

WORLDWIDE VOLTAGES AND FREQUENCIES

Country / state / territory	Single-phase Voltage	Three-phase Voltage	Frequency (hertz)	Plug type
Abu Dhabi	230 V	400 V	50 Hz	G
Afghanistan	220 V	380 V	50 Hz	C / F
Albania	230 V	400 V	50 Hz	C / F
Algeria	230 V	400 V	50 Hz	C / F
American Samoa	120 V	208 V	60 Hz	A / B / F / I
Andorra	230 V	400 V	50 Hz	C / F
Angola	220 V	380 V	50 Hz	C
Anguilla	110 V	190 V	60 Hz	A / B
Antigua and Barbuda	230 V	400 V	60 Hz	A / B
Argentina	220 V	380 V	50 Hz	C / I
Armenia	230 V	380 V	50 Hz	C / F
Aruba	120 V	220 V	60 Hz	A / B / F
Australia	230 V	415 V	50 Hz	I
Austria	230 V	400 V	50 Hz	C / F
Azerbaijan	220 V	380 V	50 Hz	C / F
Azores	230 V	400 V	50 Hz	B / C / F
Bahamas	120 V	208 V	60 Hz	A / B
Bahrain	230 V	400 V	50 Hz	G
Balearic Islands	230 V	400 V	50 Hz	C / F
Bangladesh	220 V	380 V	50 Hz	A / C / D / G / K
Barbados	115 V	200 V	50 Hz	A / B
Belarus	220 V	380 V	50 Hz	C / F
Belgium	230 V	400 V	50 Hz	C / E
Belize	110 / 220	190 V / 380 V	60 Hz	A / B / G
Benin	220 V	380 V	50 Hz	C / E
Bermuda	120 V	208 V	60 Hz	A / B
Bhutan	230 V	400 V	50 Hz	C / D / G
Bolivia	230 V	400 V	50 Hz	A / C
Bonaire	127 V	220 V	50 Hz	A / C
Bosnia & Herzegovina	230 V	400 V	50 Hz	C / F
Botswana	230 V	400 V	50 Hz	D / G

Country / state / territory	Single-phase Voltage	Three-phase Voltage	Frequency (hertz)	Plug type
Brazil	127 / 220	220 V / 380 V / 440 V*	60 Hz	C / N
British Virgin Islands	110 V	190 V	60 Hz	A / B
Brunei	240 V	415 V	50 Hz	G
Bulgaria	230 V	400 V	50 Hz	C / F
Burkina Faso	220 V	380 V	50 Hz	C / E
Burma (officially Myanmar)	230 V	400 V	50 Hz	A / C / D / G / I
Burundi	220 V	380 V	50 Hz	C / E
Cambodia	230 V	400 V	50 Hz	A / C / G
Cameroon	220 V	380 V	50 Hz	C / E
Canada	120 V	208 V / 240 V / 600 V	60 Hz	A / B
Canary Islands	230 V	400 V	50 Hz	C / E / F
Cape Verde	230 V	400 V	50 Hz	C / F
Cayman Islands	120 V	208 V	60 Hz	A / B
Central African Republic	220 V	380 V	50 Hz	C / E
Chad	220 V	380 V	50 Hz	C / D / E / F
Channel Islands (Guernsey & Jersey)	230 V	400 V	50 Hz	C / G
Chile	220 V	380 V	50 Hz	C / L
China, People's Republic of	220 V	380 V	50 Hz	A / C / I
Christmas Island	230 V	400 V	50 Hz	I
Cocos (Keeling) Islands	230 V	400 V	50 Hz	I
Colombia	110 V	440 V	60 Hz	A / B
Comoros	220 V	380 V	50 Hz	C / E
Congo, Democratic Republic of	220 V	380 V	50 Hz	C / D / E
Congo, People's Republic of	230 V	400 V	50 Hz	C / E
Cook Islands	240 V	415 V	50 Hz	I
Costa Rica	120 V	240 V	60 Hz	A / B
Côte d'Ivoire (Ivory Coast)	220 V	380 V	50 Hz	C / E
Croatia	230 V	400 V	50 Hz	C / F
Cuba	110 / 220	190 V	60 Hz	A / B / C / L
Curaçao	127 V	220 V	50 Hz	A / B

