

# Model JVM-2C/3C

## Indoor Voltage Transformer 60 kV BIL, 2,400-4,800 V

### Application

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

### Regulatory Agency Approvals

UL Recognized .....File E145172

### Thermal Rating

55 °C Rise above 30 °C Ambient .....750 VA  
30 °C Rise above 55 °C Ambient .....500 VA

### Weight

Unfused .....34 lbs  
Fused .....37 lbs



### Reference Drawings

Outline.....0142C33852

### JVM-2C/3C Data Table

Circuit Line to Line Voltage	Permissible Transformer Primary Connection	Transformer Rating		ANSI Accuracy Classification 60 Hz			Catalog Number	Primary Fuse Rating	
		Primary <sup>(1)</sup> Voltage	Ratio	Burden Per ANSI		Operated at 58 % of Rated <sup>(2)</sup> Voltage, but Burden Impedance as at Rated Voltage		Amps	Volts
				Operated at Rated Voltage	Operated at 58 % of Rated Voltage				
Unfused									
2,400 4,160	Δ or Y Y only	2,400	20:1	0.3 W,X,M,Y; 1.2Z	0.3 W,X; 1.2 M,Y	0.3 W', X', M', Y'; 1.2 Z'	763X121001	---	---
4,200	Δ or Y	4,200	35:1	0.3 W,X,M,Y; 1.2Z	0.3 W,X; 1.2 M,Y	0.3 W', X', M', Y'; 1.2 Z'	763X121002	---	---
4,800	Δ or Y	4,800	40:1	0.3 W,X,M,Y; 1.2Z	0.3 W,X; 1.2 M,Y	0.3 W', X', M', Y'; 1.2 Z'	763X121003	---	---
With One Primary Fuse									
2,400	Y only	2,400 <sup>(4)</sup>	20:1	---	0.3 W,X; 1.2 M,Y	0.3 W', X', M', Y'; 1.2 Z'	763X121042	2 A	2,400
4,160	Y only	2,400 <sup>(4)</sup>	20:1	0.3 W,X,M,Y; 1.2Z	---	---	763X121033	2 A	4,800
4,200	Y only	4,200	35:1	---	0.3 W,X; 1.2 M,Y	0.3 W', X', M', Y'; 1.2 Z'	763X121031	1 A	4,800
4,800	Y only	4,800	40:1	---	0.3 W,X; 1.2 M,Y	0.3 W', X', M', Y'; 1.2 Z'	763X121032	1 A	4,800
With Two Primary Fuses									
2,400	Δ or Y <sup>(3)</sup>	2,400 <sup>(4)</sup>	20:1	0.3 W,X,M,Y; 1.2Z	0.3 W,X; 1.2 M,Y	0.3 W', X', M', Y'; 1.2 Z'	763X121040	2 A	2,400
4,160	Y only	2,400 <sup>(4)</sup>	20:1	0.3 W,X,M,Y; 1.2Z	---	---	763X121024	2 A	4,800
4,200	Δ or Y <sup>(3)</sup>	4,200	35:1	0.3 W,X,M,Y; 1.2Z	0.3 W,X; 1.2 M,Y	0.3 W', X', M', Y'; 1.2 Z'	763X121018	1 A	4,800
4,800	Δ or Y <sup>(3)</sup>	4,800	40:1	0.3 W,X,M,Y; 1.2Z	0.3 W,X; 1.2 M,Y	0.3 W', X', M', Y'; 1.2 Z'	763X121019	1 A	4,800

#### Notes:

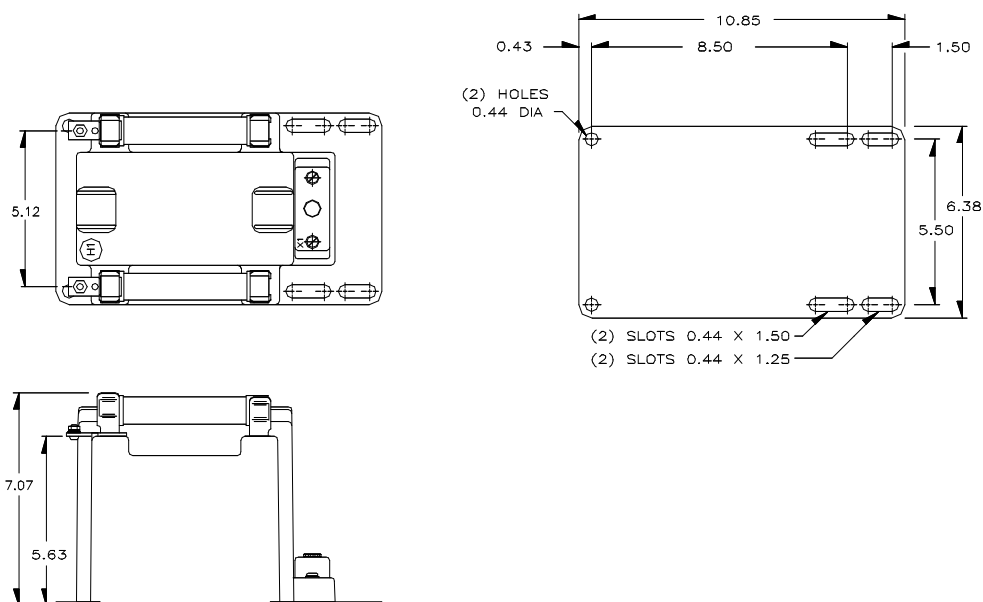
(1) For continuous operation, the transformer's rated primary voltage should not be exceeded by more than 10 %. Under emergency conditions, over-voltage must be limited to 1.25 times the transformer primary voltage rating.

(2) The prime symbol (') is used to signify 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.

## JVM-2C/3C Dimensions



### Construction and Insulation

The core and coil are enclosed in a plastic case, molded with GE Valox thermoplastic polyester resin. This tough material has excellent electrical and mechanical properties over a wide temperature range and is resistant to oil and a variety of chemicals. The core and coil assembly is then 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 No. 10-32 brass screws with one flatwasher and one lock washer.

### Polarity

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

### Fuses

Fuses are current limiting, "E" rated with 1" diameter caps and 5" clip centers.

### Nameplates

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.

### Base plate and Mounting

The base is made of stainless steel plate and is provided with holes and slots adapting it for mounting by either bolts or pipe clamps.

### Maintenance

These transformers require no maintenance, other than occasional cleaning.