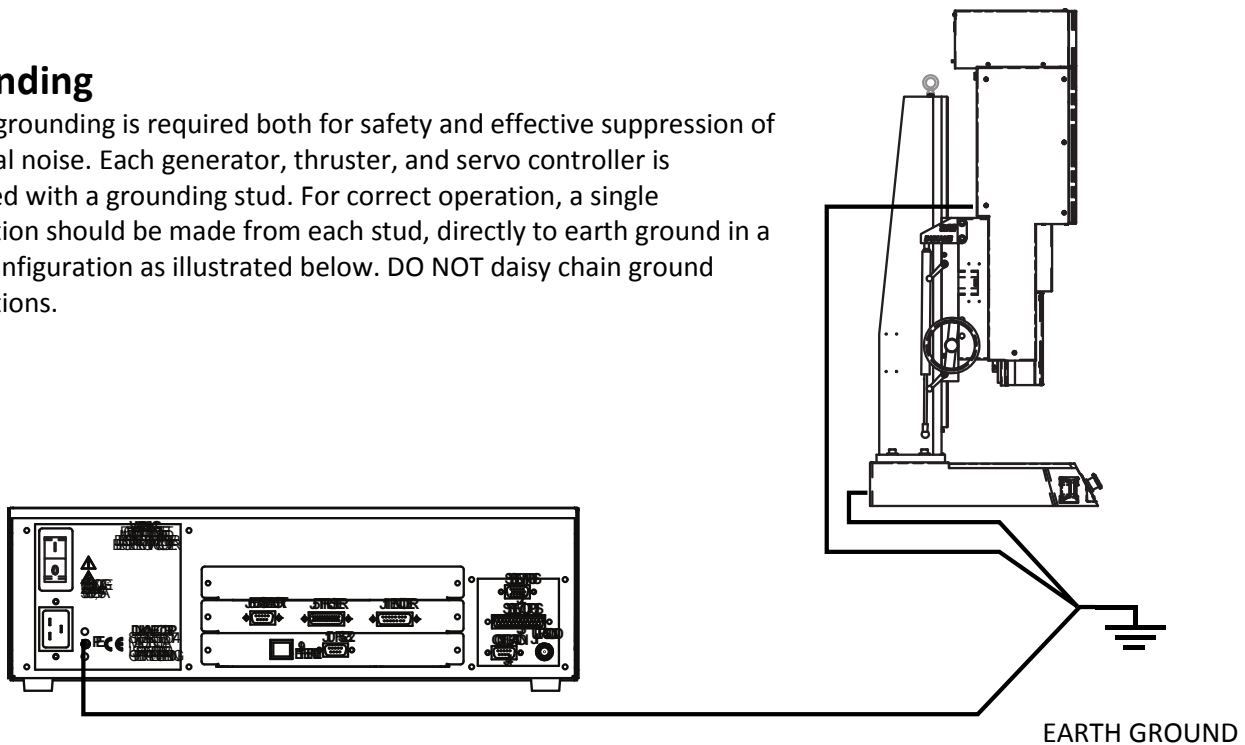
The AC power requirements for the Dukane iQ generators are determined by the power rating of the generator and the version of the servo controller. In most cases, the requirements will be as follows:

Generator Power Rating	AC Line Voltage/Current (nominal)	Recommended Circuit Breaker Size
600 to 1200 Watts	100-120V 50/60 Hz @ 15 Amps	15 amps
600 to 1200 Watts	200-240V 50/60 Hz @ 8 Amps	15 Amps
1800 to 2400 Watts	200-240V 50/60 Hz @ 15 Amps	15 Amps
2600 Watts (PFC)*	200-240V 50/60 Hz @ 15 Amps	15 Amps
3600 to 4800 Watts	200-240V 50/60 Hz @ 30 Amps	30 Amps

\*PFC: The AIM series generators are Power Factor Corrected, which is significantly more efficient.

