

Single-phase transformer 110 V / 230 V

220 V on a 110 V supply, 230 V on a 120 V supply · 63 VA to 20 kVA · IP00, IP23 or IP54 · made in France

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This single-phase 110V to 230V step up transformer raises the voltage of 110–120 V supplies to that of European equipment, isolated from the mains: connected to a 110 V supply, it gives 220 V; on a 120 V supply, as in the United States or Canada, it gives 230 V. It is the same transformer, at the same price. It is used to connect an appliance, tool or machine designed for European 220–230 V, at 50 Hz as well as 60 Hz. The primary and secondary are two separate windings. From 63 VA to 20 kVA, open frame (IP00), with a ventilated cover (IP23) or in a sealed housing (IP54): it is wound and tested in our workshop in Gailhan, in the Gard (southern France).

YOUR SUPPLY
110 or 120 V ~
50 or 60 Hz

TRANSFORMER
110 → 220 V
or 120 → 230 V: isolates and
steps up

YOUR EQUIPMENT
220 or 230 V ~
designed for the European
mains

Key points

- **110 V or 120 V supply** — 220 V on a 110 V supply, 230 V on a 120 V supply, with the same transformer, at the same price.
- **Two separate windings** — No electrical connection between the 110–120 V supply and your equipment.
- **Screw terminals up to 55 A, lugs above** — Screw terminals up to 5 kVA on this model, lugs above that. Terminal marking: 1 and 2 on the primary (0 and 110 V or 120 V), 3 and 4 on the secondary (0 and 220 V or 230 V), earth on the primary side.
- **Open frame, covered or sealed** — IP00 for cabinet mounting, IP23 with a ventilated cover, IP54 in a moulded housing or a sealed enclosure.
- **Electrostatic shield as standard** — Connected to earth, it limits the transfer of disturbances between primary and secondary.
- **Made and tested in Gailhan** — Wound, wired and 100 % tested in our workshop in the Gard, southern France, before dispatch.

General characteristics

Frequency	50 / 60 Hz
Insulation class	H (180 °C)
Cooling	dry-type, natural air cooling (AN)
Ambient temperature	40 °C max.
Standard	EN 61558-2-4
Electrostatic shield	standard, earthed
Thermal protection	on request
Connection	Screw terminals up to 55 A (5 kVA on this model), lugs above

Enclosures

- IP00 · open frame, for cabinet
- IP23 · ventilated enclosure
- IP54 · sealed enclosure

