GE
Grid Solutions

Models JVM-4/JVM-5

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

ACCUBUTE AVAILABLE

When choosing your GE Instrument Transformer, don't forget to explore the benefits of using GE's 0.15 accuracy class AccuBute line.

Application

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

Regulatory Agency Approvals

UL Recognized ..... File E178265

Thermal Rating

55 °C Rise above 30 °C Ambient....1,500 VA
30 °C Rise above 55 °C Ambient ...1,000 VA

ANSI Meter Accuracy Classification, 60 Hz

Operated at Rated Voltage
0.3 W, X, M, Y, Z; 1.2 ZZ ...Data Table - Accuracy 1

Operated at 58 % of Rated Voltage
0.3 W, X, M, Y; 1.2 Z .....Data Table - Accuracy 2

Burden Impedance as at Rated Voltage,
Operated at 58 % of Rated Voltage(2)
0.3 W', X', M', Y', Z' .....Data Table - Accuracy 3

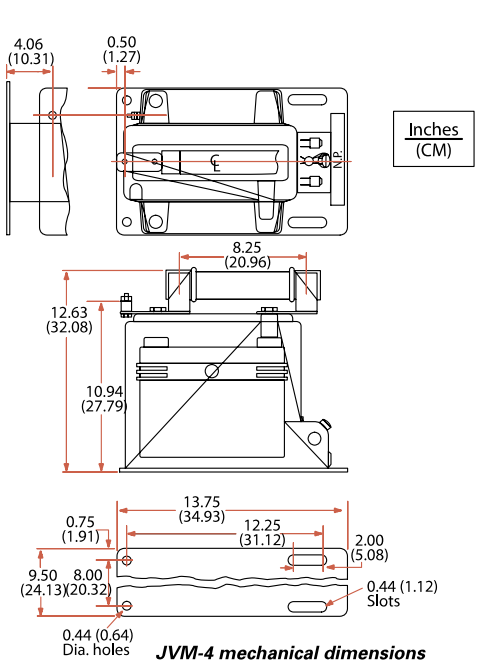
JVM-4, -5 Voltage Transformer (unfused design)

