



# Indoor Voltage Transformer

## Model JVM-4C/5C, 75 - 110 kV BIL, 4200 - 14400 V



**Application**

Designed for indoor service; suitable for operating meters, instruments, relays and control devices.

**Regulatory Agency Approvals**

UL Recognized .....File E145172

**Thermal Rating (Volt-Amperes)**

55 °C Rise above 30 °C Ambient .....1500VA  
 30 °C Rise above 55 °C Ambient .....1000VA

**Weight**

(approximate)  
 Unfused .....85 lbs  
 Fused .....88 lbs

**Reference Drawings**

Outline: No Fuse .....0162C34325  
 Single Fuse .....0162C34208  
 Two Fuse .....0162C34329

**Frequency**

60 Hz

**DATA TABLE**

Circuit Line to Line Voltage	Permissible Transformer Primary Connection	Transformer Rating		ANSI Accuracy Classification, 60 HZ (See Accuracy Specifications Overleaf)			BIL	Catalog Number Supplied with Fuses	Catalog Number Supplied without Fuses	Primary Fuse Rating	
		Primary Voltage (1)	Ratio	Burden Per ANSI		Operated at 58% Rated Voltage, but Burden Impedance as at Rated Voltage (2)				Amp	Volts
				Operated at Rated Voltage	Operated at 58% of Rated Voltage						
<b>JVM-4C - Unfused</b>											
4200	Δ or Y	4200	35:1	Accuracy 1	Accuracy 2	Accuracy 3	75 kV	---	764X120001	---	---
7200	Y only	4200(4)	35:1	Accuracy 1	---	---	75 kV	764X120023	764X120025	2 A	7200
4800	Δ or Y	4800	40:1	Accuracy 1	Accuracy 2	Accuracy 3	75 kV	---	764X120002	---	---
8320	Y only	4800	40:1	---	Accuracy 2	Accuracy 3	75 kV	764X120022	764X120026	2 A	4800
7200	Δ or Y	7200	60:1	Accuracy 1	Accuracy 2	Accuracy 3	75 kV	---	764X120003	---	---
<b>JVM-4C - With One Primary Fuse</b>											
4200	Y only	4200(4)	35:1	---	Accuracy 2	Accuracy 3	75 kV	764X120021	---	2 A	4800
7200	Y only	4200(4)	35:1	Accuracy 1	---	---	75 kV	764X120023	764X120025	2 A	7200
4800	Y only	4800	40:1	---	Accuracy 2	Accuracy 3	75 kV	764X120022	764X120026	2 A	4800
7200	Y only	7200	60:1	---	Accuracy 2	Accuracy 3	75 kV	764X120024	764X120028	1 A	7200
<b>JVM-4C - With Two Primary Fuses</b>											
4200	Δ or Y (3)	4200(4)	35:1	Accuracy 1	Accuracy 2	Accuracy 3	75 kV	764X120012	---	2 A	4800
4200	Y only (3)	4200(4)	35:1	Accuracy 1	---	---	75 kV	764X120015	764X120018	2 A	7200
4800	Δ or Y (3)	4800	40:1	Accuracy 1	Accuracy 2	Accuracy 3	75 kV	764X120013	764X120019	2 A	4800
7200	Δ or Y (3)	7200	60:1	Accuracy 1	Accuracy 2	Accuracy 3	75 kV	764X120016	764X120020	1 A	7200
<b>JVM-5C - Unfused</b>											
7200	Δ or Y	7200	60:1	Accuracy 1	Accuracy 2	Accuracy 3	110 kV	---	765X121001	---	---
12470	Y only	7200(4)	60:1	Accuracy 1	---	---	110 kV	765X121048	765X121056	1 A	14400
8400	Δ or Y	8400	70:1	Accuracy 1	Accuracy 2	Accuracy 3	110 kV	---	765X121002	---	---
14400	Y only	8400	70:1	Accuracy 1	---	---	110 kV	765X121049	765X121057	1 A	14400
12000	Δ or Y	12000	100:1	Accuracy 1	Accuracy 2	Accuracy 3	110 kV	---	765X121003	---	---
14400	Δ or Y	14400	120:1	Accuracy 1	Accuracy 2	Accuracy 3	110 kV	---	765X121004	---	---
<b>JVM-5C - With One Primary Fuse</b>											
7200	Y only	7200(4)	60:1	---	Accuracy 2	Accuracy 3	110 kV	765X121053	765X121061	1 A	7200
12470	Y only	7200(4)	60:1	Accuracy 1	---	---	110 kV	765X121048	765X121056	1 A	14400
14400	Y only	8400	70:1	Accuracy 1	---	---	110 kV	765X121049	765X121057	1 A	14400
12000	Y only	12000	100:1	---	Accuracy 2	Accuracy 3	110 kV	765X121050	765X121058	0.5 A	14400
14400	Y only	14400	120:1	---	Accuracy 2	Accuracy 3	110 kV	765X121051	765X121059	0.5 A	14400
<b>JVM-5C - With Two Primary Fuses</b>											
7200	Δ or Y (3)	7200(4)	60:1	Accuracy 1	Accuracy 2	Accuracy 3	110 kV	765X121031	765X121047	1 A	7200
12470	Y only (3)	7200(4)	60:1	Accuracy 1	---	---	110 kV	765X121027	765X121043	1 A	14400
8400	Δ or Y	8400	70:1	Accuracy 1	Accuracy 2	Accuracy 3	110 kV	765X121028	765X121044	1 A	14400
14400	Y only (3)	8400	70:1	Accuracy 1	---	---	110 kV	765X121028	765X121044	1 A	14400
12000	Δ or Y (3)	12000	100:1	Accuracy 1	Accuracy 2	Accuracy 3	110 kV	765X121029	765X121045	0.5 A	14400
14400	Δ or Y (3)	14400	120:1	Accuracy 1	Accuracy 2	Accuracy 3	110 kV	765X121030	765X121046	0.5 A	14400