Country / state / territory	Single-phase Voltage	Three-phase Voltage	Frequency (hertz)	Plug type
Cyprus	230 V	400 V	50 Hz	G
Cyprus, North	230 V	400 V	50 Hz	G
Czech Republic	230 V	400 V	50 Hz	C / E
Denmark	230 V	400 V	50 Hz	C / E / F / K
Djibouti	220 V	380 V	50 Hz	C / E
Dominica	230 V	400 V	50 Hz	D / G
Dominican Republic	120 V	120/208 V / 277/480 V	60 Hz	A / B
Dubai	230 V	400 V	50 Hz	G
East Timor (Timor-Leste)	220 V	380 V	50 Hz	C / E / F / I
Ecuador	120 V	190 V	60 Hz	A / B
Egypt	220 V	380 V	50 Hz	C / F
El Salvador	120 V	200 V	60 Hz	A / B
England	230 V	400 V	50 Hz	G
Equatorial Guinea	220 V	[unavailable]	50 Hz	C / E
Eritrea	230 V	400 V	50 Hz	C / L
Estonia	230 V	400 V	50 Hz	C / F
Ethiopia	220 V	380 V	50 Hz	C / F
Faeroe Islands	230 V	400 V	50 Hz	C / E / F / K
Falkland Islands	240 V	415 V	50 Hz	G
Fiji	240 V	415 V	50 Hz	I
Finland	230 V	400 V	50 Hz	C / F
France	230 V	400 V	50 Hz	C / E
French Guiana	220 V	380 V	50 Hz	C / D / E
Gabon (Gabonese Republic)	220 V	380 V	50 Hz	C
Gambia	230 V	400 V	50 Hz	G
Gaza Strip (Gaza)	230 V	400 V	50 Hz	C / H
Georgia	220 V	380 V	50 Hz	C / F
Germany	230 V	400 V	50 Hz	C / F
Ghana	230 V	400 V	50 Hz	D / G
Gibraltar	230 V	400 V	50 Hz	G
Great Britain (GB)	230 V	400 V	50 Hz	G

Country / state / territory	Single-phase Voltage	Three-phase Voltage	Frequency (hertz)	Plug type
Greece	230 V	400 V	50 Hz	C / F
Greenland	230 V	400 V	50 Hz	C / E / F / K
Grenada	230 V	400 V	50 Hz	G
Guadeloupe	230 V	400 V	50 Hz	C / E
Guam	110 V	190 V	60 Hz	A / B
Guatemala	120 V	208 V	60 Hz	A / B
Guinea	220 V	380 V	50 Hz	C / F / K
Guinea-Bissau	220 V	380 V	50 Hz	C
Guyana	120 / 240	190 V	60 Hz	A / B / D / G
Haiti	110 V	190 V	60 Hz	A / B
Holland (officially the Netherlands)	230 V	400 V	50 Hz	C / F
Honduras	120 V	190 V	60 Hz	A / B
Hong Kong	220 V	380 V	50 Hz	G
Hungary	230 V	400 V	50 Hz	C / F
Iceland	230 V	400 V	50 Hz	C / F
India	230 V	400 V	50 Hz	C / D / M
Indonesia	230 V	400 V	50 Hz	C / F
Iran	230 V	400 V	50 Hz	C / F
Iraq	230 V	400 V	50 Hz	C / D / G
Ireland (Eire)	230 V	400 V	50 Hz	G
Ireland, Northern	230 V	400 V	50 Hz	G
Isle of Man	230 V	400 V	50 Hz	C / G
Israel	230 V	400 V	50 Hz	C / H
Italy	230 V	400 V	50 Hz	C / F / L
Jamaica	110 V	190 V	50 Hz	A / B
Japan	100 V	200 V	50 Hz / 60 Hz	A / B
Jordan	230 V	400 V	50 Hz	C / D / F / G / J
Kazakhstan	220 V	380 V	50 Hz	C / F
Kenya	240 V	415 V	50 Hz	G

