Westinghouse

Varnished Flexible Insulation

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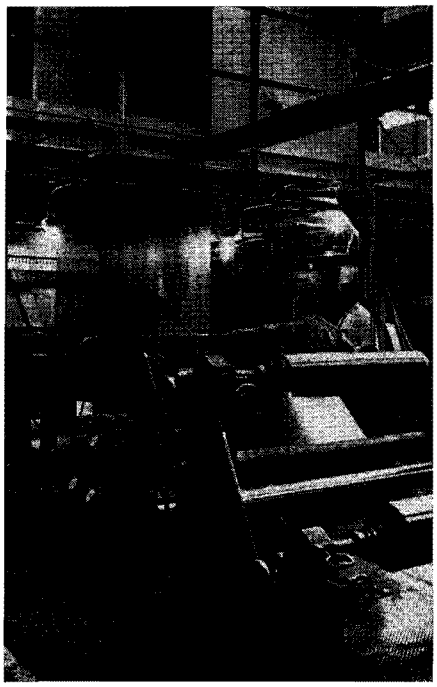

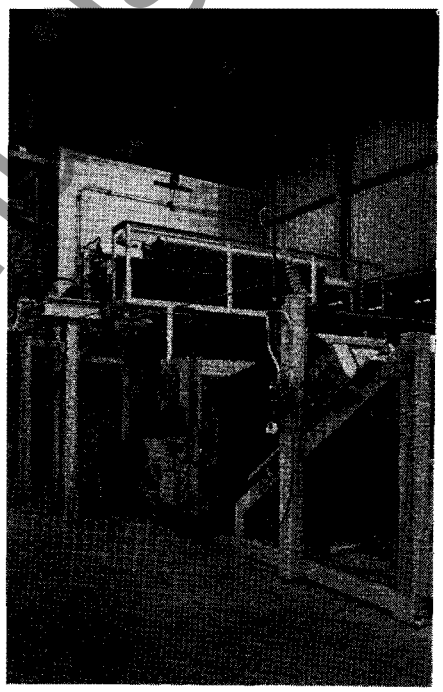

Description	(W) Number Black	(W) Number Tan	Application	Characteristics	Finished Thickness, Inches	Weight Lbs./Sq. Yard	Tensile Lbs./In. Width	Typical Diel. Str. Volts/Mil①
Varnished Cambric								
Cable Tape	TT4952		Flexible insulating covering for cable	Meets Mil C-915A NEMA VF-1-1957 ASTM D-373-58T	.008 .010 .012	0.45 0.54 0.65	MD-40 MD-45 CMD 25	1,400
Bias Cotton	1265	1266②	Wrapper insulation on coils, motors, bus bars and cable joints	Black has light oil finish for good slippage in wrapping. Tan has light wax finish for good slippage	.007 .010 .012 .015	0.40 0.45 0.65 0.80	40	1,100
Adhesive Backed Bias Cotton		TT9950	Taping irregular shapes for electrical maintenance such as motor and transformer leads	Acrylic adhesive with high adhesion and quick stick properties yield 1 lb/in. wd. adhesion	.007 .010	0.40 0.45	45	1,100
Straight Cotton	1268	1267	Sheet and layer insulation for straight surfaces	Excellent flexibility, good abrasion and moisture resistance with good aging properties Tan meets Mil I-3374-A Ends of rolls sealed with wax	.005 .007 .010 .012 .015	0.24 0.40 0.55 0.65 0.80	38 45	1,000
Adhesive Backed Straight Cotton		TT9955	Taping of bus bars or straight sections of armature coils or other regular surfaces	Excellent tack, good cohesion and resistance to solvent adhesive. Meets Mil T-9006 U.S.A.F.	.008 .010	0.45 0.55	45	1,200
Varnished Canvas		5J43	Protective covering for coil supports. Padding for windings, and banding cushions for coils	Resistant to water, acids, alkalis with good dielectric strength and with resistance to mechanical abrasion	.016 .021 .026 .031	0.80 1.00 1.30 1.55	50 100	400
Varnished Asbestos Cloth								
Phenolic Varnished Class B 130C	1250		Armature end winding, padding and cushioning under bands	5J40 meets Mil I-3053 type 6PP	0.035 0.055	1.6 2.5		
Polyester Varnished Class F 155C		5J40						
Epoxy Varnished Class F 155C				Excellent Solvent Resistance				

① ¼" Electrode. ② Low power factor version (20104) available upon request. ⑤ #108 Fabric. ⑥ #112 Fabric. ⑦ #116 Fabric. ⑧ #127 Fabric.