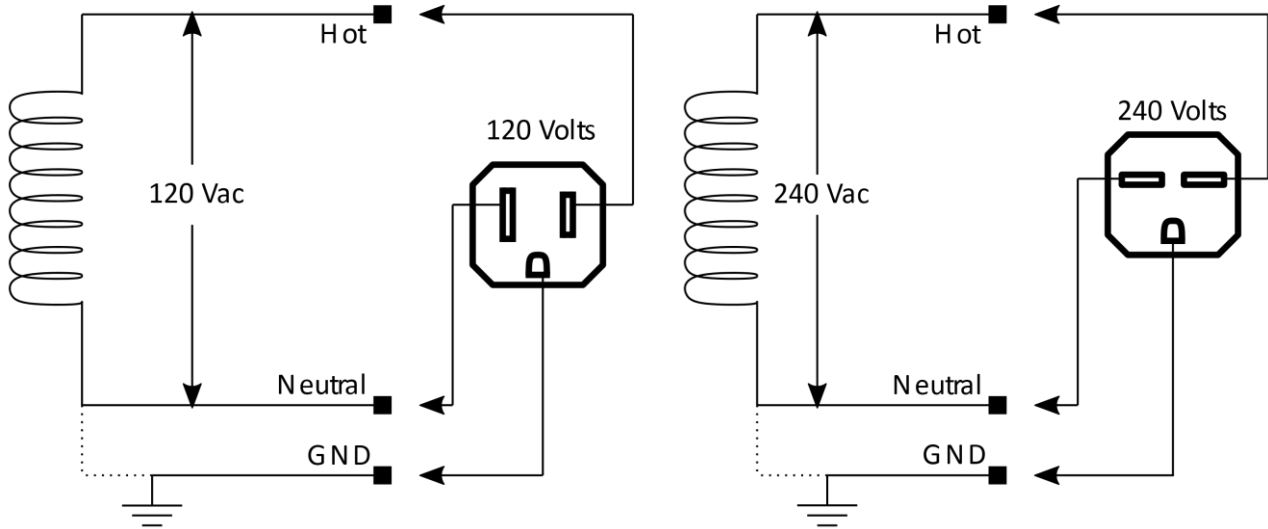
### Grounding

Proper grounding is required both for safety and effective suppression of electrical noise. Each generator, thruster, and servo controller is equipped with a grounding stud. For correct operation, a single connection should be made from each stud, directly to earth ground in a STAR configuration as illustrated below. DO NOT daisy chain ground connections.



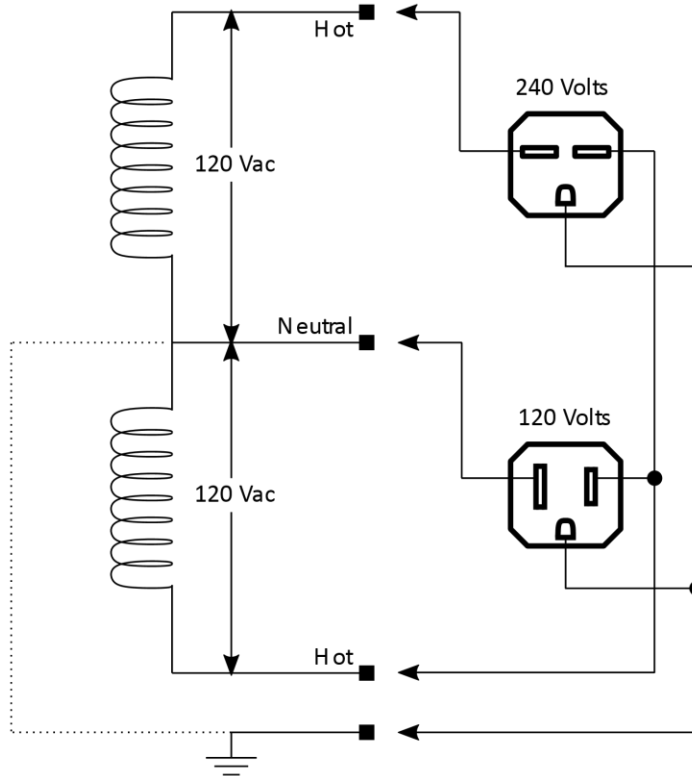
### Wiring from a Single Phase

Single phase connection should be wired as shown. This applies to 120 Volt or 220 Volt. (as common in European Union)



