## GE

## **Grid Solutions**

# Model JVM-2

# Indoor Voltage Transformer 2,400 V, BIL 45 kV, 50/60 Hz

## **Application**

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

## Thermal Rating (Volt-Amperes)

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

## Weight

(approximate, in pounds)	
Unfused	35/30
With one primary fuse	37/32
With two primary fuses	38/33

## **Reference Drawings**

Accuracy Curve	9689241267
Excitation Curve	5454043

## **Outline Drawings:**

Unfused with Primary Bushings9925196
Unfused with Primary Terminal Cover
9925197
Single Fuse9925198
Two Fuse9925199
Wiring Diagram refer to page 42, fig. 5

## Accessories - Catalog Number

Fuses, 600 Volt Class, 1 Ampere
9F60AAB001
Secondary Terminal Conduit Box
9925183001



JVM-2 Voltage Transformer (two primary fuses with fuse covers)

### JVM-2

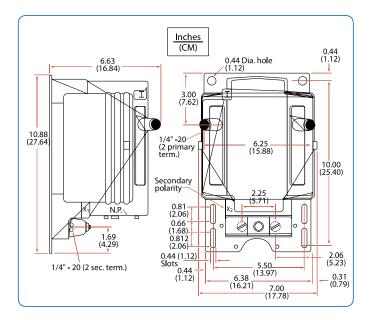
Line-To-Line Circuit Voltage for Permissible Primary Connection $\Delta$ Y Y Only <sup>(3)</sup>		Transformer Rating (1)		ANSI Accuracy	Class, 60 Hz			Fuse Ratings		
		Primary Voltage	Ratio	Operated at Rated Voltage	Operated at 58 % of Rated Voltage	Burden Impedances at Rated Voltage, but Operated at 58 % Rated Voltage (2)	Catalog Number <sup>6</sup>	Amps	Volts	
Prima	ry Terminal	Bushings								
2,400	2,400	4160	2,400	20:1	0.3 W, X, M, Y; 1.2 Z	0.3 W, X; 1.2 M, Y	0.3 W', X', M', Y'; 1.2 Z'	762X022003		
Prima	ry Terminal	Cover								
2,400	2,400	4160	2,400	20:1	0.3 W, X, M, Y; 1.2 Z	0.3 W, X; 1.2 M, Y	0.3 W', X', M', Y'; 1.2 Z'	762X022004		
One F	use (5)									
2,400	2,400	4160 (4)	2,400	20:1	0.3 W, X, M, Y; 1.2 Z	0.3 W, X; 1.2 M, Y	0.3 W', X', M', Y'; 1.2 Z'	762X022002	1A	2,400
Two F	uses									
2,400	2,400	4160 (4)	2,400	20:1	0.3 W, X, M, Y; 1.2 Z	0.3 W, X; 1.2 M, Y	0.3 W', X', M', Y'; 1.2 Z'	762X022001	1A	2,400

#### 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) Operated at 58% of Rated Voltage; the prime symbol () is used to signify that these burdens do not correspond to standard ANSI definitions
- (3) The insulation strength of these transformers is below the impluse level of 60 kV recommended by ANSI for 5 kV service.
- (4) The circuit must be solidly grounded with a 4160 V Y primary connection, since the fuse is rated only to 2,400 volts.
- (5) On transformers with one primary fuse, the neutral terminal insulation to ground is 2,500 volts
- (6) Measurement Canada Approval: AE-0311



#### JVM-2 Dimensions



#### **Construction and Insulation**

Please refer to General Product Information, item 1.8.

#### **Core and Coils**

A shell-type core is used. Emnamel-insulated wire is used in both the primary and secondary coils.

## **Primary Terminals**

The primary terminals are located on the top of the transformer. They consist of 1/4 inch-20 screws, with lock washers and cup washers.

Unfused models are available with either a primary terminal cover or primary terminal bushings. The terminal cover is a sealable, molded-phenolic cover, which fits over the primary terminals to provide primary circuit insulation and to prevent tampering. When bushings are provided, the primary terminals are located on top of raised, cylindrical taping bushings to improve ease of taping the connection between the primary circuit conductors and the terminals. When primary terminal bushings are provided, a terminal cover cannot be accommodated.

Models with a single fuse have their line terminals located on the left side of the fuse support, and the neutral terminal is located on top of the right side of the transformer. The neutral terminal has full primary voltage insulation. On models with two fuses, the primary terminals are attached directly to the fuse supports. Both single and dual fuse models are provided with fuse covers with seal tabs pre-assembled on the transformer. The covers are molded of HY-BUTEI60 insulation.

### **Secondary Terminals**

The secondary terminals are located at the lower front of the transformer, and are specifically designed to be accessible from the top of the transformer. The secondary terminals are 1 /4 inch-20 screws with lock washers. The secondary terminal cover is molded of black phenolic resin.

#### **Conduit Box**

A secondary terminal conduit box is available as an optional accessory in place of the standard secondary terminal cover. The conduit box is fabricated from pressed steel, and is fitted with two 1 inch conduit hubs. a 3 /4 inch and 1 inch knockout, one pipe plug, polarity markers, and a gasketed cover secured by four sealable captive thumbscrews

#### **Polarity**

Please refer to General Product Information, item 7.1

#### **Baseplate and Mounting**

Please refer to General Product Information, item 5.1.

#### Nameplate

Please refer to General Product Information, item 6.9.

#### Maintenance

Please refer to General Product Information, item 10.1 and pages 24-27.

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