

DISTRIBUTION TRANSFORMERS

# TOTALLY FILLED TRANSFORMERS



400 KVA, 20 KV / 400 V, DYn5

GTU SERIES

ALSTOM

AREVA



ISO 9002 CERTIFICATED FIRM



ACCREDITED BY  
THE DUTCH COUNCIL FOR  
QUALITY ASSURANCE  
Reg. No. 24

DE TECHNISCHE UNIVERSITEIT Eindhoven



REGISTERED  
SUCOFIDO REGISTRASI  
FOR QUALITY ASSURANCE

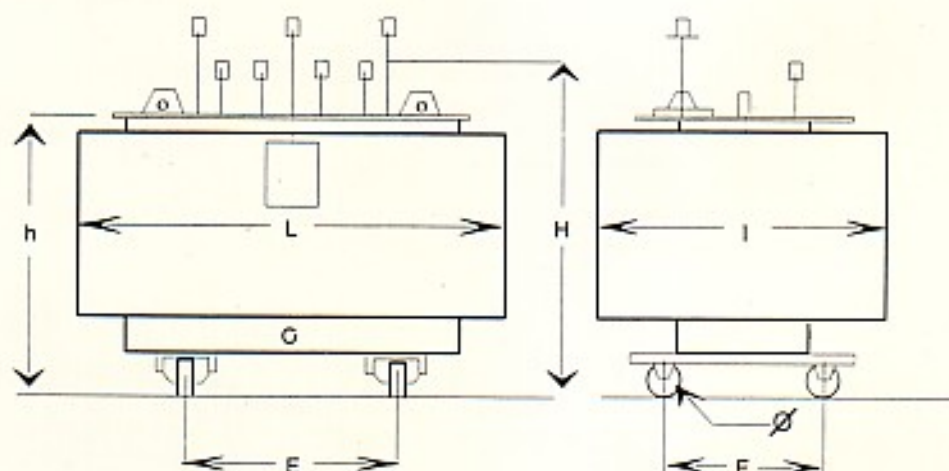
INDONESIA

QUALITY SYSTEM SNI-18-9002-1994

UNINDO

**Electrical characteristics**

Highest System Voltage HV	Rated Power	No-load Losses		Short Circuit Voltage Use <sup>1</sup>	Rated Current		Acoustic Level Acc to NEMA	No-load Current I <sub>0</sub>	voltage drop at full load		Efficiency Cos φ = 1			Efficiency Cos φ = 0.8		
		W	W		A	A			Cos φ = 1	Cos φ = 0.8	Load	Load	Load	Load	Load	Load
		%	%		%	%			%	%	%	%	%	%	%	%
≤ 24 kV	25	115	700	4	38.08	902	48	3.3	2.84	3.99	97.73	97.36	96.84	97.18	97.72	96.08
	50	190	1,100	4	72.17	1,804	48	2.9	2.26	3.77	98.17	97.89	97.48	97.73	97.37	96.66
	100	320	1,750	4	144.34	3,608	51	2.5	1.81	3.57	98.51	98.26	97.97	98.14	97.87	97.48
	160	460	2,350	4	230.94	5,773	55	2.3	1.54	3.43	98.71	98.27	98.27	98.39	98.18	97.55
	200	550	2,850	4	288.68	7,216	55	2.2	1.49	3.41	98.75	98.58	98.33	98.45	98.24	97.92
	250	650	3,250	4	360.84	9,210	55	2.1	1.37	3.33	98.84	98.70	98.46	98.56	98.37	98.09
	315	770	3,900	4	454.66	11,366	56	2	1.31	3.30	98.90	98.76	98.54	98.63	98.45	98.18
	400 (231)	930	4,810	4	699.74	24,993	56	1.9	1.28	3.28	98.94	98.80	98.59	98.68	98.51	98.24
	400	930	4,600	4	577.35	14,433	56	1.9	1.22	3.25	98.97	98.84	98.64	98.72	98.56	98.30
	500 (231)	1,100	5,950	4	1,249.67	21,241	56	1.9	1.25	3.27	98.98	98.83	98.61	98.72	98.54	98.27
	500	1,100	5,500	4	721.68	18,042	56	1.9	1.17	3.22	99.02	98.89	98.70	98.78	98.62	98.38
	630 (231)	1,300	6,950	4	1,574.59	39,364	57	1.8	1.18	3.22	99.04	98.91	98.71	98.81	98.64	98.39
	630	1,300	6,500	4	909.32	22,733	57	1.8	1.11	3.17	99.08	98.86	98.78	98.85	98.71	98.48
	800 (231)	1,650	12,000	4.5	1,999.48	36,354	57	2.5	1.54	3.43	98.89	98.66	98.29	98.48	98.22	98.67
	800	1,650	10,200	4.5	1,154.70	25,660	57	2.5	1.37	3.65	98.89	98.76	98.41	98.58	98.34	98.02
	1,000 (231)	2,300	13,900	5	2,499.35	41,665	58	2.4	1.56	4.49	98.86	98.76	98.41	98.58	98.34	98.02
	1,000	2,300	12,100	5	1,443.37	28,867	58	2.4	1.33	3.93	98.95	98.80	98.58	98.69	98.50	98.23
	1,250	2,700	15,000	5.5	1,804.21	32,804	59	2.2	1.34	4.24	98.98	98.83	98.60	98.73	98.54	98.26
	1,600	3,300	18,100	6	2,309.40	38,490	60	2	1.30	4.52	99.03	98.89	98.68	98.73	98.62	98.36
	2,000	3,900	21,000	7	2,886.75	41,238	61	1.09	1.329	5.11	99.09	98.96	98.77	98.87	98.71	98.47
2,500	4,500	28,000	7	3,608.43	51,549	62	1.8	1.36	5.16	99.09	98.93	98.72	98.86	98.67	98.40	

**DIMENSIONS AND WEIGHTS IN 400 V**


Highest System Voltage HV	Rated Power	Dimensions (mm)					Weights (Kg)	
		H	h	L	I	Ø	Total Inc Oil	Oil
kV	kVA							
	25	1,080	695	720	490	80	310	80
	50	1,100	715	800	485	80	400	100
	100	1,150	765	890	645	80	605	140
	160	1,300	915	1,180	660	125	700	140
	200	1,350	965	1,180	660	125	810	160
	250	1,450	1,062	1,285	700	125	950	215
	315	1,500	1,115	1,390	800	125	1,095	240
≤ 24 kV	400	1,560	1,175	1,350	720	125	1,290	295
	500	1,580	1,195	1,525	855	125	1,550	350
	630	1,590	1,195	1,650	960	125	1,700	370
	800	1,780	1,395	1,760	1,040	125	2,150	490
	1,000	1,715	1,330	2,085	1,315	125	2,850	585
	1,250	1,825	1,440	2,140	1,335	125	3,200	645
	1,600	1,840	1,455	2,220	1,360	125	3,750	850
	2,000	1,855	1,480	2,360	1,430	125	4,500	1,000
	2,500	1,940	1,555	2,470	1,480	125	5,350	1,250

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## REFERENCES

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UNINDO is the main Indonesian supplier of transformers to PLN (Indonesian State Electric Company) and as subcontractor, UNINDO has delivered 20 KV, 70 KV and 150 KV transformer of various capacities to world famous companies such as :

- Aerimpianti
- Asea Brown Boveri
- New Sulzer France
- Cogalex Alstom
- Energoinvest
- Hawker Siddeley
- Hyundai
- Kanematsu Goshu
- Pauwels
- Siemens
- Sumitomo
- Toyomenka

as well as export orders to other ASEAN countries .