

DATSAN
SPECIAL TRANSFORMERS



ANSI PAD MOUNTED TRANSFORMER



Datsan Special Transformer pad mounted transformer is a tamper-proof distribution transformer with lockable front doors that is installed on a concrete pad. Typically used in commercial and residential areas to connect to underground electric power lines safely and securely, padmount transformers do not require a fenced-in enclosure. This makes them ideal for public spaces like shopping malls, restaurants and other areas that see significant foot traffic, where any electrical equipment needs to be kept secure. They are frequently installed outdoors in all-weather conditions.



FEATURES AND OPTIONS

Datsan Special Transformers offers a complete line of liquid-filled ThreePhase Pad-Mounted distribution transformers that meet applicable ANSI®/IEEE® standards.

With high voltages up to 34.5 kV and ratings up to 5,000 kVA (ONAN), Datsan Special Transformers compartmental-type Three Phase Pad-Mounted Commercial Transformers are designed for outdoor installation on a concrete pad and provide underground power distribution to commercial, industrial and institutional loads.

High-grade materials, combined with sophisticated engineering design systems, are key elements of a transformer that will deliver years of highly reliable service.

Standard Features

- ⚙ 60 Hz operation.
- ⚙ 65°C average winding rise.
- ⚙ Radial & loop feed arrangements.
- ⚙ Dead and live front type of HV terminals.
- ⚙ HV BIL 45 – 150 kV (Dead Front) 200 kV (Live Front).
- ⚙ LV BIL 30 – 60 kV.
- ⚙ Three-point latching of low-voltage door.
- ⚙ High-voltage door, which can be opened only after the low-voltage door is opened.
- ⚙ Transformer tank welded from cover to base.
- ⚙ Permanent nameplate.
- ⚙ One-inch NPT pipe cap filling provision.
- ⚙ ANSI tank ground pads.
- ⚙ One-inch drain valve and sampler.
- ⚙ Automatic pressure-relief valve (35 SCFM).
- ⚙ Tap changer with (2) 2.5% full capacity taps above and below nominal.
- ⚙ One 10"x18" (or 14"x25") hand hole in transformer tank cover.
- ⚙ Painted olive-green color (Munsell 7GY 3.29/1.5).
- ⚙ Designed, manufactured and tested in accordance with the latest ANSI standards.

Optional Features & Accessories

- ▶ Broad selection of design efficiencies to meet specific customer applications and the new DOE efficiency requirements.
- ▶ 50 Hz.
- ▶ Type II insulating mineral oil.
- ▶ High-fire point fluid, such as silicone, hydrocarbon or other types of vegetable fluids.
- ▶ 50°, 55°, 60° or 65°C average winding rise.
- ▶ Copper and aluminum windings available.
- ▶ Rigid steel partition.
- ▶ Dual high-voltage ratings.
- ▶ Internal expulsion fuses.
- ▶ Current limiting fuses.
- ▶ Internal oil-immersed partial range current-limiting fuses.
- ▶ Bayonet fuse holders with and without flapper.
- ▶ Non-loadbreak and loadbreak dry-well fuseholders.
- ▶ Internal oil switch (radial or loop).
- ▶ Under oil internal arresters.
- ▶ Low-voltage molded-case circuit breaker.
- ▶ Seismic Zone III and IV.
- ▶ Stainless steel tank and cabinet construction.
- ▶ Special colors.
- ▶ Bolt-on cover.
- ▶ Compliance with Canadian Standards (CSA).

Tests

Each transformer receives all standard commercial tests in accordance with ANSI C57.12.90 (latest revision), with test reports available by serial number of the transformer.

- ▶ Resistance tests of all windings
- ▶ Ratio tests on the rated voltage and all tap connections
- ▶ Polarity and phase relation tests at rated voltage
- ▶ No load loss at rated voltage
- ▶ Exciting current at rated voltage
- ▶ Impedance and load losses
- ▶ Applied voltage test
- ▶ Induced voltage test
- ▶ Full-wave impulse test
- ▶ Mechanical leak test

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THREE-PHASE PAD MOUNTED TRANSFORMERS

They are transformers for indoor or outdoor installation of dead front, which have connecting elements, protection and incorporated maneuver. They are used in cases where for security, space or aesthetic need to be fed with dry shielded underground cable by means of lift and they are installed on a concrete slab base or pedestal named.

