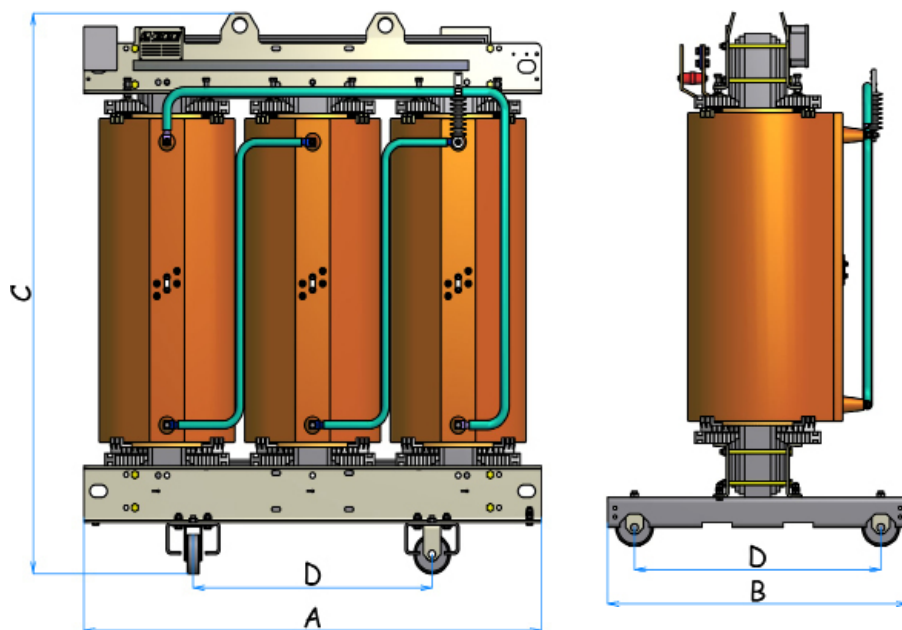


# UNITRAFO

POWER QUALITY – SAFE ENVIRONMENT

## Cast Resin Transformers TU Ecodesign Tier 2 Voltage Class 24 kV

Standards	IEC 60076 - EN 50588 - EU 548/2014
Insulating Class (Temperature Rise)	F (100 K)
Insulation Class MV	24 kV FI 50 kV BIL 125 kV
Insulation Class LV	1,1 kV FI 3 kV
Frequency	50 Hz
Tappings MV	± 2 x 2,5%
Tolerance	IEC tolerance



Power kVA	U <sub>k</sub> * %	P <sub>o</sub> * W	P <sub>k</sub> * W	I <sub>o</sub> %	L <sub>w</sub> A dB(A)	L <sub>p</sub> A dB(A)	A mm	B mm	C mm	D mm	Wheel mm	Weight Kg
100	6	252	1700	0,74	50	38	1140	670	1155	520	125	750
160	6	360	2030	0,65	53	41	1250	670	1175	520	125	1020
200	6	408	2370	0,58	55	42	1330	670	1320	520	125	1170
250	6	468	2710	0,53	56	43	1360	670	1360	520	125	1390
315	6	557	3160	0,52	58	45	1410	820	1440	670	125	1580
400	6	675	3620	0,49	59	46	1500	820	1500	670	125	1910
500	6	811	4410	0,50	60	47	1570	820	1530	670	125	2030
630	6	990	4980	0,52	61	47	1570	820	1680	670	125	2370
800	6	1170	5540	0,48	63	49	1620	820	1880	670	125	2880
1000	6	1395	6670	0,46	64	50	1650	1000	1950	820	125	3180
1250	6	1620	8500	0,43	66	51	1740	1050	2170	820	160	3730
1600	6	1980	9830	0,36	67	52	1860	1050	2200	820	160	4780
2000	6	2340	13000	0,37	69	54	2010	1300	2380	1070	200	5380
2500	6	2790	16400	0,34	70	55	2100	1300	2425	1070	200	6360

