Grid Solutions

MODEL JVM-5AC

Indoor High Accuracy Voltage Transformer

75-110 kV BIL, 4,200-14,400 V

Application

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

Thermal Rating

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

Weight

Unfused ..... 85 lbs
Fused ..... 88 lbs

Reference Drawings

Outline 0162C33853

GE VERNOVA

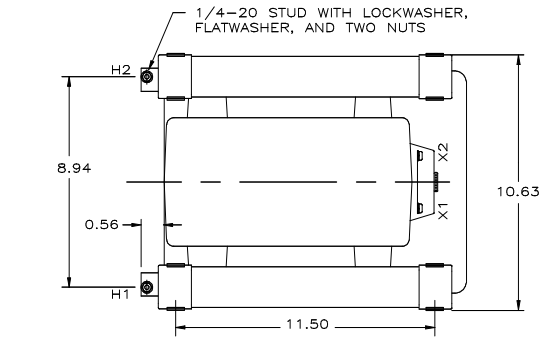
Model JVM-5AC

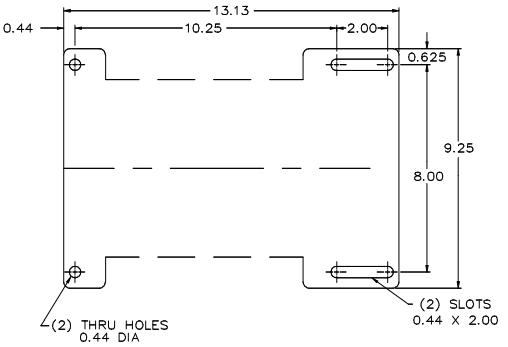
CIRCUIT LINE TO LINE VOLTAGE	PERMISSIBLE TRANSFORMER PRIMARY CONNECTION	TRANSFORMER RATING		ANSI ACCURACY CLASSIFICATION 60 Hz		BIL	CATALOG NUMBER SUPPLIED WITHOUT FUSES	PRIMARY FUSE RATING	
				BURDEN PER ANSI					
		PRIMARY [1] VOLTAGE	RATIO	OPERATED AT RATED VOLTAGE	OPERATED AT 58% OF RATED VOLTAGE			Amps	VOLTS
JVM-5AC Unfused									
7,200 12,470	Δ or Y Y only	7,200	60:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765 X 123001	-	-
7,620 13,200	Δ or Y Y only	7,620	63.5:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765 X 123002	-	-
8,400 14,400	Δ or Y Y only	8,400	70:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765 X 123003	-	-
12,000	Δ or Y	12,000	100:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765 X 123004	-	-
13,200	Δ or Y	13,200	110:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765 X 123005	-	-
14,400	Δ or Y	14,400	120:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765 X 123006	-	-
JVM-5AC With One Primary Fuse									
7,200	Y only	7,200 [4]	60:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z [2]	110 kV	765 X 123010	1A	7200
12,470	Y only	7,200 [4]	60:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765 X 123011	1A	14400
7,620	Y only	7,620	63.5:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765 X 123012	1A	14400
8,400	Y only	8,400	70:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765 X 123013	1A	14400
12,000	Y only	12,000	100:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z [2]	110 kV	765 X 123014	1A	14400
13,200	Y only	13,200	110:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z [2]	110 kV	765 X 123015	1A	14400
14,400	Y only	14,400	120:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z [2]	110 kV	765 X 123016	1A	14400
4800 JVM-5AC With Two Primary Fuses									
7,200	Δ or Y only [3]	7,200	60:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765 X 123020	1A	7200
12,000	Δ or Y only [3]	12,000	100:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765 X 123024	1A	14400
13,200	Δ or Y only [3]	13,200	110:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765 X 123025	1A	14400
14,400	Δ or Y only [3]	14,400	120:1	0.15 W, X, M, Y	0.3 W, X, M, Y, Z	110 kV	765 X 123026	1A	14400

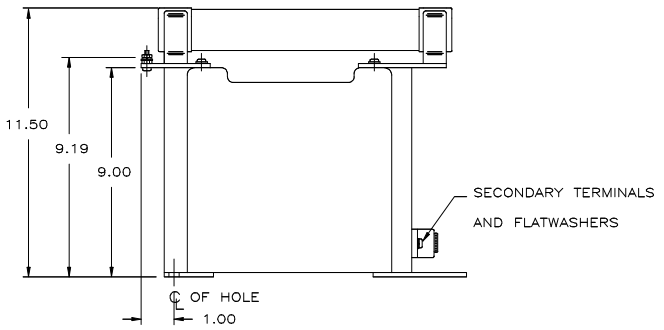
Notes:

(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) With ANSI 69 Volt burden.
(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-5AC Dimensions







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 white.

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.

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.

Maintenance

These transformers require no maintenance, other than occasional cleaning.

For more information, visit
gevernova.com/grid-solutions

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English
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