

Pais	Frecuencia y tolerancia (Hz y %)	Doméstico (V)	Comercial (V)	Industrial (V)
Afganistán	50	380/220 (a) 220 (k)	380/220 (a)	380/220 (a)
Alemania	50 ± 0,3	400/230 (a) 230 (k)	400/230 (a) 230 (k)	20.000 10.000 6.000 690/400 400/230
Angola	50	380/220 (a) 220 (k)	380/220 (a)	380/220 (a)
Antigua y Barbuda	60	240 (k) 120 (k)	400/230 (a) 120/208 (a)	400/230 (a) 120/208 (a)
Arabia Saudí	60	220/127 (a)	220/127 (a) 380/220 (a)	11.000 7.200 380/220 (a)
Argelia	50 ± 1,5	220/127 (e) 220 (k)	380/220 (a) 220/127 (a)	10.000 5.500 6.600 380/220 (a)
Argentina	50 ± 2	380/220 (a) 220 (k)	380/220 (a) 220 (k)	
Armenia	50 ± 5	380/220 (a) 220 (k)	380/220 (a) 220 (k)	380/220 (a)
Australia	50 ± 0,1	415/240 (a) 240 (k)	415/240 (a) 440/250 (a) 440 (m)	22.000 11.000 6.600 415/240 440/250
Austria	50 ± 0,1	230 (k)	380/230 (a) (b) 230 (k)	5.000 380/220 (a)
Azerbaiyán	50 ± 0,1	208/120 (a) 240/120 (k)	208/120 (a) 240/120 (k)	
Bahrein	50 ± 0,1	415/240 (a) 240 (k)	415/240 (a) 240 (k)	11.000 415/240 (a) 240 (k)
Bangladesh	50 ± 2	410/220 (a) 220 (k)	410/220 (a)	11.000 410/220 (a)
Barbados	50 ± 6	230/115 (j) 115 (k)	230/115 (j) 200/115 (a) 220/115 (a)	230/400 (g) 230/155 (j)
Bélgica	50 ± 5	230 (k) 230 (a) 3N, 400	230 (k) 230 (a) 3N, 400	6.600 10.000 11.000 15.000
Bielorrusia	50	380/220 (a) 220 (k) 220/127 (a) 127 (k)	380/220 (a) 220 (k)	380/220 (a)
Bolivia	50 ± 0,5	230 (k)	400/230 (a) 230 (k)	400/230 (a)
Botsuana	50 ± 3	220 (k)	380/220 (a)	380/220 (a)

País	Frecuencia y tolerancia (Hz y %)	Doméstico (V)	Comercial (V)	Industrial (V)
Brasil	60	220 (k) 127 (k)	220/380 (a) 127/220 (a)	13.800 11.200 220/380 (a) 127/220 (a)
Brunei	50 ± 2	230	230	11.000 68.000
Bulgaria	50 ± 0,1	220	220/240	1.000 690 380
Cabo Verde		220	220	380/400
Camboya	50 ± 1	220 (k)	220/300	220/380
Camerún	50 ± 1	220/260 (k)	220/260 (k)	220/380 (a)
Canadá	60 ± 0,02	120/240 (j)	347/600 (a) 480 (f) 240 (f) 120/240 (j) 120/208 (a)	7.200/12.500 347/600 (a) 120/208 600 (f) 480 (f) 240 (f)
Chad	50 ± 1	220 (k)	220 (k)	380/220 (a)
Chile	50 ± 1	220 (k)	380/220 (a)	380/220 (a)
China	50 ± 0,5	220 (k)	380/220 (a) 220 (k)	380/220 (a) 220 (k)
Chipre	50 ± 0,1	240 (k)	415/240	11.000 415/240
Colombia	60 ± 1	120/240 (g) 120 (k)	120/240 (g) 120 (k)	13.200 120/240 (g)
Congo	50	220 (k)	240/120 (j) 120 (k)	380/220 (a)
Corea (Norte)	60 +0, -5	220 (k)	220/380 (a)	13.600 6.800
Corea (Sur)	60	100 (k)	100/200 (j)	
Croacia	50	400/230 (a) 230 (k)	400/230 (a) 230 (k)	400/230 (a)
Dinamarca	50 ± 1	400/230 (a)	400/230 (a)	400/230 (a)
Dominica	50	230 (k)	400/230 (a)	400/230 (a)
Egipto	50 ± 0,5	380/220 (a) 220 (k)	380/220 (a) 220 (k)	66.000 33.000 20.000 11.000 6.600 380/220 (a)
Emiratos Árabes Unidos	50 ± 1	220 (k)	415/240 (a) 380/220 (a) 220 (k)	6.600 415/210 (a) 380/220 (a)
Eslovaquia	50 ± 0,5	230	230	230/400
Eslovenia	50 ± 0,1	220 (k)	380/220 (a)	10.000 6.600 380/220 (a)
España	50 ± 1	400/230 (a) (e) 230 (k) 220/127 (a) 127 (k)	400/230 (a) 220/127 (a) (e)	25.000 15.000 11.000 400/230 (a)
Estados Unidos Charlotte (Carolina del Norte)	60 ± 0,06	120/240 (j) 120/208 (a)	265/460 (a) 120/240 (j) 120/208 (a)	14.400 7.200 2.400 575 (f) 460 (f) 240 (f) 265/460 (a) 120/240 (j) 120/208 (a)
Estados Unidos Detroit (Michigan)	60 ± 0,2	120/240 (j) 120/208 (a)	480 (f) 120/240 (h) 120/208 (a)	13.200 4.800 4.160 480 (f) 120/240 (h) 120/208 (a)