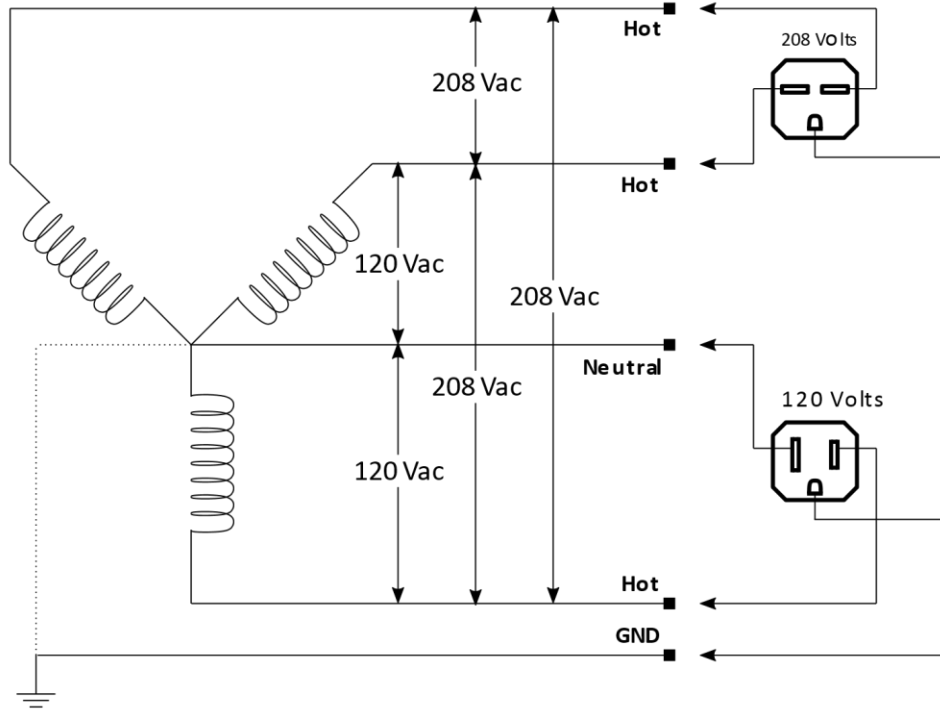
### Wiring from 2 Phases

2 Phase 220 Volt connections should be wired as shown below. This typically applies to a 200-240 AC line as is commonly found in the US. (120 Volt connection also shown)



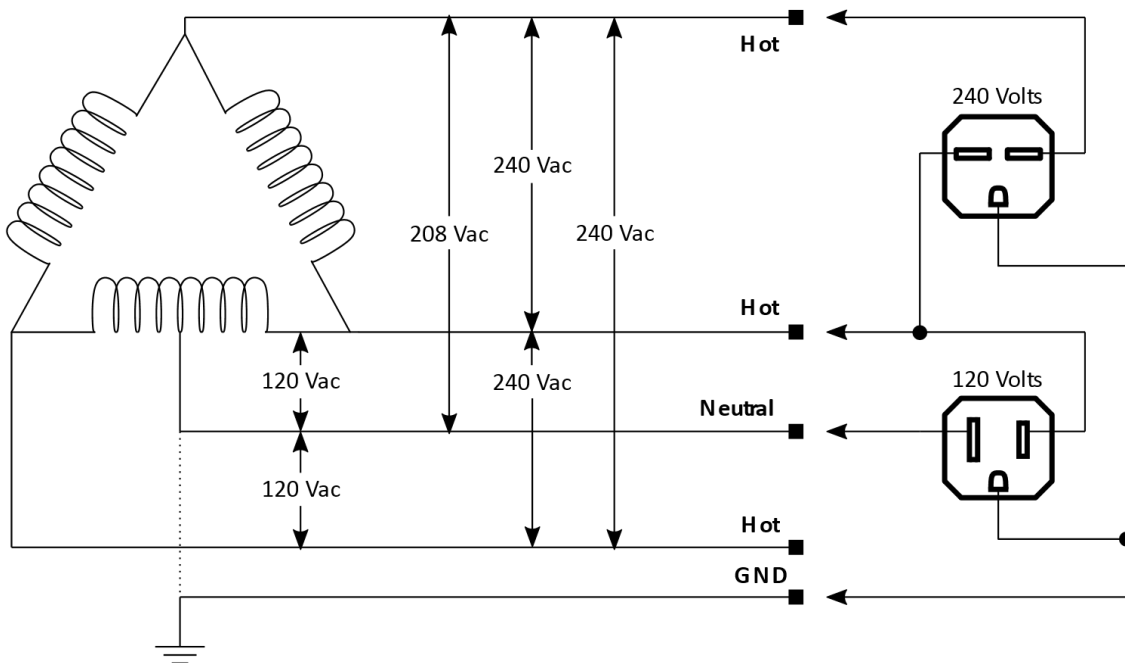
### Wiring from a 3 Phase Circuit (WYE)

3 Phase 208 Volt connections should be wired as shown below. (120 Volt outlet also shown)



### Wiring from a 3 Phase Circuit (Delta)

3 Phase 240 Volt connections should be wired as shown below. (120 Volt outlet also shown)



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