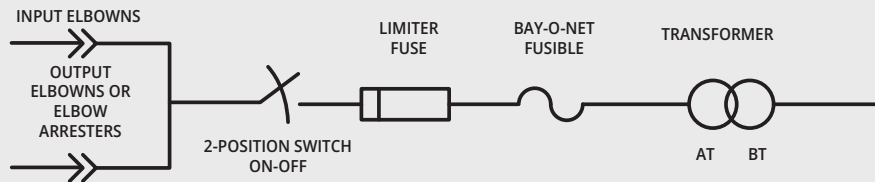
They have elements of a substation to protect the equipment:

- Failures in the secondary network and external overload by fuses bayonet type removable interchangeable.
- Failures primary overvoltage surge through elbow type.
- In addition, the transformer protects the primary network of high current faults in the windings by limiting fuses or backup link isolation.

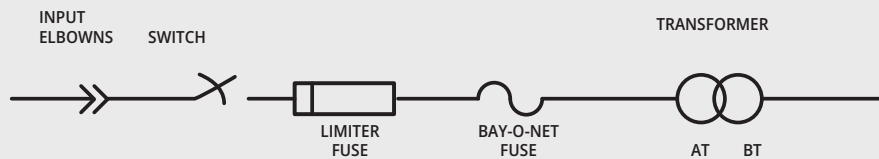


Configuration

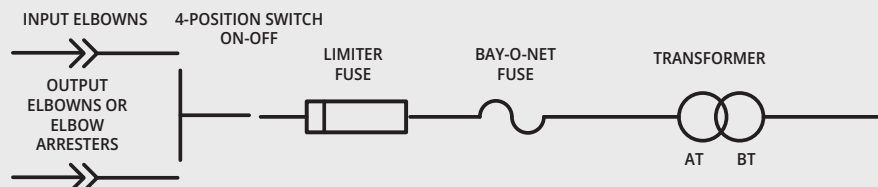
RADIAL MODIFIED PAD MOUNTED TRANSFORMER



RADIAL PAD MOUNTED TRANSFORMER



LOOP TYPE PAD MOUNTED TRANSFORMER



Standard Voltages

Standard Primary	
Voltage Rating	Minimum BIL (kV)
2400	45
4160	60
4800	60
7200	75
7620	75
12000	95
12470	95
13200	95
13800	95
16340	95

Standard Ratings

Standard kVA Ratings		
30	250	750
45	300	1000
75	400	1500
112.5	500	2000
150	630	2500

Grounded Wye	
4160GrdY/2400	65
12470GrdY/7200	95
13200GrdY/7620	95
13800GrdY/7970	95
22860GrdY/13200	125
23900GrdY/13800	125
24940GrdY/14400	125
34500GrdY/19920	150

For kVAs not listed, contact factory.

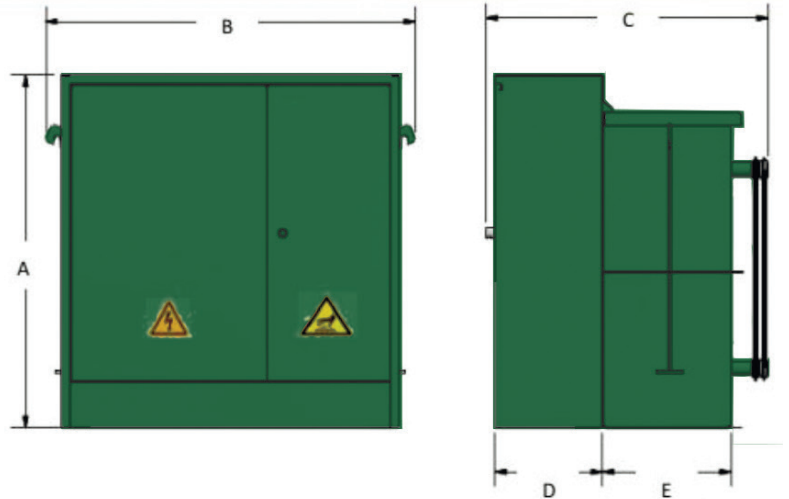
Dimensions and weights are approximate and subject to change without notice and should not be used for construction purposes.



THREE-PHASE PAD MOUNTED TRANSFORMERS

These units are available in powers ratings of up to 3000 KVA. Voltage supply ratings of up to 34.5 GRDY / 19.92 KV and 150 KV maximum BIL.

NOTE: The dimensions are approximate, at the time of purchasing the equipment please request an update on the dimensions, as these may have varied.



