Superbute[™] Instrument Transformers

Substation Class Dry-Type Instrument Transformers

From the arctic cold, to the desert heat, to the salty coastal air. Through lightning, snow storms, and hail. Since 1965, Superbute dry-type transformers have given utilities superior performance and reliability in even the harshest of operating conditions. GE's Superbute products offer the following unique features:

Maximum Reliability

Unique design features such as GE's lattice wound primary coil and HyBute60™ insulating material provide for reliable operation and long service life. Proven field experience with field studies showing of 40 to 60 year life expectancy and observed field failure rates 3X better than traditional oil-filled transformers.

Improved Safety

GE's resilient butyl rubber insulation allows for a failure mode that is typically passive & self-contained, eliminating risks such as porcelain or metal projectiles, oil spills, or fire hazard, all which can accompany an oil-filled unit failure.

Mounting Convenience and Minimum Maintenance

Dry-type construction ends oil leakage problems. Tough butyl rubber will not easily chip or crack. Corrosion resistant construction defies moisture and oxidation. Smaller footprint, less height and less weight, high cantilever strength and no oil all allow for convenient installation onto existing structures.

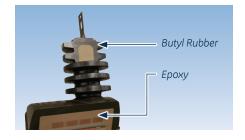
Extra Creep

Superbutes can be used in environmentally severe and high altitude applications, thanks to extra creep distance which exceeds that of any leading oil-filled design.

Advanced Rugged Design

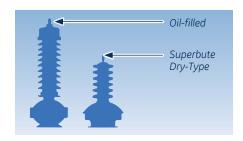


The primary coil is the most critical component of any voltage transformer. GE's lattice wound primary coil, patented in 1967, is the secret to the legendary durability of GE Superbute product.



Outer shell is HyBute60 butyl rubber; a hydrophobic, non-arc tracking material proven to be superior in handling mechanical and environmental extremes.

Internally filled with epoxy for high dielectric strength and mounting flexibility.



Even with their nice, compact size (up to 30% lower profile), Superbutes have more creep distance than oil-filled designs. This is an important factor in providing superior performance in coastal installations and other extreme environments



Voltage Transformers

MODEL	BIL (KV)	RATED PRIMARY VOLTAGE	NOMINAL SYSTEM VOLTAGE	RATIO (PRI:SEC) ¹	THERMAL RATING 30°C AMB	CREEP DISTANCE	APPROX. WEIGHT (LB.)		AVAILABLE IEEE METERING CLASSES AND BURDENS, 60HZ	
							(SHIP)	(NET)	STANDARD	HIGH ACC.2
Single Bushing (for line to ground connection, only)										
JVS-150	150	14400	24000	120/200 & 120/200:1	3000VA	27"	270	230	0.3 ZZ	0.15 Z
JVS-200	200	20125	34500	175/300 & 175/300:1	3000VA	36"	280	240	0.3 ZZ	0.15 Z
JVS-250	250	27600	46000	240/400 & 240/400:1	5000VA1	50"	480	420	0.3 ZZ	0.15 Z
JVS-350	350	40250	69000	350/600 & 350/600:1	5000VA1	64"	490	430	0.3 ZZ	0.15 Z
Two Bushing (for line to line connection)										
JVT-150	150	24000	24000	200 & 200:1	3000VA ²	26"	265	225	0.3 ZZ	0.15 Z
JVT-200	200	34500	34500	300 & 300:1	3000VA ²	36"	275	235	0.3 ZZ	0.15 Z
JVT-250	250	46000	46000	400:1	4500VA	52"	580	520	0.3 ZZ	0.15 Z
JVT-350	350	69000	69000	600:1	4500VA	66"	620	560	0.3 ZZ	0.15 Z

- 1. To achieve 5000VA when using a 67.08 volt tap, loading must not exceed 3000VA on the 67.08 volt tap. If all load is on one 67.08 volt tap, thermal rating is 4000VA.
- 2. With both secondary windings in parallel. When windings are used separately, the rating is 1500VA per winding. If only one winding is used separately, the rating is 2000VA.

Current Transformers

MODEL	BIL (KV)	NOMINAL SYSTEM VOLTAGE	RATIO (PRI:SEC) ¹	CREEP	APPROX. WEIGHT (LB.)		AVAILABLE IEEE METERING CLASSES AND BURDENS, 60HZ		
					(SHIP)	(NET)	STANDARD	HIGH ACC. ²	
JKW-150	150	24000	25/50:5 50/100:5 75/150:5	26"	378	323	0.3 B1.8 - (both ratios)	0.15S B0.5 (high ratio ³)	
JKW-200	200	34500	100/200:5 150/300:5 200/400:5 300/600:5 400/800:5 500/1000:5 600/1200:5 800/1600:5 1000/2000:5 1500/3000:5	35"	403	348			
JKW-250	250	46000		48"	633	543			
JKW-350	350	69000		64"	683	593			

- 1. Also available as single ratio, upon request.
- 2. Contact factory for availability of "Extended Range", 0.15% accuracy from 1% of rated primary current thru rating factor.
- 3. Low ratio (tap) is rated 0.15 B0.5 if primary current is less than 600A, otherwise 0.15S B0.5.

Current Transformer Relay Class (60Hz), Thermal & Mechanical Ratings

CONNECTION	RATED PRIMARY AMPS	RELAY CLASS	RATING FACTOR, 30°C AMBIENT	ONE SECOND THERMAL LIMIT AMPS	MECHANICAL LIMIT AMPS
High Ratio	50A thru 2000A	T400	1.5	75 x Rated	85 x Rated
(X1-X3)	3000A	T800	1.33	75 x Rated	85 x Rated
Low Ratio	25A thru 1000A	T200	2	75 x Rated	170 x Rated
(X2-X3)	1500A	T400	1.5	75 x Rated	170 × Rated

JVS-200



JVT-200



JVS-350



JVT-350



JKW-200



JKW-350



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