Country / state / territory	Single-phase Voltage	Three-phase Voltage	Frequency (hertz)	Plug type
Kiribati	240 V	[unavailable]	50 Hz	I
Korea, North	220 V	380 V	50 Hz	C
Korea, South	220 V	380 V	60 Hz	C / F
Kosovo	230 V	400 V	50 Hz	C / F
Kuwait	240 V	415 V	50 Hz	G
Kyrgyzstan	220 V	380 V	50 Hz	C / F
Laos	230 V	400 V	50 Hz	A / B / C / E / F
Latvia	230 V	400 V	50 Hz	C / F
Lebanon	230 V	400 V	50 Hz	C / D / G
Lesotho	220 V	380 V	50 Hz	M
Liberia	120 V	208 V	60 Hz	A / B
Libya	230 V	220 V / 400 V	50 Hz	C / L
Liechtenstein	230 V	400 V	50 Hz	C / J
Lithuania	230 V	400 V	50 Hz	C / F
Luxembourg	230 V	400 V	50 Hz	C / F
Macau	220 V	380 V	50 Hz	G
Macedonia	230 V	400 V	50 Hz	C / F
Madagascar	220 V	220 V / 380 V	50 Hz	C / E
Madeira	230 V	400 V	50 Hz	C / F
Malawi	230 V	400 V	50 Hz	G
Malaysia	240 V	415 V	50 Hz	G
Maldives	230 V	400 V	50 Hz	C / D / G / J / K / L
Mali	220 V	380 V	50 Hz	C / E
Malta	230 V	400 V	50 Hz	G
Marshall Islands	120 V	208 V	60 Hz	A / B
Martinique	220 V	380 V	50 Hz	C / D / E
Mauritania	220 V	220 V	50 Hz	C
Mauritius	230 V	400 V	50 Hz	C / G
Mayotte	230 V	400 V	50 Hz	C / E

Country / state / territory	Single-phase Voltage	Three-phase Voltage	Frequency (hertz)	Plug type
Mexico	127 V	220 V / 480 V	60 Hz	A / B
Micronesia, Federated States of	120 V	208 V	60 Hz	A / B
Moldova	230 V	380 V	50 Hz	C / F
Monaco	230 V	400 V	50 Hz	C / E / F
Mongolia	230 V	400 V	50 Hz	C / E
Montenegro	230 V	400 V	50 Hz	C / F
Montserrat	230 V	400 V	60 Hz	A / B
Morocco	220 V	380 V	50 Hz	C / E
Mozambique	220 V	380 V	50 Hz	C / F / M
Myanmar (formerly Burma)	230 V	400 V	50 Hz	A / C / D / G / I
Namibia	220 V	380 V	50 Hz	D / M
Nauru	240 V	415 V	50 Hz	I
Nepal	230 V	400 V	50 Hz	C / D / M
Netherlands	230 V	400 V	50 Hz	C / F
New Caledonia	220 V	380 V	50 Hz	C / F
New Zealand	230 V	415 V	50 Hz	I
Nicaragua	120 V	208 V	60 Hz	A
Niger	220 V	380 V	50 Hz	C / D / E / F
Nigeria	230 V	400 V	50 Hz	D / G
Niue	230 V	400 V	50 Hz	I
Norfolk Island	230 V	400 V	50 Hz	I
North Cyprus	230 V	400 V	50 Hz	G
Northern Ireland	230 V	400 V	50 Hz	G
North Korea	220 V	380 V	50 Hz	C
Norway	230 V	400 V	50 Hz	C / F
Oman	240 V	415 V	50 Hz	G
Pakistan	230 V	400 V	50 Hz	C / D
Palau	120 V	208 V	60 Hz	A / B
Palestine	230 V	400 V	50 Hz	C / H
Panama	120 V	190 V	60 Hz	A / B
Papua New Guinea	240 V	415 V	50 Hz	I
Paraguay	220 V	380 V	50 Hz	C

Country / state / territory	Single-phase Voltage	Three-phase Voltage	Frequency (hertz)	Plug type
Peru	220 V	220 V	60 Hz	A / C
Philippines	220 V	380 V	60 Hz	A / B / C
Pitcairn Islands	230 V	400 V	50 Hz	I
Poland	230 V	400 V	50 Hz	C / E
Portugal	230 V	400 V	50 Hz	C / F
Puerto Rico	120 V	208 V	60 Hz	A / B
Qatar	240 V	415 V	50 Hz	G
Réunion	230 V	400 V	50 Hz	C / E
Romania	230 V	400 V	50 Hz	C / F
Russia (officially the Russian Federation)	220 V	380 V	50 Hz	C / F
Rwanda	230 V	400 V	50 Hz	C / J
Saba	110 V	190 V	60 Hz	A / B
Saint Barthélemy (informally also referred to as Saint Barth's or Saint Barts)	230 V	400 V	60 Hz	C / E
Saint Kitts and Nevis (officially the Federation of Saint Christopher and Nevis)	230 V	400 V	60 Hz	D / G
Saint Lucia	230 V	400 V	50 Hz	G
Saint Martin	220 V	380 V	60 Hz	C / E
Saint Helena	230 V	400 V	50 Hz	G
Sint Eustatius	110 / 220	190 V / 380 V	60 Hz	A / B / C / F
Sint Maarten	110 V	190 V	60 Hz	A / B
Saint Vincent and the Grenadines	110 / 230	190 V / 400 V	50 Hz	A / B / G
Samoa	230 V	400 V	50 Hz	I
San Marino	230 V	400 V	50 Hz	C / F / L
São Tomé and Príncipe	230 V	400 V	50 Hz	C / F
Saudi Arabia	127 / 220	190 V / 380 V***	60 Hz	A / B / C / G
Scotland	230 V	400 V	50 Hz	G
Senegal	230 V	400 V	50 Hz	C / D / E / K
Serbia	230 V	400 V	50 Hz	C / F
Seychelles	240 V	240 V	50 Hz	G
Sierra Leone	230 V	400 V	50 Hz	D / G
Singapore	230 V	400 V	50 Hz	G
Slovakia	230 V	400 V	50 Hz	C / E
Slovenia	230 V	400 V	50 Hz	C / F