\* Data referred to 120°C at rated voltage

Po = Non load losses | Pk = Load losses | Ptot (Po+Pk) = Total losses

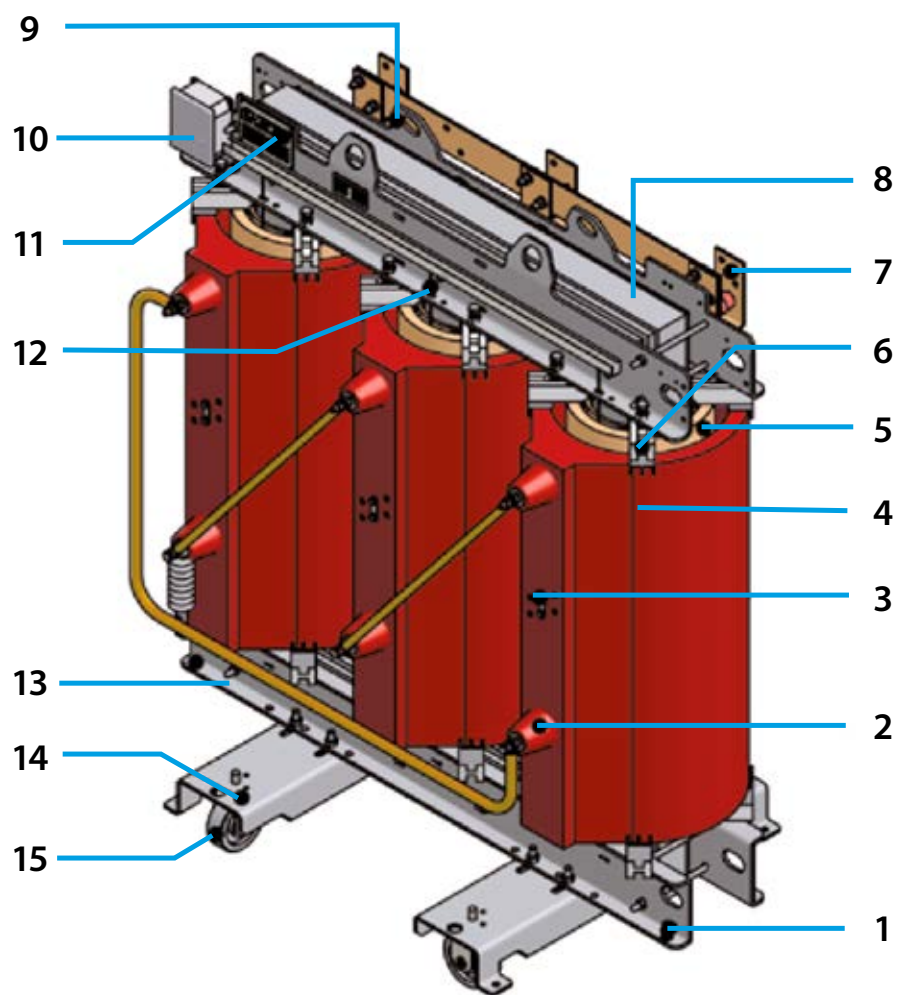
N.B. Dimensions and weights are preliminary and will be confirmed upon order

## Standard equipment

- Terminal board for voltage regulation of  $\pm 2 \times 2,5\%$  (Disconnected transformer)
- High Voltage output insulator
- HV connections with n.3 brass details M12
- LV connections plate in aluminum
- Earthing link
- Thermometer with 2 changeover contacts, type JUMO
- Lugs/eyebolts for lifting or horizontal movement
- Trucks (2 pcs) with orthogonal swivelling revolving wheels (4 pcs)
- Ratingplates in accordance with IEC 60076 (2 pcs, whereof one is delivered unmounted)
- Standard testing, including relevant test certificate
- Documentation as digital files

## CAST RESIN TRANSFORMER – PRINCIPLE SKETCH

- 1 Earthing Terminal
- 2 Medium Voltage Output Insulator
- 3 Medium Voltage Tapping
- 4 Medium Voltage Windings
- 5 Low Voltage Windings
- 6 Windings Pressure Plugs
- 7 Low Voltage Output Bars
- 8 Magnetic Core
- 9 Lifting Eyebolts
- 10 Centralization Auxiliary Box
- 11 Data Plate
- 12 Thermal Sensors
- 13 Core Frame
- 14 Eyebolts for Horizontal Movement
- 15 Orthogonal Revolving Wheels



## Options

As an alternative option we can adapt our transformers for your specific needs. For instance we can offer you transformers with extra low losses, windings in copper for special applications, alternative temperature risings and calsses,

double primary- or secondary current, alternative frequencies, low fitted bushings and vector groups as desired. Below you can see some of the options we offer.

### TEMPERATURE SUPERVISION

ITEM NO.	DESCRIPTION	ITEM NO.	DESCRIPTION
<b>2</b>	Digitalt thermo instrument with 3 contacts for PT100, T154 Tecsystem	<b>7</b>	PT-100-sensor, 3 pcs incl. mounting
<b>3</b>	Temperature relay for PTC-termistors, T119 Tecsystem	<b>10</b>	Thermometer with 2 changeover contacts, type JUMO
<b>4</b>	Digitalt thermo instrument for PT100 with analogue output 4-20 mA or serial 485-connection or modbus, NT935 Tecsystem	<b>10-P</b>	Temperature transmitter incl. program display, with analouge output 4-20 mA for PT100-sensor

### ADDITIONAL ACCESSORIES

ITEM NO.	DESCRIPTION	ITEM NO.	DESCRIPTION
<b>33</b>	Complete fan cooling for forced cooling (power increase +30%) including digitalt temperature instrument T154 and protective relay for fan engines VRT200 (pos 2+36.2). Up to 3150 kVA	<b>42</b>	Electrostatic screen between primary and secondary voltage, max 1,1 kV
<b>36.2</b>	Protective relay for fan engine VRT200 for panel mounting. (N.B. included in the package above)	<b>43</b>	Housing protection - plexiglass
<b>38</b>	Antivibration pads, set of 4 pcs/ transformer	<b>43.1</b>	Plexiglass protection for terminal boards
<b>40</b>	Earthing bolts for HV- or LV-side (Ø 25 mm)	<b>44</b>	Cupal plates
<b>40 A</b>	Earthing link, type Pfisterer (earthing link, control rod och hanger) for work earthing at HV-side with max allowed short circuit current for one second	<b>58</b>	Low placed secondary voltage connectors
<b>40 B</b>	Earthing switch, type ABB, EB12/24, HV-side. Complete with help contact, locking solenoid, hand lever and front		

### TYPPEPROVER\*

ITEM NO.	DESCRIPTION	ITEM NO.	DESCRIPTION
	Shock test (up to 6300 kVA)		Heat test
	Sound test		Participation in test at the factory

\* Standard testing according to IEC 60076, is always included.