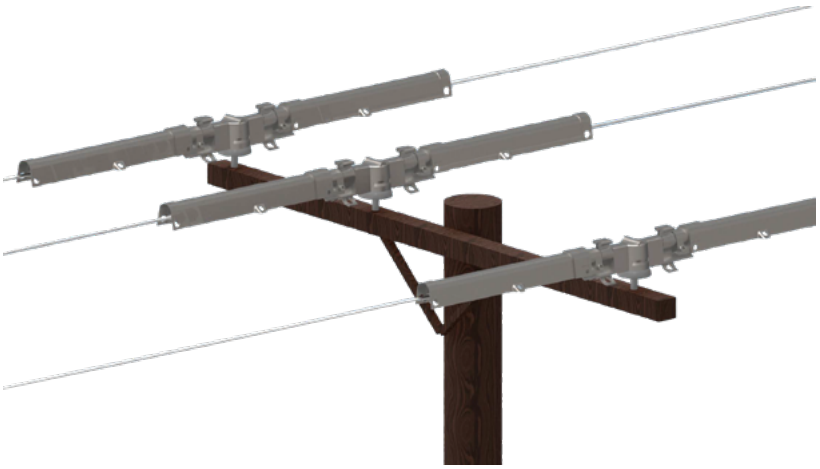
RAYCHEM DEAD END RAPTOR COVERS BCIC/BCAC

WILDLIFE ASSET PROTECTION PRODUCTS



EASY TO INSTALL ON LIVE LINE USING HOT STICK

APPLICATIONS

- Dead End Clamps
- Tension Insulators
- Double Pin Insulators
- Horizontal Insulators

RELEVANT STANDARDS AND TESTING

- Tracking Erosion Resistance - ASTM D2303
- Thermal Endurance - IEC 60216
- Tensile Strength - ASTM D412
- UV Weathering - ASTM G154

KEY FEATURES

- UV and weather resistant material
- High anti-tracking
- High mechanical stiffness and chemical resistant
- Flame retardant
- REACH and RoHS compliant

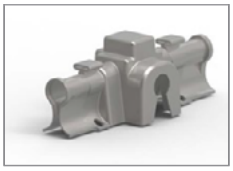
TE Connectivity TE Raychem insulating covers BCIC/BCAC have successfully eliminated outages from any wildlife for years. Our hot-stickable distribution covers prevent raptor-caused outages on medium-voltage distribution lines. They are also available with Raychem V0+ material with better flame retardant performance than standard Raychem material.

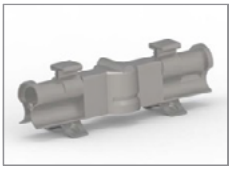
Our covers can be installed with a hot stick on a pin and they can be used for horizontal and dead end insulator applications. The main cover has built-in rigid clips, providing a reliable mechanical hold.

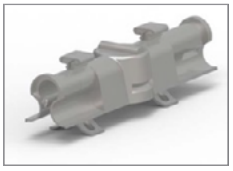
When placed together with the extension arms, the raptor cover provides over 2 m (6 feet) of coverage on conductor sizes from #6 to 795 kcmil, equivalent to a diameter of 4–22 mm (0.16 inch–0.89 inch). The extension arm is designed to nest over vibration dampers without any interferences and interlock over the raptor cover. This modular design can extend coverage beyond a single arm with its integrated locking system.

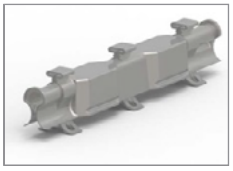
The main cover fits a variety of porcelain and polymer-type insulators without disturbing the BIL levels of the insulators. The flexible center cover allows conductors to exit from the insulator at angles up to 30° from any axis: all without having to trim the cover.

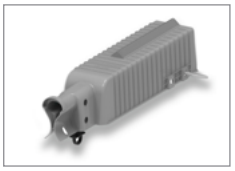

BCIC-GT-PIN/CT (B6)


BCIC-GT-HZ (B6)


BCIC-GT-PIN (B6)


BCIC-GT-PIN-XL (B6)


BCIC-GT-DPIN (B6)


BCAC-G-DEADEND (B3)

PRODUCT SELECTION INFORMATION

TE Raychem Standard Material	TE Raychem V0+ Material	Application	Conductor Diameter Ø mm (inches)	Conductor Size awg / kcmil	ANSI Insulator Type	Length mm (inches)	Std Pack Size (pc)
BCIC-GT-PIN (B6)	BCIC+GT-PIN (B6)	Porcelain Pin, Post	4 - 22 (0.16 - 0.89)	#6 - 795	55-4, 55-5, 57-2	508 (20)	6
BCIC-GT- PIN/ CT (B6)	BCIC+GT- PIN/ CT (B6)	Vise Top	4 - 22 (0.16 - 0.89)	#6 - 795	Vise Top	508 (20)	6
BCIC-GT-PIN-XL (B6)	BCIC+GT-PIN-XL (B6)	Porcelain Pin, Post	4 - 22 (0.16 - 0.89)	#6 - 795	56-1, 55-6, 55-7	533 (21)	6
BCIC-GT-DPIN (B6)	BCIC+GT-DPIN (B6)	Porcelain Pin, Double Pin	4 - 22 (0.16 - 0.89)	#6 - 795	56-1, 55-6, 55-7	775 (30.5)	6
BCIC-GT-HZ (B6)	BCIC+GT-HZ (B6)	Horizontal Post	4 - 22 (0.16 - 0.89)	#6 - 795	Porcelain or Polymeric	533 (21)	6
BCIC-G-DE/ CL-01(B3)	BCIC+G-DE/ CL-01(B3)	Dead End	4 - 22 (0.16 - 0.89)	#6 - 795	Porcelain or Polymeric	787 (31)	6
BCAC-G-DEADEND (B3)	BCAC+G-DEADEND (B3)	Dead End	4 - 22 (0.16 - 0.89)	#6 - 795	Porcelain or Polymeric	675 (26.6)	3
BCAC-G-ARM-01 (B12)	BCAC+G-ARM-01 (B12)	Extension Arm	4 - 22 (0.16 - 0.89)	#6 - 795	Extension Arm for G and GT Series	685 (27)	12

