

Three-phase transformer 400 V / 208 V + N (208Y/120 V)

North American 208Y/120 V supply in Europe · vector group Dyn11 · 1 to 100 kVA · made in France



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This three-phase transformer recreates the North American 208Y/120 V system in Europe: from your 3 × 400 V three-phase supply, it provides 208 V between phases and 120 V between each phase and neutral. It is the solution for running machines built for the United States or Canada — machine tools, commercial kitchen equipment, air conditioning, UPS systems and IT racks. Vector group Dyn11, electrostatic shield as standard, 1 to 100 kVA in IP00, IP23 or IP54, and 125 to 1,000 kVA on request: it is wound and tested in our workshop in Gailhan (Gard, southern France).

YOUR SUPPLY

3 × 400 V

European mains, 50 Hz

TRANSFORMER

Dyn11

steps down and isolates

YOUR AMERICAN

MACHINE

208Y/120 V208 V between phases ·
120 V phase to neutral

Key points

- **208 V between phases** — The three-phase voltage of North American commercial buildings.
- **120 V between phase and neutral** — For single-phase circuits and the machine controls.
- **Vector group Dyn11** — Delta primary, star secondary, neutral brought out to terminal 2N.
- **Galvanic isolation** — Your machine is electrically separated from the European supply that feeds it.
- **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

Vector group	Dyn11
Frequency	50 Hz
Electrostatic shield	standard, earthed
Insulation class	H (180 °C)
Cooling	dry-type, natural air cooling (AN)
Ambient temperature	40 °C max.
Altitude	3,000 m max.
Standard	EN 61558-2-4

Enclosures

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

Ratings and references

REFERENCE	RATING	CURRENT primary / secondary	TYPE D MCB	LOSSES NO-LOAD / LOAD	EFFICIENCY	WEIGHT IP00 / 23 / 54	DIMENSIONS IP23 mm	DIMENSIONS IP54 mm
TTI400208N-1000-xx	1 kVA	1.4 / 2.8 A	D 2 A	12 / 59 W	93.4 %	9 / 12 / 19 kg	340 × 310 × 350	595 × 410 × 375
TTI400208N-2000-xx	2 kVA	2.9 / 5.6 A	D 4 A	22 / 107 W	94 %	17 / 20 / 27 kg	340 × 310 × 350	595 × 410 × 375
TTI400208N-2500-xx	2,5 kVA	3.6 / 6.9 A	D 4 A	24 / 126 W	94.3 %	19 / 22 / 29 kg	340 × 310 × 350	595 × 410 × 375
TTI400208N-3150-xx	3,15 kVA	4.5 / 8.7 A	D 6 A	30 / 136 W	95 %	23 / 26 / 33 kg	340 × 310 × 350	595 × 410 × 375
TTI400208N-4000-xx	4 kVA	5.8 / 11.1 A	D 10 A	42 / 239 W	93.4 %	34 / 40 / 44 kg	460 × 320 × 500	642 × 505 × 550
TTI400208N-5000-xx	5 kVA	7.2 / 13.9 A	D 10 A	51 / 255 W	94.2 %	40 / 46 / 50 kg	460 × 320 × 500	642 × 505 × 550
TTI400208N-6300-xx	6,3 kVA	9.1 / 17.5 A	D 10 A	59 / 287 W	94.8 %	46 / 52 / 56 kg	460 × 320 × 500	642 × 505 × 550
TTI400208N-8000-xx	8 kVA	11.5 / 22.2 A	D 16 A	90 / 284 W	95.5 %	65 / 74 / 75 kg	525 × 335 × 550	642 × 505 × 550
TTI400208N-10000-xx	10 kVA	14.4 / 27.8 A	D 16 A	98 / 332 W	95.9 %	72 / 81 / 82 kg	525 × 335 × 550	642 × 505 × 550
TTI400208N-12500-xx	12,5 kVA	18 / 34.7 A	D 20 A	on request	—	— / 94 / — kg	525 × 335 × 550	642 × 505 × 550
TTI400208N-16000-xx	16 kVA	23.1 / 44.4 A	D 25 A	131 / 407 W	96.7 %	96 / 105 / 106 kg	525 × 335 × 550	642 × 505 × 550
TTI400208N-20000-xx	20 kVA	28.9 / 55.5 A	D 32 A	147 / 496 W	96.9 %	108 / 117 / 118 kg	525 × 335 × 550	642 × 505 × 550
TTI400208N-30000-xx	30 kVA	43.3 / 83.3 A	D 50 A	179 / 667 W	97.3 %	133 / 142 / 143 kg	525 × 335 × 550	642 × 505 × 550
TTI400208N-40000-xx	40 kVA	57.7 / 111 A	D 63 A	166 / 771 W	97.7 %	132 / 144 / 155 kg	700 × 480 × 720	822 × 610 × 725
TTI400208N-50000-xx	50 kVA	72.2 / 138.8 A	D 80 A	190 / 980 W	97.7 %	149 / 161 / 172 kg	700 × 480 × 720	822 × 610 × 725
TTI400208N-63000-xx	63 kVA	90.9 / 174.9 A	D 100 A	on request	—	200 / 220 / 223 kg	700 × 480 × 720	822 × 610 × 725
TTI400208N-80000-xx	80 kVA	115.5 / 222.1 A	D 125 A	on request	—	280 / 300 / 303 kg	700 × 480 × 720	822 × 610 × 725
TTI400208N-100000-xx	100 kVA	144.3 / 277.6 A	D 160 A	on request	—	325 / 345 / 348 kg	700 × 480 × 720	822 × 610 × 725

Protection and installation

Upstream protection. A type D circuit breaker or aM fuses, sized for the rated current of the chosen rating: the protection rating for each size is given in the table. At switch-on, the inrush current reaches about twelve times the rated current.

Secondary neutral. Earthed at the transformer, it gives a TN-S system, the most common. Left isolated, it gives an IT system, which requires an insulation monitoring device. The choice is the installer's.

Safety. Connection must be carried out by a qualified person. Earth is connected before switching on. In IP00, the transformer is installed in a cabinet or a closed electrical room.

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