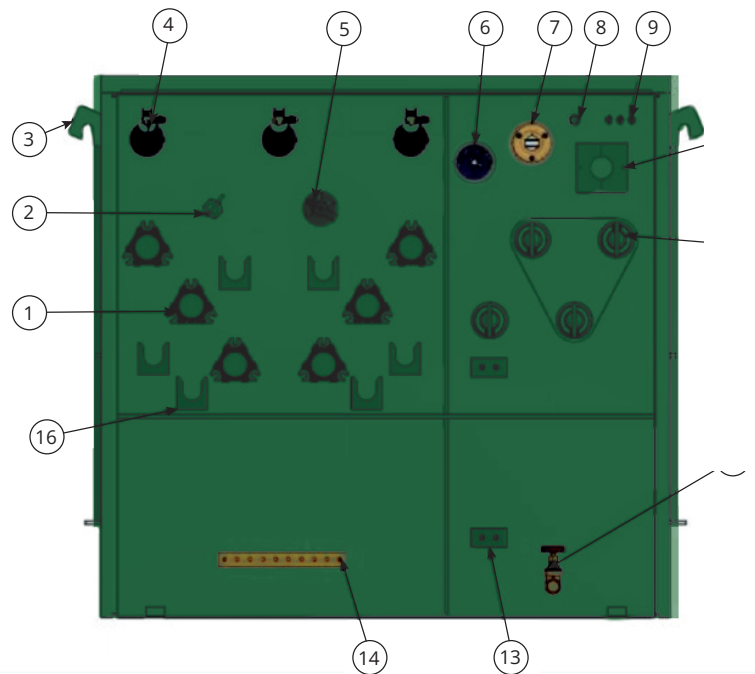
THREE-PHASE PAD MOUNTED TRANSFORMERS OVERALL TYPICAL DIMENSIONS FOR REFERENCE

kVA	Approximate Oil Volume (Lt)	Approximate Weight (Kg)	Dimensions (mm)				
			A	B	C	D	E
30	275	540	1050	1310	970	500	470
45	320	660	1070	1340	1000	500	500
75	340	770	1100	1340	1000	500	500
112.5	415	950	1100	1340	1000	500	500
150	440	1010	1145	1340	1195	500	695
250	635	1350	1280	1400	1330	500	830
300	680	1550	1320	1400	1395	500	895
400	695	1850	1390	1400	1340	500	840
500	810	2050	1440	1540	1415	500	915
630	995	2550	1530	1620	1480	500	980
750	1100	2900	1660	1640	1450	500	950
1000	1445	3630	1680	1790	1560	500	1060
1500	1850	4350	1730	2030	1720	550	1170
2000	2300	5240	1800	2300	1865	570	1295
2500	2950	6230	2080	2550	2030	600	1430

POWERING THE WORLD



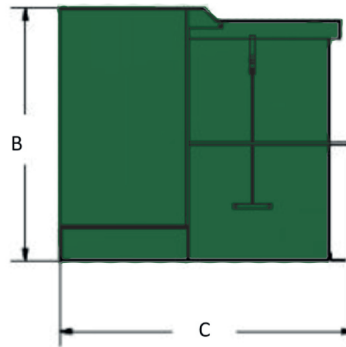
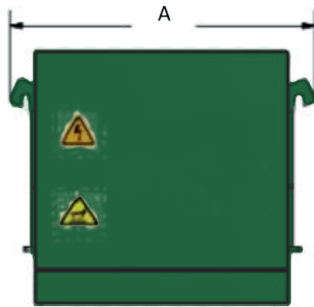
ITEM	QTY	PARTS
1	6	HV BUSHING
2	1	LOADBREAK SWITCH
3	2 o 4	LIFTING LUGS
4	3	BAY-O-NET FUSING
5	1	TAP CHANGER
6	1	TERMOMETER*
7	1	LIQUID LEVEL*
8	1	OIL FILLING
9	1	PRESSURE RELIEF DEVICE
10	1	NAMEPLATE
11	4	LV BUSHING
12	1	DRAIN VALVE
13	2	LV GROUND
14	2	HV GROUND
15	1	HANDLE
16	6	PARKING STAND