Accuracy Specifications		
Accuracy 1	Accuracy 2	Accuracy 3
Operated at Rated Voltage	Operated at 58% of Rated Voltage	Operated at 58% of Rated Voltage With Burden Impedance as at Rated Voltage (2)
0.3 W, X, M, Y, Z; 1.2 ZZ	0.3 W, X, M, Y; 1.2 Z	0.3 W', X', M', Y', Z'

**Notes:**

- (1) For continuous operation, the transformer's rated primary voltage should not be exceeded by more than 10%. Under emergency conditions, overvoltage must be limited to 1.25 times the transformer primary voltage rating.
- (2) Note that these burdens do not correspond to standard ANSI definitions.
- (3) For Y connections, it is preferred practice to connect one lead from each voltage transformer directly to the grounded neutral, using a fuse only in the line side of the primary. By this connection a transformer can never be "alive" from the line side by reason of a blown fuse on the grounded side.
- (4) Although these pairs of transformers have the same voltage rating and turns ratio and are otherwise identical, they are supplied with fuses having different voltage ratings to suit the operating voltage of the application. This difference necessitates a separate catalog number to differentiate them.

**Construction and Insulation**

The core and coil are placed in a mold and vacuum encapsulated in a polyurethane resin.

**Core**

The cores are made from high quality grain oriented silicon steel, which is annealed under rigidly controlled factory conditions.

**Primary Terminals**

Primary terminals on unfused units are 1/4"-20 brass screws with one flat-washer and one lock-washer. On fused units, primary terminals are 1/4"-20 brass studs with one flat-washer, one lock-washer and two nuts.

**Secondary Terminals**

Secondary terminals are compression type with a 0.275" cross-hole and a 1/4"-28 clamp screw. The terminal cover is made of transparent plastic. Provision is made for sealing the cover.

**Polarity**

The primary and secondary polarity markers H1, X1, are molded in the insulation. They are thus permanent and integral parts of the transformer and cannot be readily obliterated. They are also marked with white paint.

**Fuses**

Fuses are current limiting, "E" rated with 1.625" diameter caps. Clip centers are 11.50" for 14.4 kV fuses, 8.25" for 7.2 kV fuses, and 5.88" for 4.8 kV fuse.

**Nameplate**

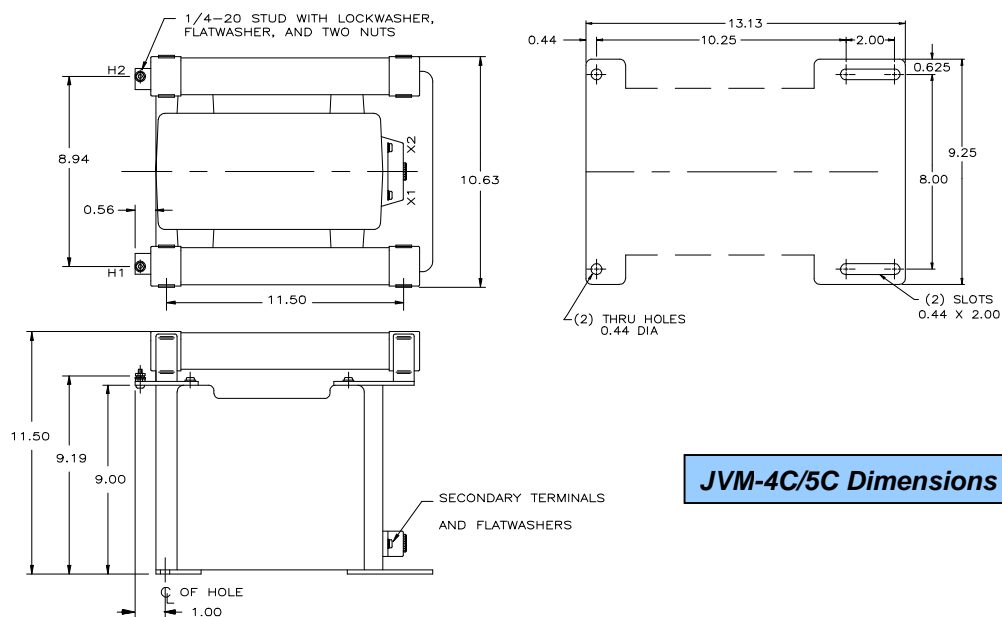
The nameplate is laser engraved aluminum. It is mounted on the base of the transformer. Provision is made for attaching the user's identifying tag.

**Maintenance**

These transformers require no maintenance, other than occasional cleaning.

*Data subject to change without notice*

To purchase or obtain more information about GE Instrument Transformer products, please call GE's Charlotte Service Center at 1-800-431-7867. Product information is also available on our web site at <http://www.GEIndustrial.com>. Click on the Product Index button (right column), select Transformers and follow the menus to **Product Information** or a **Solutions Advisor**



**JVM-4C/5C Dimensions**



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