

Indoor Voltage Transformer

Models PTW4-1-75 PTW4-2-75 rev 11112025

CERTIFICATIONS:





QUALITY MANAGEMENT

ACCURACY CLASS: 0.3 WXMY, 1.2Z at 100% rated voltage with 120V based ANSI burden. 0.3 WXMY, 1.2Z at 58% rated voltage with 69.3V based ANSI burden.

FREQUENCY:

MAXIMUM SYSTEM VOLTAGE:

12 kV, BIL 75kV full wave

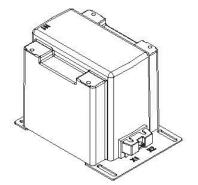
THERMAL RATING:

1500 va AT 30°c amb. 1000 VA at 55°C. amb.

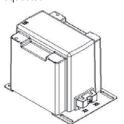
APPROXIMATE WEIGHT:

85 lbs., unfused

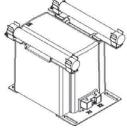
- Primary terminals that are unfused are 1/4-20 brass screws with one lockwasher and flat washer.
- Primary terminals that are fused are 1/4-20 brass screws with one flat washer, lockwasher and two nuts.
- Secondary terminals are No. 10-32 brass screws with one flat washer and lockwasher.
- The transformers are tested for partial discharge to Canadian Standards CAN 3-C13-M83. This test can also be carried out to IEC requirements if requested.



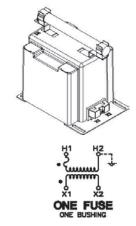
- The core and coil assembly is vacuum encapsulated in polyurethane resin.
- Thermal burden rating is for 120 volt secondaries
- Plated steel mounting base.
- Fuses have 1.63" Dia Caps and 11.50" clip centers.
- Switchgear style is similar to fused style. No fuse or fuse clip is provided, but inserts for fuse clips are supplied.
- A test cord is provided with each unit.











ONE BUSHING(b)				CATALOG NUMBERS			
GROUP	PRIMARY	RATIO	SECONDARY	R FR (c)	FUSES	FUSE CLIPS ONLY	SWITCHGEAR
	VOLTAGE		VOLTAGE				STYLE
4A	4200	35:1	120	65	PTW4-1-75-422F	PTW4-1-75-422C	PTW4-1-75-422S
4A	4800	40:1	120	65	PTW4-1-75-482F	PTW4-1-75-482C	PTW4-1-75-482S
4B	6600	60:1	110-50Hz	65	PTW4-1-75-662F	PTW4-1-75-662C	PTW4-1-75-662S
4B	7200	60:1	120	65	PTW4-1-75-722F	PTW4-1-75-722C	PTW4-1-75-722S
4B	8400	70:1	120	65	PTW4-1-75-842F	PTW4-1-75-842C	PTW4-1-75-842S
4B	11000	100:1	110-50Hz	65	PTW4-1-75-113F	PTW4-1-75-113C	PTW4-1-75-113S
4B	12000	100:1	120	65	PTW4-1-75-123F	PTW4-1-75-123C	PTW4-1-75-123S

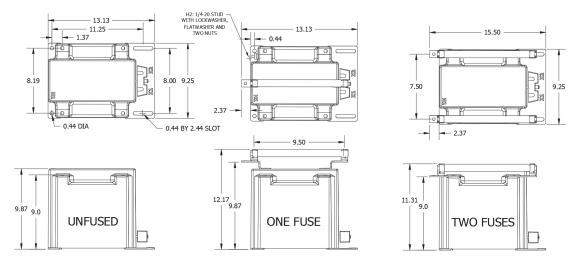
TWO BUSHING(a)				CATALOG				
GROUP	PRIMARY VOLTAGE	RATIO	SECONDARY VOLTAGE	UNFUSED	FUSES	FUSE CLIPS ONLY	SWITCHGEAR STYLE	
1	4200	35:1	120	PTW4-2-75-422	PTW4-2-75-422FF	PTW4-2-75-422CC	PTW4-2-75-422SS	
1	4800	40:1	120	PTW4-2-75-48	PTW4-2-75-482FF	PTW4-2-75-482CC	PTW4-2-75-482SS	
2	6600	60:1	110-50Hz	PTW4-2-75-662	PTW4-2-75-662FF	PTW4-2-75-662CC	PTW4-2-75-662SS	
2	7200	60:1	120	PTW4-2-75-72:	PTW4-2-75-722FF	PTW4-2-75-722CC	PTW4-2-75-722SS	
2	8400	70:1	120	PTW4-2-75-842	PTW4-2-75-842FF	PTW4-2-75-842CC	PTW4-2-75-842SS	
2	11000	100:1	110-50Hz	PTW4-2-75-11:	PTW4-2-75-113FF	PTW4-2-75-113CC	PTW4-2-75-113SS	
2	12000	100:1	120	PTW4-2-75-123	PTW4-2-75-123FF	PTW4-2-75-123CC	PTW4-2-75-123SS	



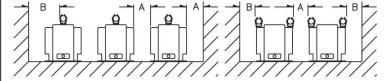
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- (a) Two fuse transformers should not be used for Y connections. It is preferred practice to connect one lead from each voltage transformer directly to the neutral terminal using a fuse in the line side of the primary only. By using this connection, a transformer can never be made "live" from the line side by reason of a blown fuse in the neutral side. For continuous operation, the transformer primary voltage should not exceed 110% of rated value.
- (b) Voltage transformers 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.
- (c) Possibility of ferroresonance should be considered.



Recommended spacing is for guidance only. User needs to set appropriate values to assure performance for: high potential test; impulse test; high humidity; partial discharge, high altitude; and other considerations like configuration.



FUSE FOR MODEL PTW4 TRANSFORMER	RATING VOLTS	INTERRUPTING AMPERES (SYM)	SUGGESTED RATING * CONTINUOUS AMPERES	CAP DIA. INCHES	LENGTH INCHES	CLIP CENTERS INCHES
4200:120V	12 kV	50,000	2.0E	0.812	10	9.5
4800:120V	12 kV	50,000	2.0E	0.812	10	9.5
6600:110V	12 kV	50,000	1.0E	0.812	10	9.5
7200:120V	12 kV	50,000	1.0E	0.812	10	9.5
8400:120V	12 kV	50,000	1.0E	0.812	10	9.5
11000:110V	12 kV	50,000	0.5E	0.812	10	9.5
12000:120V	12 kV	50,000	0.5E	0.812	10	9.5

The circle diagram can be used to predict the performance of a transformer for various loads and power factors. A convenient scale of volt-amperes 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.

