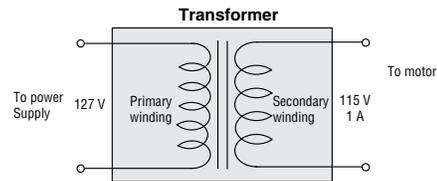


# Global Power Supply Voltages

Country	Frequency	Voltage
Canada	60 Hz	Single-Phase 120/347 VAC, Three-Phase 208/240/600 VAC
U.S.A.	60 Hz	Single-Phase 115/230 VAC, Three-Phase 230 VAC
Austria	50 Hz	Single-Phase 230 VAC, Three-Phase 400 VAC
Belgium	50 Hz	Single-Phase 230 VAC, Three-Phase 400 VAC
Bulgaria	50 Hz	Single-Phase 220 VAC, Three-Phase 380 VAC
Czech Republic	50 Hz	Single-Phase 220 VAC, Three-Phase 380 VAC
Denmark	50 Hz	Single-Phase 230 VAC, Three-Phase 400 VAC
Finland	50 Hz	Single-Phase 230 VAC, Three-Phase 400 VAC
France	50 Hz	Single-Phase 230 VAC, Three-Phase 400 VAC
Germany	50 Hz	Single-Phase 230 VAC, Three-Phase 400 VAC
Greece	50 Hz	Single-Phase 230 VAC, Three-Phase 400 VAC
Hungary	50 Hz	Single-Phase 220 VAC, Three-Phase 380 VAC
Italy	50 Hz	Single-Phase 220 VAC, Three-Phase 380 VAC
Luxembourg	50 Hz	Single-Phase 230 VAC, Three-Phase 400 VAC
Netherlands	50 Hz	Single-Phase 230 VAC, Three-Phase 400 VAC
Norway	50 Hz	Single-Phase 220/230 VAC, Three-Phase 380 VAC
Poland	50 Hz	Single-Phase 220 VAC, Three-Phase 380 VAC
Portugal	50 Hz	Single-Phase 230 VAC, Three-Phase 400/480 VAC
Romania	50 Hz	Single-Phase 220 VAC, Three-Phase 380 VAC
Spain	50 Hz	Single-Phase 127/220 VAC, Three-Phase 220/380 VAC
Sweden	50 Hz	Single-Phase 230/400 VAC, Three-Phase 400/690 VAC
Switzerland	50 Hz	Single-Phase 230 VAC, Three-Phase 400 VAC
United Kingdom	50 Hz	Single-Phase 240 VAC, Three-Phase 415VAC
China	50 Hz	Single-Phase 220 VAC, Three-Phase 220 VAC
Japan	50/60 Hz	Single-Phase 100/200 VAC, Three-Phase 200 VAC
Korea	60 Hz	Single-Phase 110/220 VAC, Three-Phase 200/220/380 VAC
Malaysia	50 Hz	Single-Phase 240 VAC, Three-Phase 415 VAC
Thailand	50 Hz	Single-Phase 220 VAC, Three-Phase 380 VAC
India	50 Hz	Single-Phase 230/240 VAC, Three-Phase 400/415 VAC
Singapore	50 Hz	Single-Phase 230 VAC, Three-Phase 400 VAC
Taiwan	60 Hz	Single-Phase 110/220 VAC, Three-Phase 220/380 VAC

## Power Supply Voltage and Motor Rated Voltage

Line voltage varies from country to country and, in some places, from city to city. The line voltages and frequencies of many countries are shown in the table above. Oriental Motor offers motors and fans for worldwide use. Our wide range of products includes those that meet North American voltage specifications, as well as Asian and European voltage specifications. If a motor is to be used with a different power supply voltage than specified, a transformer must be connected between the power supply and the motor. The primary winding of the transformer should be of the same voltage as the power source, and the secondary winding voltage should be the same as the voltage rating of the motor or fan.



The transformer should be rated for a current of at least twice the rated motor current to allow for the current peak at motor start. The transformer should also possess stable transforming characteristics.