Pais	Frecuencia y tolerancia (Hz y %)	Doméstico (V)	Comercial (V)	Industrial (V)
Estados Unidos Los Angeles (California)	60 ± 0,2	120/240 (j)	4.800 120/240 (g)	4.800 120/240 (g)
Estados Unidos Miami (Florida)	60 ± 0,3	120/240 (j) 120/208 (a)	120/240 (j) 120/240 (h) 120/208 (a)	13.200 2.400 480/277 (a) 120/240 (h)
Estados Unidos Nueva York (Nueva York)	60	120/240 (j) 120/208 (a)	120/240 (j) 120/208 (a) 240 (f)	12.470 4.160 277/480 (a) 480 (f)
Estados Unidos Pittsburg (Pennsylvania)	60 ± 0,03	120/240 (j)	265/460 (a) 120/240 (j) 120/208 (a) 460 (f) 230 (f)	13.200 11.500 2.400 265/460 (a) 120/208 (a) 460 (f) 230 (f)
Estados Unidos Portland (Oregón)	60	120/240 (j)	227/480 (a) 120/240 (j) 120/208 (a) 480 (f) 240 (f)	19.900 12.000 7.200 2.400 277/480 (a) 120/208 (a) 480 (f) 240 (f)
Estados Unidos San Francisco (California)	60 ± 0,08	120/240 (j)	277/480 (a) 120/240 (j)	20.800 12.000 4.160 277/480 (a) 120/240 (g)
Estados Unidos Toledo (Ohio)	60 ± 0,08	120/240 (j) 120/208 (a)	277/480 (c) 120/240(h) 120/208 (j)	12.470 7.200 4.800 4.160 480 (f) 277/480 (a) 120/208 (a)
Estonia	50 ± 1	380/220 (a) 220 (k)	380/220 (a) 220 (k)	380/220 (a)
Etiopía	50 ± 2,5	220 (k)	380/231 (a)	15.000 380/231 (a)
Filipinas (República de)	60 ± 0,16	110/220 (j)	13.800 4.160 2.400 110/220 (h)	13.800 4.160 2.400 440 (b) 110/220 (h)
Finlandia	50 ± 0,1	230 (k)	400/230 (a)	690/400 (a) 400/230 (a)
Francia	50 ± 1	400/230 (a) 230 (a)	400/230 690/400 590/100	20.000 10.000 230/400
Gambia	50	220 (k)	220/380	380
Georgia	50 ± 0,5	380/220 (a) 220 (k)	380/220 (a) 220 (k)	380/220 (a)
Ghana	50 ± 5	220/240	220/240	415/240 (a)
Gibraltar	50 ± 1	415/240 (a)	415/240 (a)	415/240 (a)
Granada	50	230 (k)	400/230 (a)	400/230 (a)
Grecia	50	220 (k) 230	6.000 380/220 (a)	22.000 20.000 15.000 6.600
Hong Kong	50 ± 2	220 (k)	380/220 (a) 220 (k)	11.000 386/220 (a)
Hungría	50 ± 5	220	220	220/380
India	50 ± 1,5	440/250 (a) 230 (k)	440/250 (a) 230 (k)	11.000 400/230 (a) 440/250 (a)
Indonesia	50 ± 2	220 (k)	380/220 (a)	150.000 20.000 380/220 (a)