Country / state / territory	Single-phase Voltage	Three-phase Voltage	Frequency (hertz)	Plug type
Solomon Islands	230 V	400 V	50 Hz	G / I
Somalia	220 V	380 V	50 Hz	C
Somaliland	220 V	380 V	50 Hz	C
South Africa	230 V	400 V	50 Hz	C / D / M / N
South Korea	220 V	380 V	60 Hz	C / F
South Sudan	230 V	400 V	50 Hz	C / D
Spain	230 V	400 V	50 Hz	C / F
Sri Lanka	230 V	400 V	50 Hz	D / G
Sudan	230 V	400 V	50 Hz	C / D
Suriname	127 / 230	220 V	60 Hz	A / B / C / F
Swaziland	230 V	400 V	50 Hz	M
Sweden	230 V	400 V	50 Hz	C / F
Switzerland	230 V	400 V	50 Hz	C / J
Syria	220 V	380 V	50 Hz	C / E / L
Tahiti	220 V	380 V	50 Hz / 60 Hz	C / E
Taiwan	110 V	190 V	60 Hz	A / B
Tajikistan	220 V	380 V	50 Hz	C / F
Tanzania	230 V	400 V	50 Hz	D / G
Thailand	230 V	380 V	50 Hz	A / B / C / O
Togo	220 V	380 V	50 Hz	C
Tokelau	230 V	400 V	50 Hz	I
Tonga	240 V	415 V	50 Hz	I
Trinidad & Tobago	115 V	200 V	60 Hz	A / B
Tunisia	230 V	400 V	50 Hz	C / E
Turkey	230 V	400 V	50 Hz	C / F
Turkmenistan	220 V	380 V	50 Hz	C / F
Turks and Caicos Islands	120 V	208 V	60 Hz	A / B
Tuvalu	230 V	400 V	50 Hz	I
Uganda	240 V	415 V	50 Hz	G
Ukraine	230 V	380 V	50 Hz	C / F
United Arab Emirates (UAE)	230 V	400 V	50 Hz	G

Country / state / territory	Single-phase Voltage	Three-phase Voltage	Frequency (hertz)	Plug type
United Kingdom (UK)	230 V	400 V	50 Hz	G
United States of America (USA)	120 V	208 V	60 Hz	A / B
United States Virgin Islands	110 V	190 V	60 Hz	A / B
Uruguay	220 V	220 V	50 Hz	C / F / L
Uzbekistan	220 V	380 V	50 Hz	C / F
Vanuatu	230 V	400 V	50 Hz	I
Vatican City	230 V	400 V	50 Hz	C / F / L
Venezuela	120 V	240 V	60 Hz	A / B
Vietnam	220 V	380 V	50 Hz	A / C / D
Virgin Islands (British)	110 V	190 V	60 Hz	A / B
Virgin Islands (USA)	110 V	190 V	60 Hz	A / B
Wales	230 V	400 V	50 Hz	G
Yemen	230 V	400 V	50 Hz	A / D / G
Zambia	230 V	400 V	50 Hz	C / D / G
Zimbabwe	240 V	415 V	50 Hz	

Important Notice

The table above is a SUGGESTION ONLY and intended to help you understand if you have a need. Even within countries voltages and frequencies can change and so it is vital that you perform your own research for the specific site you are looking at. Power Systems International makes no representations as to the accuracy of the numbers and Power Systems International Limited will not be responsible for any errors or costs, direct or indirect, incurred as a result of reliance placed on the numbers above.