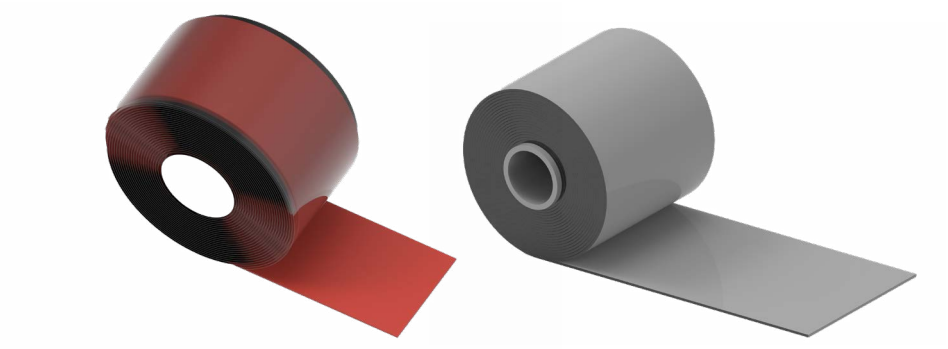
RAYCHEM MEDIUM VOLTAGE FUSION TAPES MVFT

WILDLIFE AND ASSET PROTECTION PRODUCTS



SELF-AMALGAMATING DESIGN PROVIDES EFFECTIVE PROTECTION AGAINST FLASHOVER FOR ENHANCED SAFETY.

APPLICATIONS

- Overhead Power Networks
- Electrical Substations
- Data Center Power Systems

RELEVANT STANDARDS AND TEST REPORTS

- EU RoHS Compliant
- EU ELV Compliant

KEY FEATURES

- Compatible with TE Raychem medium voltage insulation enhancement system
- Suitable for indoor and outdoor applications
- Non-tracking properties
- Continuous operating temperature up to 90°C

TE Connectivity's (TE) Raychem Medium Voltage Fusion Tapes are self-amalgamating, providing insulation enhancement and protection against accidentally induced discharge. The design aims to combine the integrity of silicone polymers with the versatility of wraparound products.

Our Raychem MVFT tapes are quick and easy to install. When applied, the tapes amalgamate the overlapped layers, producing a complete seal. A single MVFT layer, two-thirds overlapped, will provide AC voltage withstand (flashover protection) to at least 15 kV, increasing to 35 kV if a second layer is applied. Although the tapes will stick to themselves and other insulating materials, they will not adhere to metal or porcelain, for easy removal and maintenance.

Our Raychem MVFT tapes offer a simple and effective solution to the challenges of retrofit insulation of busbars, particularly where existing equipment cannot be dismantled. They can be used for indoor and outdoor applications and installed on different shapes, including complex connections.

PRODUCT PERFORMANCE

Test		
AC Dry Withstand/1 min.	15 kV (one insulation layer) 35 kV (two insulation layers)	
Loading Cycleing 30 days at 130°C	No Deformation or Splitting	
Low Temperature Install at 0°C	Installable without Difficulty	
Physical		
Key Material Properties	**Test Method**	**Required**
Accelerated Aging 168hrs at 150°C Tensile Strength	ASTM D412	> 1,000 psi (6.8MPa)
Accelerated Aging 168hrs at 150°C Ultimate Elongation	ASTM D412	> 450%
Low Temperature Flexibility 4hrs.- 40°	ASTM D2671	No cracking
Electrical		
Dielectric Strength 0.76 mm (0.03 inch) wall	ASTM D149	> 160 kV/cm (400 V/mil)
Tracking and Erosion Resistance	ASTM D2303	No tracking, erosion to top surface or flame. Failure after: 1hr. at 2.5 kV 1hr. at 2.75 kV 1hr. at 3.0 kV 20 min at 3.25 kV

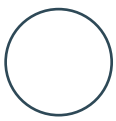
PRODUCT SELECTION

Description	Supplied Length: m (yards)	Width: M (inches)	Color	STD Pack
MVFT-G-2-12(B4)	11 (12)	50 (2)	Grey	4 rolls
MVFT-50-6400	6.4 (7)	50 (2)	Red	1 roll
MVFT-50-1800	1.8 (2)	50 (2)	Red	1 roll

INSTALLATION INSTRUCTIONS	
EPP-3150	Installation Instructions for Medium Voltage Fusion Tapes MVFT

TECHNICAL REPORT	
EDR-5465	MVFT Product Test Report
EDR-5651	MVFT Material Test Report

MVFT APPLICATION LENGTH GUIDE

Busbar Width X Thickness mm (inches)		Estimated Length of MVFT required to insulate 1 m (3 ft) of busbar
 Rectangular Busbar	25 X 10 (1 X 0.3)	4.7 (15)
	50 X 10 (2 X 0.3)	7.6 (25)
	75 X 10 (3 X 0.3)	11.4 (38)
	100 X 10 (4 X 0.3)	15.6 (51)
	150 X 10 (6 X 0.3)	25 (82)
	200 X 10 (8 X 0.3)	30 (98)
 Square Busbar	25 X 25 (1 X 1)	6 (20)
	50 X 50 (2 X 2)	12 (39)
	75 X 75 (3 X 3)	18 (59)
	100 X 100 (4 X 4)	24 (79)
	150 X 150 (6 X 6)	36 (118)
 Round Busbar	12 (0.5)	2.5 (8)
	25 (1)	5 (16)
	50 (2)	10 (33)
	75 (3)	15 (49)
	100 (4)	20 (66)

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