

Medium Voltage Indoor Voltage Transformer Model PT7-1-150 & PT7-1-200 ANSI Groups 4A & 4B

REGULATORY AGENCY APPROVALS



Manufactured to meet the requirements of ANSI/IEEE C57.13.

150 kV BIL



ONE BUSHING

ACCURACY CLASS:

0.3 WXYZ 1.2ZZ at 100% rated voltage with 120V based ANSI burden.

0.3 WXYZ, 1.2Z at 58% rated voltage with 69.3V ANSI burden.

FREQUENCY:

60 Hz.

MAXIMUM SYSTEM VOLTAGE:

Model PT7-1-150
36.5kV, BIL 150kV.

Model PT7-1-200
36.5kV, BIL 200kV.

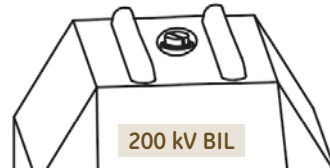
THERMAL RATING:

1500 VA at 30°C amb.

1000 VA at 55°C amb.

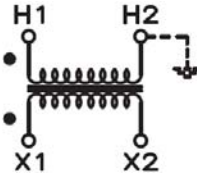
WEIGHT:

Approximate weight 140 lbs.



Terminal Designed to Accept
Primary Terminal Lead Assembly
0843A09154 (See Following Page)

** Consult factory for 200kV BIL catalog numbers.

	GROUP	PRIMARY VOLTAGE (a)	RATIO	SECONDARY VOLTAGE	** 150kV BIL CATALOG NUMBERS	R _{FR} (b)
	4A	15240	127:1	120	PT7-1-150-SD01967	80 ohms
	4A	15600	130:1	120	PT7-1-150-SD03259	80 ohms
	4A	*16800	140:1	120	PT7-1-150-SD02381	80 ohms
	4A	19920	166:1	120	PT7-1-150-SD01620	80 ohms
	4A	*20125	175:1	115	PT7-1-150-2012A	80 ohms
	4B	24000	200:1	120	PT7-1-150-SD03289	50 ohms
	4B	26400	220:1	120	PT7-1-150-SD02085	50 ohms
	4B	27000	225:1	120	PT7-1-150-SD03158	50 ohms
	4B	27600	240:1	115	PT7-1-150-SD03449	50 ohms
	4B	34500	300:1	115	PT7-1-150-SD01617	50 ohms

NOTE: All primary voltages marked with an asterisk (*) are approved for revenue metering in Canada by industry Canada, Approval No. AE-0677 Rev.1

Models PT7-1-150 & PT7-1-200 ANSI Groups 4A & 4B

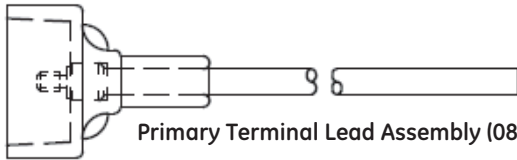
(a) Also available are other ratios and frequencies, double secondaries and units meeting IEC 44-2 rated voltage factors of 1.50 or 1.90.

(b) Voltage transformer connected line-to-ground cannot be considered to be grounding transformers and must not be operated with the secondaries in closed delta because excessive currents may flow in the delta. Transformers may be connected line-to-neutral on a system rated 25,000 volts ground wye.

(c) See page 32, item 1 for ferroresonance considerations.

Note: It is recommended that the system line-to-line voltage not exceed transformer maximum system voltage level.