Ratings and references

REFERENCE	RATING	CURRENT primary / secondary	aM primary / secondary	LOSSES NO- LOAD / LOAD	EFFICIENCY	WEIGHT IP00 / 23 / 54	DIMENSIONS IP00 mm	DIMENSIONS IP54 mm
TMN110230-63-xx	63 VA	0.57 / 0.27 A	aM 2 / 2 A	2 / 3.4 W	92.1 %	1.5 / 3 / 2 kg	75 × 68 × 73	100 × 64 × 72
TMN110230-100-xx	100 VA	0.91 / 0.43 A	aM 2 / 2 A	3 / 5.2 W	92 %	2 / 3.5 / 2.6 kg	84 × 82 × 78	130 × 80 × 98
TMN110230-160-xx	160 VA	1.45 / 0.70 A	aM 2 / 2 A	4 / 8.5 W	92.5 %	2.5 / 4 / 3.2 kg	96 × 89 × 87	130 × 80 × 98
TMN110230-200-xx	200 VA	1.82 / 0.87 A	aM 2 / 2 A	5 / 8.9 W	93 %	2.6 / 4.1 / 3.5 kg	118 × 97 × 97	130 × 80 × 98
TMN110230-250-xx	250 VA	2.27 / 1.09 A	aM 4 / 2 A	6 / 10.1 W	93.6 %	3.9 / 5.4 / 4.5 kg	108 × 95 × 100	165 × 93 × 94
TMN110230-300-xx	300 VA	2.73 / 1.30 A	aM 4 / 2 A	6 / 14.7 W	93 %	4 / 5.5 / 5.5 kg	108 × 103 × 94	165 × 93 × 94
TMN110230-400-xx	400 VA	3.64 / 1.74 A	aM 4 / 2 A	8 / 15.6 W	94 %	6 / 9 / 7.5 kg	126 × 122 × 108	176 × 103 × 130
TMN110230-500-xx	500 VA	4.55 / 2.17 A	aM 6 / 4 A	10 / 18.3 W	94.4 %	6.8 / 9.8 / 8.2 kg	126 × 110 × 115	176 × 103 × 130
TMN110230-630-xx	630 VA	5.73 / 2.74 A	aM 8 / 4 A	12 / 22.7 W	94.4 %	9 / 12 / 11 kg	150 × 124 × 126	176 × 103 × 130
TMN110230-750-xx	750 VA	6.82 / 3.26 A	aM 8 / 4 A	15 / 23.9 W	94.8 %	10.3 / 13.3 / 15.3 kg	150 × 120 × 135	300 × 200 × 250
TMN110230-1000-xx	1 kVA	9.09 / 4.35 A	aM 10 / 6 A	18 / 28.5 W	95.3 %	14 / 17 / 19 kg	150 × 144 × 127	300 × 200 × 250
TMN110230-1600-xx	1,6 kVA	14.55 / 6.96 A	aM 16 / 8 A	19 / 47.8 W	95.8 %	16.4 / 20.4 / 21.4 kg	180 × 140 × 160	300 × 200 × 250
TMN110230-2000-xx	2 kVA	18.18 / 8.70 A	aM 20 / 10 A	19 / 59.8 W	96 %	20 / 24 / 25 kg	180 × 160 × 160	300 × 200 × 250
TMN110230-2500-xx	2,5 kVA	22.73 / 10.87 A	aM 25 / 12 A	24 / 66.4 W	96.4 %	24 / 28 / 29 kg	180 × 180 × 150	300 × 200 × 250
TMN110230-3000-xx	3 kVA	27.27 / 13.04 A	aM 32 / 16 A	29 / 122.4 W	95 %	29 / 33 / 34 kg	180 × 200 × 160	300 × 200 × 250
TMN110230-4000-xx	4 kVA	36.36 / 17.39 A	aM 40 / 20 A	42 / 101.7 W	96.4 %	33 / 37 / 43 kg	240 × 190 × 220	595 × 250 × 375
TMN110230-5000-xx	5 kVA	45.45 / 21.74 A	aM 50 / 25 A	45 / 120.9 W	96.7 %	36 / 40 / 46 kg	240 × 200 × 220	595 × 250 × 375
TMN110230-6300-xx	6,3 kVA	57.27 / 27.39 A	aM 63 / 32 A	56 / 131 W	97 %	40 / 44 / 50 kg	240 × 210 × 220	595 × 250 × 375
TMN110230-7500-xx	7,5 kVA	68.18 / 32.61 A	aM 80 / 40 A	56 / 159.8 W	97.1 %	46 / 48 / 56 kg	240 × 230 × 220	595 × 250 × 375
TMN110230-10000-xx	10 kVA	90.91 / 43.48 A	aM 100 / 50 A	on request	—	75 / 83 / 85 kg	390 × 150 × 470	642 × 350 × 550
TMN110230-15000-xx	15 kVA	136.36 / 65.22 A	aM 160 / 80 A	on request	—	80 / 88 / 90 kg	390 × 160 × 470	642 × 350 × 550
TMN110230-20000-xx	20 kVA	181.82 / 86.96 A	aM 200 / 100 A	on request	—	95 / 103 / 105 kg	390 × 170 × 470	642 × 350 × 550

Protection and installation

- Primary.** The 110 or 120 V supply to terminals 1 (0 V) and 2 (110 V), earth to the primary earth terminal.
- Secondary.** 220-230 V equipment to terminals 3 (0 V) and 4 (230 V), with its own protection.
- Safety.** Connection by a qualified person, with the power off. In IP00, the transformer is installed in a closed cabinet or enclosure.

A question or another voltage? contact@abltransfo.com · +33 4 66 80 14 33 · abltransfo.com