# Low voltage transformers T3P - Three phase power transformer

Three phase or single phase dry-type low voltage (LV) transformers are used as isolation transformers or to adjust the voltage level in the LV distribution grid. The windings are made of aluminum or copper and impregnated with epoxy resin of thermal class F or H by simple or vacuum pressure impregnation (VPI).



## Application

ABB low voltage transformers are widely used in industrial applications and in commercial and public buildings. They are also used for adjusting the voltage from 690 V to 400 V or as isolation transformers with a voltage ratio of 1:1, providing galvanic separation.

Dedicated products are available for various applications

- in renewable power generation including:
- Wind or photovoltaics
- Transportation (ie, marine or railways)
- Uninterruptible power supply (UPS)
- Chemical, oil and gas industry
- Converters

## Key features

- Low losses
- Low weight and compact dimensions
- Non-flammable and non-explosive
- IP23 enclosures (optional)
- With air cooling based on natural convection (AN) optional with forced air cooling (AF)

### Standards

All units are built in accordance with IEC and EN.

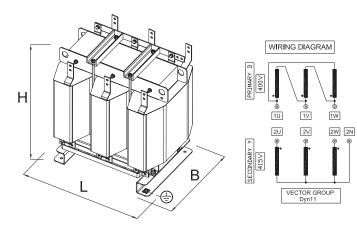
Ratings						
Number of phases	3 or 1					
Rated power	10-1,000 kVA (others on request)					
Primary/secondary voltage	220, 230, 240, 380, 400, 415 600, 690 V					
Frequency	50, 60, 400 Hz					



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### Features

- Voltage ratio: 400 V / 400 V (415V No Load)
- Frequency: 50 Hz or 60 Hz
- Vector group: Dyn11
- Technology: vacuum pressurized impregnation with epoxy resin class H
- Winding material: aluminum
- Terminals: copper cableshoes tinned or aluminum bars
- Cooling: AN
- Protection degree: IP00
- Installation up to maximum 1,000 meters (3,280 ft) A.S.L.
- Insulation voltage primary and secondary: 3 kV for one minute
- Winding temperature rise: 125 °C measured by resistance
- Ambient temperature: 40 °C maximum

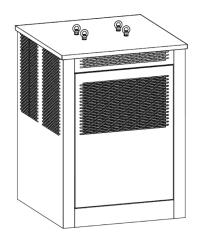


Power Reference		Reference Imped Ucc		Losses	Dimensions			Total weight	
[kVA]	[IP00]	[%]	No-load [W]	Load (115 °C) [W]	L [mm]	B [mm]	H [mm]	[kg]	
10	T3P0010K	4	150	400	350	230	400	65	
13	T3P0013K	4	175	475	350	250	400	75	
16	T3P0016K	4	200	560	420	260	450	88	
20	T3P0020K	4	230	670	420	280	450	102	
25	T3P0025K	4	270	780	420	290	450	120	
32	T3P0032K	4	300	980	450	320	450	133	
40	T3P0040K	4	350	1,120	450	350	470	163	
50	T3P0050K	4	400	1,250	550	380	430	185	
63	T3P0063K	4	450	1,450	550	450	430	220	
80	T3P0080K	4	520	1,750	580	450	480	260	
100	T3P0100K	4	600	2,250	580	470	540	300	
125	T3P0125K	4	700	2,700	580	490	600	360	
160	T3P0160K	4	840	3,100	650	520	620	450	
200	T3P0200K	4	1,050	3,500	740	510	680	550	
250	T3P0250K	4	1,250	3,900	770	520	780	655	
315	T3P0315K	4	1,500	4,400	770	570	780	785	
400	T3P0400K	4	1,750	5,000	860	600	860	1,000	
500	T3P0500K	4	2,100	5,900	860	690	930	1,200	
630	T3P0630K	4	2,650	6,800	950	730	1,000	1,570	
800	T3P0800K	4	3,200	8,200	950	830	1,060	1,920	
1,000	T3P1000K	4	3,750	10,000	950	860	1,160	2,150	

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#### **Features**

- Enclosure shall be IP23 degree with two detachable panels on long side and detachable roof
- Four fixing points on the floor
- Four lifting hooks on cover for full lifting
- Cable entry from the bottom
- Painting: 100 micron DFT
- Finishing colour: grey RAL 7035



### Optional enclosure supplied

Power	Reference	Imped Ucc	Dimensions			Total weigh
[kVA]	[IP00]	[%]	X [mm]	Y [mm]	Z [mm]	[kg]
10	T3P0010K23	4	550	500	750	100
12.5	T3P0013K23	4	550	500	750	110
16	T3P0016K23	4	550	500	750	123
20	T3P0020K23	4	550	500	750	138
25	T3P0025K23	4	550	500	750	155
31.5	T3P0030K23	4	750	700	1,000	193
40	T3P0040K23	4	750	700	1,000	223
50	T3P0050K23	4	750	700	1,000	245
63	T3P0063K23	4	750	700	1,000	280
80	T3P0080K23	4	750	700	1,000	320
100	T3P0100K23	4	750	700	1,000	360
125	T3P0125K23	4	750	700	1,500	460
160	T3P0160K23	4	1,000	1,000	1,500	550
200	T3P0200K23	4	1,000	1,000	1,500	650
250	T3P0250K23	4	1,000	1,000	1,500	755
315	T3P0315K23	4	1,000	1,000	1,500	885
400	T3P0400K23	4	1,000	1,000	1,500	1,100
500	T3P0500K23	4	1,000	1,000	1,500	1,300
630	T3P0630K23	4	1,200	1,200	1,750	1,720
800	T3P0800K23	4	1,200	1,200	1,750	2,070
1,000	T3P1000K23	4	1,200	1,200	1,750	2,300

For more information please contact:

#### ABB Management Service Ltd.

Affolternstrasse, 44 P.O. Box 8131 8050 Zurich, Switzerland

### Trasfor S.A.

6995 Molinazzo di Monteggio Switzerland Phone: +41 91 611 30 82 Fax: +41 91 611 30 10 Email: info.trasfor@trasfor.ch

www.abb.com/transformers

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