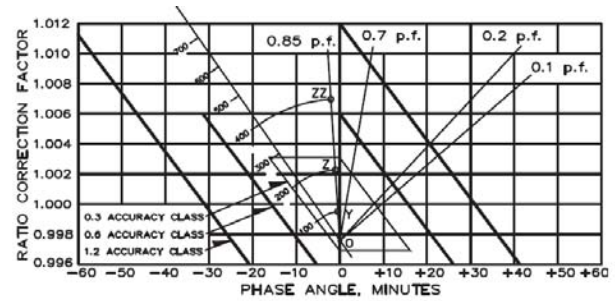
- Primary terminals for 150kV BIL units are 3/8-16 brass screws with one flatwasher and lockwasher.
- Secondary terminals are 1/4-20 brass screws with one flatwasher and lockwasher.
- The core and coil assembly is vacuum encapsulated in polyurethane resin.
- A primary fuse is not supplied, but is recommended. Use a 34.5 kV, 0.5E rated fuse.
- A test card is provided with each unit.



Primary Terminal Lead Assembly (0843A09154)

- Supplied with 200 kV BIL units only (Not available for 150 kV BIL units)
- 10-32 threaded connector, insulating boot, and lead wire included
- Lead wire is No. 10 AWG rated 600 volt only
- Lead clearances shown below for PT7-1-200 must be maintained
- 36 inches long unless specified otherwise

CIRCLE DIAGRAM



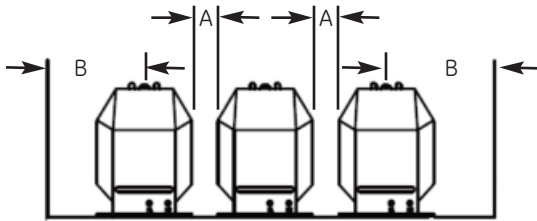
The circle diagram can be used to predict the performance of a transformer for various loads and power factors. A convenient scale of volt-ampere is shown on the unity power factor line (u.p.f.) and commences at the zero or no-load locus. To use the diagram, measure the known V.A. and scribe an arc about the "Zero" locus of a length that contains the angle of the burden power factor. The point at which the arc terminates is the error locus in phase angle minutes and ratio correction factor.

RECOMMENDED MINIMUM SPACINGS

PT7-1-150 (Customer supplied leads must be directed away from the transformer)

A = Unit to Unit = 1.75" minimum

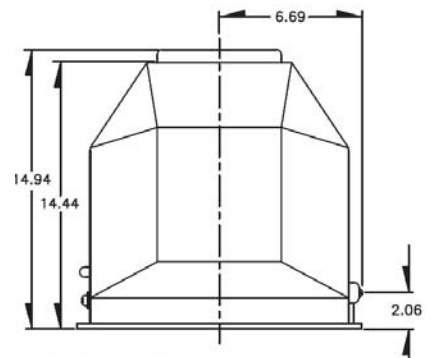
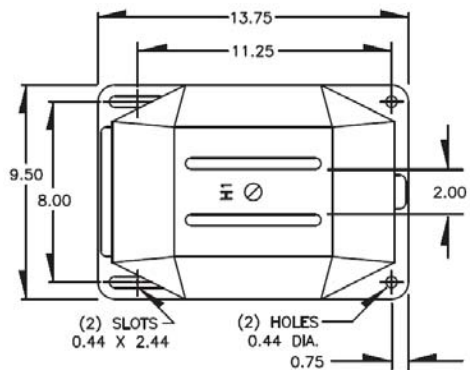
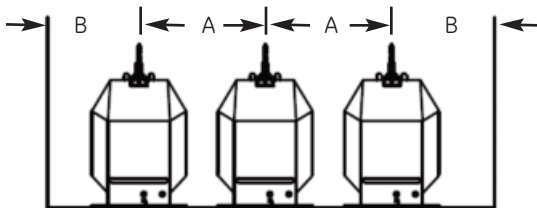
B = HV to Ground in Air = 11.50" minimum



PT7-1-200 (Leads must be directed away from the transformer)

A = Lead to Lead = 14.00" minimum

B = Lead to Ground in Air = 14.00" minimum



Recommended spacings are for guidance only. User needs to select appropriate values to assure performance for high potential testing, impulse testing, high humidity, partial discharge, high altitude, specific configurations and other considerations.