# GF **Grid Solutions**

# Models JVM-4A/JVM-5A

### Indoor Voltage Transformer 4,200 V to 14,400 V, BIL 75 kV to 110 kV, 60 Hz

# Application

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

# **Regulatory Agency Approvals**

UL Recognized .....File E178265

# Thermal Rating (Volt-Amperes)

55 °C Rise above 30 °C Ambient ......2,000 30 °C Rise above 55 °C Ambient .......1,400

# Weight (Approximate in Pounds)

Unfused	105/85
Fused	.110/90



JVM-4A, -5A Voltage Transformer (two-fuse design)

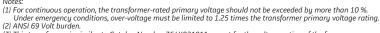
# **Reference Drawings**

Accuracy Curve	9932600137
Excitation Curves:	
JVM-4A; 60:1 and 70:1	.9689241591
JVM-4A; 100:1 and 120:1	9689241629
JVM-5A	.9932600139

## JVM-4A/JVM-5A (two-fuse design)

Line-To-Line Circuit Voltage for		Transformer Rating (1)		Accuracy Classification 60 Hz		_		Primary Fuse Ratings		
Permiss ∆	ible Prima Y	ry Connection Y Only	Primary Voltage	Ratio	ACCUBUTE	ANSI	BIL	Catalog Number	Amps	Volts
					Unfused - JVI	M-4A				
4,200	4,200	7,200	4,200	35:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	75 kV	764X021001		
4,800	4,800	8,320	4,800	40:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	75 kV	764X021002		
7,200	7,200		7,200	60:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	75 kV	764X021003		
					One Primary Fuse -	JVM4A				
		4,200	4,200 (3)	35:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z $^{\scriptscriptstyle(2)}$	75 kV	764X021010	2 A	4,800
		7,200	4,200	35:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	75 kV	764X021011	2 A	7,200
		4,800	4,800	40:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z <sup>(2)</sup>	75 kV	764X021012	2 A	4,800
		7,200	7,200	60:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z <sup>(2)</sup>	75 kV	764X021013	1 A	7,200
					Two Primary Fuses	- JVM-4A				
4,200		4,200 (4)	4,200	35:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	75 kV	764X021021	2 A	4,800
4,800		4,800 (4)	4,800	40:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	75 kV	764X021022	2 A	4,800
7,200		7,200 (4)	7,200	60:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	75 kV	764X021023	1 A	7,200
					Unfused – JVI	M-5A				
7,200	7,200	12,470	7,200	60:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765X023001		
7,620	7,620	13,200	7,620	63.5:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765X023002		
8,400	8,400	14,400	8,400	70:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765X023003		
12,000	12,000		12,000	100:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765X023004		
13,200	13,200		13,200	110:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765X023005		
14,400	14,400		14,400	120:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765X023006		
					One Primary Fuse	- JVM5A				
		7,200	7,200 (5)	60:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z (2)	110 kV	765X023010	1 A	7,200
		12,470	7,200	60:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765X023011	1 A	14,400
		7,620	7,620	63.5:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765X023012	1 A	14,400
		8,400	8,400	70:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765X023013	1 A	14,400
		12,000	12,000	100:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z (2)	110 kV	765X023014	0.5 A	14,400
		13,200	13,200	110:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z (2)	110 kV	765X023015	0.5 A	14,400
		14,400	14,400	120:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z (2)	110 kV	765X023016	0.5 A	14,400
					Two Primary Fuses	s – JVM-5A				
7,200		7,200 (4)	7,200	60:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765X023020	1 A	7,200
12,000		12,000 (4)	12,000	100:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765X023024	0.5 A	14,400
13,200		13,200 (4)	13,200	110:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765X023025	0.5 A	14,400
14,400		14,400 (4)	14,400	120:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765X023026	0.5 A	14,400

Notes.



(2) ANSI 69 Volt burden.
(3) This transformer is similar to Catalog Number 764X021011 except for the voltage rating of the fuse.
(4) 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.
(5) This transformer is similar to Catalog Number 765X023011 except for the voltag rating of the fuse.



# Indoor - Voltage - JVM-4A/JVM-5A

#### **Reference Drawings (con't)**

#### **Outline Drawings: JVM-4A**

Unfused	8949818
One Fuse	
Two Fuses	8949820

Two Fuses (Model 765X023020 only) ..... 9935474 Wiring Diagram ...... refer to page 42, figure 5

#### Accessories ..... Catalog Number

Fuses, Current-limiting, Type EJ-1:	
4,800 Volt Class, 1 Ampere	9F60BDD001
4,800 Volt Class, 2 Ampere	9F60BDD002
7,200 Volt Class, 1 Ampere	. 9F60BDE001
7,200 Volt Class, 2 Ampere	. 9F60BDE002
14,400 Volt Class, 0.5 Ampere	. 9F60BHH905

#### **Construction and Insulation**

Please refer to General Product Information, item 1.4.

#### Core

Please refer to General Product Information, item 2.3.

#### **Primary and Secondary Coils**

Please refer to General Product Information, item 3.2.

#### **Primary Terminals**

Please refer to General Product Information, item 4.2.

#### Fuses

Current-limited, Type EJ-1 fuses are used.

#### **Secondary Terminals**

Please refer to General Product Information, item 4.12.

#### Polarity

Please refer to General Product Information, item 7.2.

#### **Baseplate and Mounting**

Please refer to General Product Information, item 5.6.

#### Nameplate

Please refer to General Product Information, item 6.5.

#### Maintenance

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

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