

# Olie Transformere ED Step 2

<b>Losses Ao-10% Ak</b>	<b>Minera ONAN transformers</b>													
<b>Standard : EN 50708 July 2015 - EcoDesign</b>														
<b>12kV (75/28) HV insulation - 1,1 kV ( 400V) LV insulation</b>														

Serie :	A class - Temperature rise 65 / 60 K													
Rated power	kVA	50	100	160	200	250	400	630	800	1000	1250	1600	2000	2500
<b>Manufacturing cycle</b>		NO4/NCC	NO4/NCC	NO4/NCC	NO4/NCC	NO4/NCC	NO4/NCC	NO4/NCC	NO4/NCC	NO4/NCC	NO4/NCC	NO4/NCC	NO4/NCC	NO4/NCC
<b>Installation</b>		outdoor	outdoor	outdoor	outdoor	outdoor	outdoor	outdoor	outdoor	outdoor	outdoor	outdoor	outdoor	outdoor
<b>Oil type</b>		mineral	mineral	mineral	mineral	mineral	mineral	mineral	mineral	mineral	mineral	mineral	mineral	mineral
<b>Type</b>		uninhibited	uninhibited	uninhibited	uninhibited	uninhibited	uninhibited	uninhibited	uninhibited	uninhibited	uninhibited	uninhibited	uninhibited	uninhibited
<b>Underbase</b>		SD	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD
<b>Nominal Frequency</b>	Hz	50	50	50	50	50	50	50	50	50	50	50	50	50
<b>Primary Voltage</b>	V	10500	10500	10500	10500	10500	10500	10500	10500	10500	10500	10500	10500	10500
<b>Insulation Level</b>	kV	12	12	12	12	12	12	12	12	12	12	12	12	12
<b>Secondary Voltage (at no-load)</b>	V	420	420	420	420	420	420	420	420	420	420	420	420	420
<b>HV Tappings</b>	%	+2x2,5	+2x2,5	+2x2,5	+2x2,5	+2x2,5	+2x2,5	+2x2,5	+2x2,5	+2x2,5	+2x2,5	+2x2,5	+2x2,5	+2x2,5
<b>Vector Group</b>		Dyn5	Dyn5	Dyn5	Dyn5	Dyn5	Dyn5	Dyn5	Dyn5	Dyn5	Dyn5	Dyn5	Dyn5	Dyn5
<b>No Load Losses</b>	W	81	130	189	225	270	387	540	585	693	855	1080	1305	1575
<b>Load Losses at 75°C</b>	W	750	1250	1750	2017	2350	3250	4600	6000	7600	9500	12000	15000	18500
<b>Impedance Voltage</b>	%	4	4	4	4	4	4	4	6	6	6	6	6	6
<b>HV Bushings Type</b>		DT 10/30	DT 10/30	DT 10/30	DT 10/30	DT 10/30	DT 10/30	DT 10/60	DT 10/60	DT 10/60	DT 10/250	DT 10/250	DT 10/250	DT 10/250
<b>LV Bushings Type</b>		DT 250	DT 250	DT 250	DT 250	DT 630	DT 630	DT 1000	DT 2000	DT 2000	DT 2000	DT 3150	DT 3150	DT 3/4500
<b>Max Altitude</b>	m	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
<b>Max Ambient Temperature</b>	°C	40	40	40	40	40	40	40	40	40	40	40	40	40
<b>HV/LV Windings Material</b>		Al/Al	Al/Al	Al/Al	Al/Al	Al/Al	Al/Al	Al/Al	Al/Al	Al/Al	Al/Al	Al/Al	Al/Al	Al/Al
<b>** approximate dimensions (+/-200m) and weight (+/-20%kg) **</b>														
<b>Dimensions</b>	kVA	50	100	160	200	250	400	630	800	1000	1250	1600	2000	2500
<b>Length (A)</b>	mm	880	960	1010	1060	1060	1165	1261	1390	1552	1517	1736	1936	2096
<b>Width (B)</b>	mm	638	711	707	750	750	800	867	955	1114	1102	1104	1234	1244
<b>Height on bushings (C)</b>	mm	1155	1272	1294	1350	1350	1456	1586	1688	1734	1843	1812	2010	2325
<b>Roller distance (D)</b>	mm	520	520	520	520	520	670	670	670	820	820	820	1070	1070
<b>Height on cover (E)</b>	mm	849	966	988	1044	1044	1150	1280	1343	1389	1498	1465	1663	1801
<b>Distance between HV bushings (I)</b>	mm	265	265	265	265	265	265	265	265	265	265	265	265	265
<b>Distance between LV bushings (J)</b>	mm	105	105	105	105	150	150	150	150	150	150	155	155	220
<b>Distance till middle of cover (H)</b>	mm	388	438	437	440	440	482	527	577	557	551	552	617	622
<b>Total weight</b>	kg	580	870	960	1120	1260	1790	2420	3150	3810	4030	4440	5210	6480
<b>Oil weight</b>	kg	126	176	185	253	232	315	419	583	699	778	860	996	1159
<b>Technology</b>	LV	LC	LC	Bande	Bande	Bande	Bande	Bande	Bande	Bande	Bande	Bande	Bande	Bande
	HV	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC
<b>Noise level</b>														
<b>Acoustic power</b>	dB(A)	38	40	43	44	46	49	51	52	54	55	57	59	62