SINGLE-PHASE PAD MOUNTED TRANSFORMER

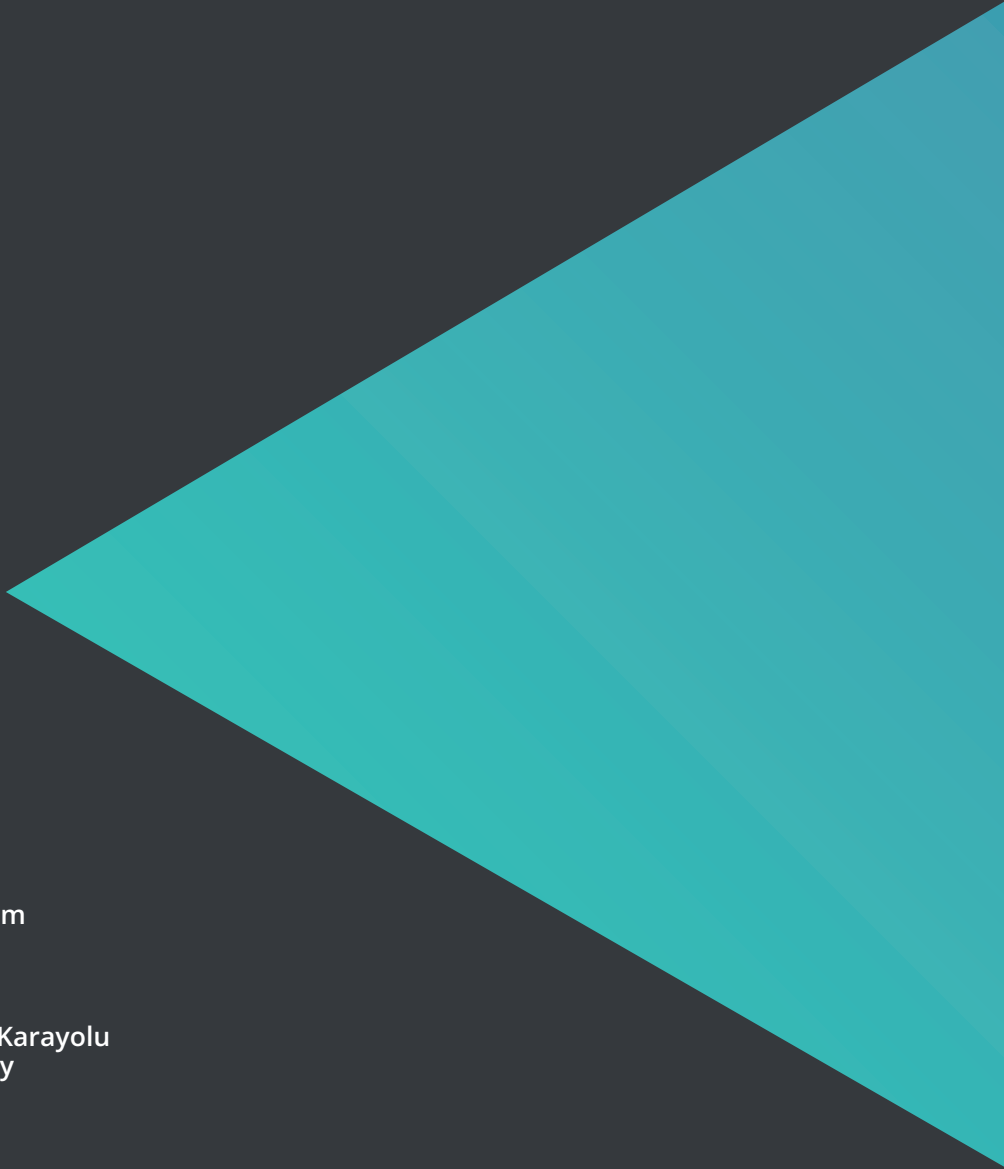
These units are available in powers ranging from 15 KVA up to 500 KVA, and voltage rating up to GRDY 34.5/19.92 kV and up to 150 kV BIL.



ONE-PHASE PAD MOUNTED TRANSFORMERS OVERALL TYPICAL DIMENSIONS FOR REFERENCE

kVA	Approximate Oil Volume (Lt)	Approximate Weight (Kg)	Dimensions (mm)		
			A	B	C
25	162	375	946	915	863
37,5	187	430	946	915	920
50	214	441	986	915	945
75	252	629	986	935	1010
100	262	701	986	935	1031
167	387	935	1046	1155	1012

NOTE: The above dimensions are approximate, at the time of purchasing the equipment please request an update on the dimensions, as these may have varied.



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