



Energy Division

MVLC

Medium Voltage Line Cover

Outage Prevention

The MVLC line cover provides state-of-the-art insulation to help prevent electrical outages caused by trees or wildlife coming into contact with distribution lines.

Cost-Effective

The MVLC cover is designed to insulate existing bare lines without costly conductor replacement expenditures or additional line hardware. The MVLC cover may be applied selectively on problem spans when temperatures are above 0°C.

Live, Consistent Installation

Tyco Electronics has designed a special tool that ensures fast and reliable application of the MVLC cover. The tool allows application on energized lines.

It attaches directly to the over head conductor and remains stationary in a single location on each span. The tool may be manually or automatically operated, using a hand crank or with the aid of a gasoline powered drill. The tool forms, closes, and feeds the MVLC cover along the conductor with speed and consistency.

The MVLC hand tool also allows for quick installation on short lengths of conductors, especially in substations.

Wide Use Range

Three sizes cover conductors from #6 - 1590 kcmil (16-800 mm²). Higher performance product available. A mastic sealed version of the product is available for 25 kV or higher performance at 15 kV.

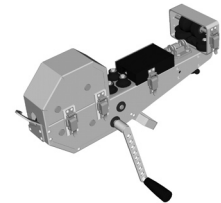
High Voltage Material

The MVLC cover material formulation is based on Tyco Electronics' Raychem products field-proven experience with HV products in harsh environments. The MVLC material is UV stable as well as tracking and erosion resistant. The MVLC cover is electronically cross-linked to create an extremely robust insulation system, ensuring many years of reliable operation in the harshest environments.

Product Performance

Test	MVLC-A/U / MVLC-A/241 (sealed)
AC withstand (dry) - 1 minute	15 kV min. / 25 kV min.
AC withstand (wet) - 1 minute	15 kV min. / 25 kV min.
AC long term withstand (dry) - 4 hours	8.6 kV min. / 14.4 kV min.
30 day thermal loading (8 hr @ 130°C; 16 hr off)	No MVLC deformation
Conductor ampacity	82-89% of bare conductor ampacity

Material properties per pps 3010/42		Test Method	Requirement
Physical	Tensile Strength	ASTM D638	8 MPa min. 1150 psi min.
	Ultimate Elongation	ASTM D638	200% min.
	Abrasion Resistance	1000 cycles, 2068g	20% max. thickness loss
	Low Temperature Impact	ASTM D746	No cracking at -20°C
Electrical	Dielectric Strength	ASTM D149	217 kV/cm @ 1.27 mm 550 V/mil min @ 0.050"
	Tracking and Erosion Resistance	ASTM D2303 Step Voltage Method (Initiate @ 2.5 kV)	No tracking or erosion to top surface or flame failure after: 200 minutes



MVLC-14 Tool



MVLC-18 Tool



MVLC-Hand-Tool-02



MVLC-38 Tool



MVLC-14 Hand Tool

Ordering Information

Conductor Size	Voltage Class	Description	UOM: m (ft) Spool Length*	Overhead Installation Tool
Up to 99 mm ² (up to 3/0 kcmil)	15kV	MVLC-14-A/U	100m (330 ft)	Contact Tyco Electronics
Up to 99 mm ² (up to 3/0 kcmil)	25kV	MVLC-14-A/241	100m (330 ft)	Contact Tyco Electronics
Up to 185mm ² (up to 397kcmil)	15kV	MVLC-18-A/U	75m (247ft)	MVLC-18-TOOL-01
Up to 185mm ² (up to 397kcmil)	25kV	MVLC-18-A/241	75m (247ft)	MVLC-18-TOOL-02
Up to 800mm ² (up to 1590kcmil)	15kV	MVLC-38-A/U	50m (165ft)	Contact Tyco Electronics
Up to 800mm ² (up to 1590kcmil)	25kV	MVLC-38-A/241	50m (165ft)	Contact Tyco Electronics

Note: Non-Impact Hydraulic Drill available. * 6ft cut lengths also available. Order OLIC-C & S1251 for connectors/drainage points. MVLC-Hand-Tool-02 will install both MVLC-18 and MVLC-38 products. MVLC-Hand-Tool-14 will install MVLC-14 products only.

Technical Reports

EDR-5308 MVLC Electrical Testing (-18)

EDR-5309 MVLC Material Qualification to PPS 3010/42

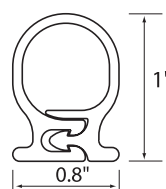
EDR-5316 Summary of Wind and Ice/Snow Load testing of MVLC at EA Technology

Product Selection

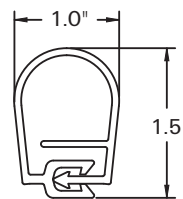
Product Weight (Nominal)

MVLC-14	0.27kg/m (0.18 lbs/ft)
MVLC-18	0.40kg/m (0.27 lbs/ft)
MVLC-38	0.52kg/m (0.35 lbs/ft)

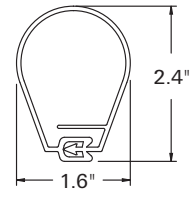
Nominal Dimensions



MVLC-14



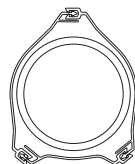
MVLC-18



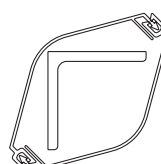
MVLC-38

For Busbar Applications

2"	use 1-MVLC-38 & 1-MVLC-18
2.5"	use 2-MVLC-38
3"	use 2-MVLC-38
4"	use 2-MVLC-38 & 1-MVLC-18



4" busbar with 2-MVLC-38
1-MVLC-18



2.5" L busbar with 2-MVLC-38



2 MVLC-38 on busbar with BCIC

Tyco Electronics Corporation
8000 Purfoy Road
Fuquay Varina, NC 27526-9349
Tel: 800.327.6996
Fax: 800.527.8350
E-mail: naenergy@tycoelectronics.com
<http://energy.tycoelectronics.com/raysulate>
www.tycoelectronics.com

Copyright 2005, 2007 - 2009 Tyco Electronics Corporation.
All rights reserved.
1308377 E113 03/09

All of the above information, including drawings, illustrations and graphic designs, reflects our present understanding and is to the best of our knowledge and belief correct and reliable. Users, however, should independently evaluate the suitability of each product for the desired application. Under no circumstances does this constitute an assurance of any particular quality or performance. Such an assurance is only provided in the context of our product specifications or explicit contractual arrangements. Our liability for these products is set forth in our standard terms and conditions of sale. Raychem, TE logo, and Tyco Electronics are trademarks.

Energy Division - a pioneer in the development of economical solutions for the electrical power industry. Our product range includes: Cable accessories, connectors & fittings, electrical equipment, instruments, lighting controls, insulators & insulation enhancement and surge arresters.