March, 1970
Supersedes TD 65-660, pages 1-4, dated May, 1968
E, D, C/2158/PL; E, D, C/2162/DB

Varnished Flexible Insulation

Varnished Flexible Insulation, Continued

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Varnished Dacron Glass									
Class B 130C	5J52		Hand and machine wrapping of irregular shapes	Retains dielectric strength after aging. Straight weave with bias characteristics. High tensile strength.	.008		0.45	45	2,000
					.010		0.56	45	
Class F 155C		5J51			.012		0.68	45	
Adhesive Backed Class F 155C		TT9957	For wrapping curved or irregular surfaces where temperatures are moderately high and thermal stability is important	Acrylic adhesive gives adhesion of 2 lbs/in. Meets Mil TT9906	.008		0.45	45	1,300
					.010		0.56	45	
Self Adhering Modified Epoxy Class F 155 C	5J68③		Recommended for complete seal against moisture, corrosive atmosphere and abrasive elements. For use on dc motors. Proper application results in a completely encapsulated unit.	Difficult configuration readily wrapped and insulated without gaps and air pockets. Excellent hydrolytic stability. Modified Epoxy resin contains no silicone. Maintains pressure sensitive properties for 1 year at 70°F.	.010		0.65	45	
Varnished Glass					Bare	Finish			
NEMA Grade Class B 130C		8176-1	For wrapper and layer application such as coil phase barrier. For ground and slot cell insulation.	Extremely flexible, high dielectric strength with good oil and moisture resistance	.002⑤	.003	0.22	60	1,200
					.003⑥	.005	0.42	100	1,050
					.003⑥	.007	0.50	100	1,000
					.003⑥	.010	0.72	100	950
LC Grade Class B 130C		8176-8	For wrapper and layer application such as coil phase barrier. For ground and slot cell insulation.	Economically priced; good oil and moisture resistance	L.C. 4	.007	0.44	150	1,630
					L.C. 4	.010	0.58	150	1,630
					L.C. 4	.012	0.80	150	1,400
Adhesive Backed LC Grade Class B		TT9967	Wrapper and layer applications in coils, motors and generators.	Excellent pressure sensitive tack, good adhesion and solvent resistance	L.C. 4	.007	0.44	150	1,630
					L.C. 4	.010	0.58	150	1,400
Class F 155C		5J04	Layer and wrapper insulation where Class F material is required such as in dry type transformers	Flexible with high dielectric and mechanical strength	.002⑤	.003	0.22	60	1,900
					.003⑥	.005	0.29	100	1,900
					.004⑦	.007	0.50	100	1,400
					.007⑥	.010	0.72	300	1,400
					.007⑧	.012	0.90	300	1,400
					.007⑥	.015	1.12	300	1,200
		5JF04	Taping application where a maximum degree of flexibility is required.	Extremely flexible with high dielectric and mechanical strength. Meets MIL-I-17205C.	.003⑥	.005	0.29	100	1,700
					.003⑥	.007	0.41	100	1,600
					.007⑥	.010	0.69	300	1,300
					.007⑥	.012	0.84	300	1,250
					.007⑧	.015	1.02	300	1,200
		5J44	Low cost layer and wrapper insulation where class F material is required.	Economically priced. Flexibility with good dielectric and mechanical strength.	L.C. 4	.007	0.44	150	1,450
					L.C. 4	.010	0.58	150	1,400
		5JF44		Economically priced. Extreme flexibility with good dielectric and mechanical strength. Meets MIL-I-17205C.	L.C. 4	.007	0.44	150	1,400
					L.C. 4	.010	0.65	150	1,300
		5J47	Low cost layer and wrapper insulation where class F material is required.	Economically priced. Flexibility with good dielectric and mechanical strength.	L.C. 7	.010	0.70	270	1,300
					L.C. 7	.015	1.05	270	900
		5JF47		Economically priced. Extreme flexibility with good dielectric and mechanical strength. Meets MIL-I-17205C.	L.C. 7	.010	0.70	270	1,250
					L.C. 7	.015	1.05	270	850
Epoxy Class F 155C		5J67	Layer and wrapper insulation where good chemical resistance is needed.	Compatible with most varnishes and encapsulating compounds	.002⑤	.003	0.23	60	1,700
					.002⑤	.005	0.43	60	1,700
					.003⑥	.007	0.51	110	1,700
					.007⑥	.010	0.73	300	1,500
					.007⑧	.012	0.80	300	1,375
NEMA Silicone Class H 180C		8929	Class H flexible layer wrapper and tape insulation. Slot cell mica tape backing for mica combinations	Meets Mil I-17205C. Dielectric strength is retained at elevated temperature	.002⑤	.0035	0.22	70	1,500
					.002⑤	.004	0.26	70	1,500
					.002⑤	.005	0.32	70	1,500
					.003⑥	.007	0.43	100	1,400
					.004⑦	.010	0.65	100	1,300
					.007⑥	.010	0.80	300	450
					.007⑧	.013	0.96	300	650
Adhesive Backed Silicone Class H 180C		TT9954	Class H applications in motors, transformers, heating equipment, aircraft, ships and power plants	1.56 lbs/in width adhesion; resists oil, chemicals and abrasion	.004⑦	.007	0.50	100	750
NEMA Silicone Rubber Class 180C		5J98	For Class H service in cable tape or insulation in dry type transformers	Meets Mil-C-2194D including amendment 2 flexible at high or low temperatures	.004⑦	.007	0.48	100	900
					.004⑦	.010	0.68	100	1,000

① ¼" Electrode. ③ Red ⑤ #108 Fabric. ⑥ #112 Fabric. ⑦ #116 Fabric. ⑧ #127 Fabric.

The Flexible Insulations, Prepregs, and Copperclad listed are manufactured by the Insulating Materials Division to the highest standards of quality in accordance with the quality control policies of the Westinghouse Electric Corporation. The Insulating Materials Division Flexible Insulation Plant is prepared to supply many of its products to customer's specifications on a special-run basis when the customer's need varies from the standard line. For further information about specially formulated products, contact your nearest Industrial Materials Division salesman or distributor.

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