

OIL IMMERSED TRANSFORMERS WITH TIER2 LOSSES ACC. TO EU 1783/2019

50to 2500 kVA (AI / AI)

Insulation level \leq 24kV and 36kV

Standart IEC 60076-1

Regulation EcoDesign (EU) 1783/2019

SPECIFICATIONS FOR OIL-IMMERSED TRANSFORMERS WITH INSULATION LEVEL FOR PRIMARY \leq 24kV AND SECONDARY \leq 1,1kV

Rated Power (kVA)	50	100	160	250	400	630	800	1000	1250	1600	2000	2500
Rated Primary Voltage (kV)	6 to 24kV											
Rated Secondary Voltage (V)	10 to 24kV											
Rated Insulation Level On Primary (kV)	380 - 400 - 410 - 420 - 440 - 600 - 660 - 690 - 800 - 820 or 840											
Rated Insulation Level On Secondary (kV)	7,2 (BIL 60/20kV) - 12 (BIL 75/28kV) - 17,5 (95/38kV) or 24 (BIL 125/50kV)											
No-Load Loss (W)	81	130	189	270	387	540	585	693	855	1080	1305	1575
Load Loss (W)	750	1250	1750	2350	3250	4600	6000	7600	9500	12000	15000	18500
Rated Impedance Voltage (%) (Tol. \pm 10%)	4	4	4	4	4	4 or 6	6	6	6	6	6	6
Frequency (Hz)	50	50	50	50	50	50	50	50	50	50	50	50
Vector Group	Dyn5 or Dyn11											
Number of Phases	3	3	3	3	3	3	3	3	3	3	3	3
HV Tapping Range (off-load)	$\pm 2 \times 2,5\%$	$\pm 2 \times 2,5\%$	$\pm 2 \times 2,5\%$	$\pm 2 \times 2,5\%$	$\pm 2 \times 2,5\%$	$\pm 2 \times 2,5\%$	$\pm 2 \times 2,5\%$	$\pm 2 \times 2,5\%$	$\pm 2 \times 2,5\%$	$\pm 2 \times 2,5\%$	$\pm 2 \times 2,5\%$	$\pm 2 \times 2,5\%$
Oil / Winding Temperature Rises (K)	60/65	60/65	60/65	60/65	60/65	60/65	60/65	60/65	60/65	60/65	60/65	60/65
Altitude Above Sea Level (m)	≤ 1000	≤ 1000	≤ 1000	≤ 1000	≤ 1000	≤ 1000	≤ 1000	≤ 1000	≤ 1000	≤ 1000	≤ 1000	≤ 1000
Noise Level Sound Power Lwa (dB)	38	40	43	46	49	51	52	54	55	57	59	62
Dimension A (mm)	1000	1050	1050	1140	1220	1300	1400	1520	1520	1540	1620	1750
Dimension B (mm)	780	740	850	800	900	980	1050	1100	1100	1150	1250	1300
Dimension C (mm)	1400	1500	1580	1600	1700	1850	1860	1920	1980	2020	2150	2180
Dimension E (mm)	520	520	520	520	670	670	670	820	820	820	1070	1070
Dimension F (mm)	40	40	40	40	40	40	50	50	50	50	70	70
Dimension ϕ (mm)	125	125	125	125	125	125	160	160	160	160	200	200
Oil Weight (kg)	200	230	265	280	350	450	520	670	670	740	980	1050
Total Weight (kg)	780	1100	1320	1500	1900	2500	2800	3500	3650	4000	5650	6000

Available Optional Specifications On Demand

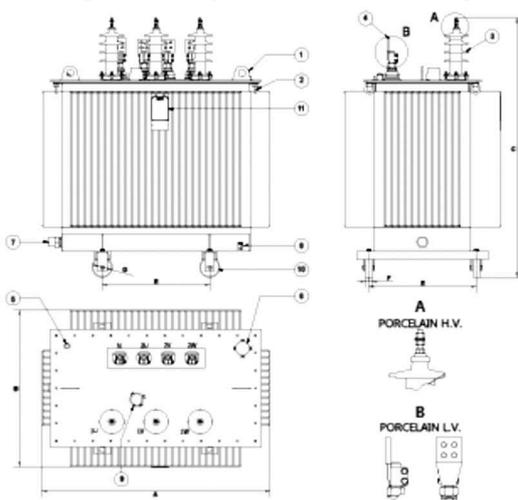
Rated Primary Voltage between 24 and 36kV	30 - 31,5 - 33 - 34,5 or 35kV
Rated Primary Voltage between \leq 24kV	6 - 6,3 - 10 - 10,5 - 10,6 - 11 - 11,75 - 15 - 15,75 - 20 - 20,5 - 21 - 21,5 - 22kV or Dual primary voltage combinations
Rated Secondary Voltage between 1,1kV and 24kV	3 - 3,3 - 6 - 6,3 - 10 - 10,5 - 10,5 - 15 - 15,75 - 20 - 21 or 22kV
Vector Group	YNd5 - YNd11 - Yyn0 - Dd0 - Yyn6 - Dd6 Etc.
HV Tapping Range (off-load)	3 to 7 taps with max. 1500V tapping voltage
Oil / Winding Temperature Rises (K)	45 / 50 - 50 / 55 or 55 / 60K
Altitude Above Sea Level (m)	any level up to 2500m

Standart Accesories	Optional Accesories
DIN 42531 Porcelain H.V. Bushings	EN 50180 Porcelain H.V. Bushings
EN 50385 Porcelain L.V. Bushings	EN 50180 Inner Cone Plug-in H.V. Bushings
Off- Circuit Tap changer	Pfisterer Type Plug in H.V. Bushings
Pressure relief valve	Pfisterer Type in L.V. Bushings
Oil level indicator	Multi Functional Protection Relay \geq 800kVA
Dial Thermometer up to 160kVA	Bi-directional wheels
Double Contact Thermometer above 160kVA	
Oil filling and drain valves	

Tolerances On Losses	Load Loss	No-Load Loss
Transformers with single primary with $U_m \leq 24kV$	+0%	+0%
Transformers with single primary with $U_m = 36kV$	+10%	+15%
Transformers with dual primary with $U_m \leq 24kV$	+10%	+15%

NOTE: RED ELECTRIC follows a policy of continuous product development and reserves the right to modify specifications and technical characteristics without prior notice. This technical data sheet is provided for information purposes only and does not constitute any commitment. For further details, please contact RED ELECTRIC.

With Porcelain Bushings



Pos.	Description
1	Lifting lugs
2	Pull eyebolts
3	H.V. bushings
4	L.V. bushings
5	Thermometer sheath
6	Filling device
7	Oil drain valve
8	Earthings M12
9	Tap changer
10	Orientable wheels 90°
11	Rating plate

With Plug-in or Busbar Bushings