JVM-4/JVM-5

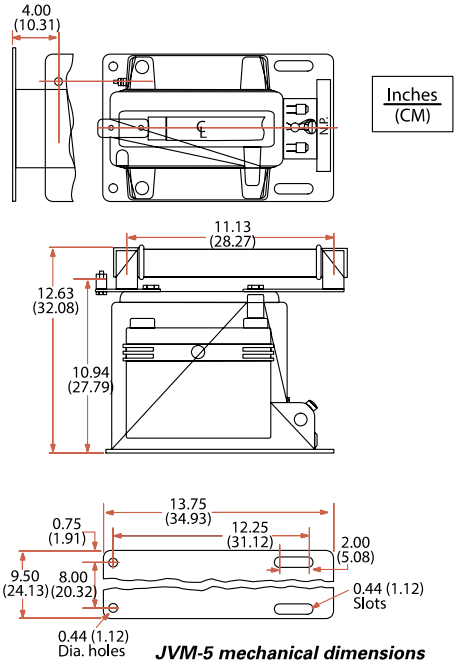
Line-To-Line Circuit Voltage for Permissible Primary Connection			Transformer Rating (1)		ANSI Accuracy Classification 60 Hz			BIL	Catalog Number Supplied with Fuses (8)	Catalog Number Supplied without Fuse (8)	Primary Fuse Rating	
					Burden Per ANSI							
Δ	Y	Y Only	Primary Voltage	Ratio	Operated at Rated Voltage	Operated at 58% of Rated Voltage	Burden Imp as at Rated Voltage; Operated at 58% of Rated Voltage (2)				Amps	Volts
Unfused - JVM-4												
4,200	4,200	7,200	4,200	35:1	Accuracy 1	Accuracy 2	Accuracy 3	75 kV	---	764X020001	---	---
4,800	4,800	8,320 (3)	4,800	40:1	Accuracy 1	Accuracy 2	Accuracy 3	75 kV	---	764X020002	---	---
7,200	7,200	---	7,200	60:1	Accuracy 1	Accuracy 2	Accuracy 3	75 kV	---	764X020003	---	---
One Primary Fuse - JVM-4												
---	---	4,200	4,200 (4)	35:1	---	Accuracy 2	Accuracy 3	75 kV	764X020021	---	2 A	4,800
---	---	7,200	4,200 (7)	35:1	Accuracy 1	---	---	75 kV	764X020023	---	2 A	7,200
---	---	4,800	4,800	40:1	---	Accuracy 2	Accuracy 3	75 kV	764X020022	---	2 A	4,800
---	---	7,200	7,200	60:1	---	Accuracy 2	Accuracy 3	75 kV	764X020024	---	1 A	7,200
Two Primary Fuses - JVM-4												
4,200	---	4,200 (3)	4,200 (7)	35:1	Accuracy 1	Accuracy 2	Accuracy 3	75 kV	764X020012	---	2 A	4,800
---	---	7,200 (3)	4,200	35:1	Accuracy 1	---	---	75 kV	764X020015	---	2 A	7,200
4,800	---	4,800 (3)	4,800	40:1	Accuracy 1	Accuracy 2	Accuracy 3	75 kV	764X020013	---	2 A	4,800
7,200	---	7,200 (3)	7,200	60:1	Accuracy 1	Accuracy 2	Accuracy 3	75 kV	764X020016	---	1 A	7,200
Unfused – JVM-5												
7,200	7,200	12,470	7,200	60:1	Accuracy 1	Accuracy 2	Accuracy 3	110 kV	765X021001	---	---	---
8,400	8,400	14,400	8,400	70:1	Accuracy 1	Accuracy 2	Accuracy 3	110 kV	765X021002	---	---	---
12,000	12,000	---	12,000	100:1	Accuracy 1	Accuracy 2	Accuracy 3	110 kV	765X021003	---	---	---
14,400	14,400	---	14,400	120:1	Accuracy 1	Accuracy 2	Accuracy 3	110 kV	765X021004	---	---	---
One Primary Fuse – JVM-5												
---	---	7,200	7,200 (5)	60:1	---	Accuracy 2	Accuracy 3	110 kV	765X021053	765X021061	1 A	7,200
---	---	12,470	7,200	60:1	Accuracy 1	---	---	110 kV	765X021048	765X021056	1 A	14,400
---	---	14,400	8,400	70:1	Accuracy 1	---	---	110 kV	765X021049	765X021057	1 A	14,400
---	---	12,000	12,000	100:1	---	Accuracy 2	Accuracy 3	110 kV	765X021050	765X021058	0.5 A	14,400
---	---	14,400	14,400	120:1	---	Accuracy 2	Accuracy 3	110 kV	765X021051	765X021059	0.5 A	14,400
Two Primary Fuses – JVM-5												
7,200	---	7,200 (3)	7,200 (6)	60:1	Accuracy 1	Accuracy 2	Accuracy 3	110 kV	765X021031	765X021047	1 A	7,200
7,200	7,200	12,470 (3)	7,200	60:1	Accuracy 1	---	---	110 kV	765X021027	765X021043	1 A	14,400
8,400	8,400	14,400 (3)	8,400	70:1	Accuracy 1	Accuracy 2	Accuracy 3	110 kV	765X021028	765X021044	1 A	14,400
12,000	---	12,000 (3)	12,000	100:1	Accuracy 1	Accuracy 2	Accuracy 3	110 kV	765X021029	765X021045	0.5 A	14,400
14,400	---	14,400 (3)	14,400	120:1	Accuracy 1	Accuracy 2	Accuracy 3	110 kV	765X021030	765X021046	0.5 A	14,400

Notes:
(1) For continuous operation, the transformer-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) 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) This transformer is similar to Catalog Number 764X020023 except for the voltage rating of the fuse.
(5) This transformer is similar to Catalog Number 765X021048 except for the voltage rating of the fuse.
(6) This transformer is similar to Catalog Number 765X021027 except for the voltage rating of the fuse.
(7) This transformer is similar to Catalog Number 764X020015 except for the voltage rating of the fuse.
(8) Measurement Canada Approval: AE-0853 or AE-0314

JVM-4/JVM-5 Dimensions



JVM-4 mechanical dimensions



JVM-5 mechanical dimensions

Weight - Shipping/Net
(approximate, in pounds)
Unfused 105/85
With fuses 110/90
Reference Drawings
Accuracy Curve 9689241655
Excitation Curves:
60:1 and 70:1 9689241591
100:1 and 120:1 9689241629
Outline Drawings:
JVM-4
Unfused Models 8949818
One Fuse Models 8949938
Two Fuse Models 8949820
JVM-5
Unfused Models 8949818
One Fuse Models:
Model 765X021053 only 8949938
All except Model 756X021053 8949939
Two Fuse Models:
Model 765X021031 only 8949825
All except Model 765X021031 8949824
Wiring Diagram ..... refer to page 42, figure 5
Accessories ..... Catalog Number
Fuses, Current-limiting, Type EJ-1:
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
14,400 Volt Class, 1 Ampere 9F60BHH001

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 5.5.

Nameplate
Please refer to General Product Information, item 6.5.

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

Note:
1. Voltage transformers of this type are available for use in 50 Hz applications in many ratings. However, Industry Standard IEEE 57.13 to which we test transformers does not apply at 50 Hz. Customers who order voltage transformers for 50 Hz application should provide an accuracy specification including Burden VA and Power Factor. If an accuracy specification is not made available, the transformer(s) will be tested at 60 Hz with test burdens as defined in IEEE 57.13 for 60 Hz application.

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