Material Performance Attributes	TE Raychem Standard Material	TE Raychem V0+ Material
Tracking and Erosion Resistance (TERT), per ASTM D2303 or IEC 60587 STEP test method, (with abrasion)		
This test predicts behavior under contamination and leakage current stress. The sample is abraded to represent testing on an aged sample.	>300 min.	>180 min.
UV Performance ASTM G154		
This test assesses the damage from UV exposure in intense environments and provides a proxy for 30+ life expectancy.	5000 hrs	5000 hrs
Thermal Aging Performance		
Accelerated Ageing ASTM D2671 This accelerated aging test demonstrates material robustness to short term extreme temperature events	168 hrs at 150°C	168 hrs at 150°C
Thermal Endurance / Thermal Index IEC 60216 This test predicts life expectancy, and ties the material's tested values to real-life data from 30+ years of actual service life in the field	105°C min (20,000 hrs)	105°C min (20,000 hrs)
Flammability Performance		
Fire Retardancy UL94 and IEC 60695-11-10 Assessment of materials fire and flame propagation performance	HB40	V0
Flame Retardancy IEC 60695-2-11 and ASTM D2303 Assessment of materials ability to resist ignition through temperature and electrical surface activity	GWERT 650°C TERT 300 mins	GWERT 650°C TERT 180 mins
Halogen Free	Yes	No
Electrical Product Performance Attributes		
Wet Withstand IEEE-4-1995 and IEEE 1656-2010 (Guide), Fixed Electrode		
This test demonstrates a product and material's ability to protect against animal contact up to 35 kV	Yes	Yes
Wet Power Frequency Flashover & Lightning Impulse Withstand IEEE-4-1995 and IEEE 1656-2010 (Guide)		
This test demonstrates whether a cover affects the electrical perform of the insulator that it is covering	Yes	Yes
IEEE Compliance		
IEEE-1656 (Guide for testing wildlife protection devices on overhead equipment up to 38 kV) IEEE-1264-2022 (Guide for animal mitigation for electric power supply substations)	Yes	Yes

PRODUCT SELECTION INFORMATION

Properties	Test Method	BCIC Performance	BCIC+ Performance	BCAC Performance	BCAC+ Performance
Product Tests					
AC Wet Withstand	IEEE Std 4	>25 kV	>25 kV	>25 kV	>25 kV
Salt Fog (1000hrs)	IEEE Std 62217	>25 kV	>25 kV	>25 kV	>25 kV
Wind Resistance		208 kmh (130 mph)	208 kmh (130 mph)	208 kmh (130 mph)	208 kmh (130 mph)
Physical Material Tests					
Tensile Strength	ASTM D412	12 MPa min. 1740 psi min.	7 MPa min. 1015 psi min.	17 MPa min. 2450 psi min.	9 MPa min. 1300 psi min.
Ultimate Elongation	ASTM D412	500% min.	200% min.	25% min.	25% min.
Accelerated Aging 168 hrs at 150±2°C	ASTM D2671 ASTM D412	12 MPa min. 1740 psi min.	7 MPa min. 1015 psi min.	17 MPa min. 2450 psi min.	9MPa min. 1300 psi min.
Tensile Strength					
Ultimate Elongation		500% min.	50% min.	25% min.	25% min.
UV Weathering Resistance Ultimate Elongation	ASTM G154 Cycle 1 & Cycle 3	200% min.	200% min.	25% min.	25% min.
Thermal Endurance	IEC 60216	105°C (221°F)	105°C (221°F)	105°C (221°F)	105°C (221°F)
Flammability	IEC-60695-11-10 METHOD A IEC-60695-11-10 METHOD B UL94 VB	HB40 - -	HB40 V0 V0	HB40 - -	HB40 V0 V0
Electrical Material Tests					
Electrical Material Tests	ASTM D149	160 kV/cm at 2.5 mm 400 V/mil at 0.1 inches	180 kV/cm at 2.5 mm 450 V/mil at 0.1 inches	150 kV/cm at 2.5 mm 380 V/mil at 0.1 inches	150 kV/cm at 2.5 mm 380 V/mil at 0.1 inches
Tracking and Erosion Resistance	ASTM D2303 Step Voltage Method initiating at 2.5 kV	No tracking or erosion to top surface or flame failure after 180 minutes	No tracking or erosion to top surface or flame failure after 180 minutes	No tracking or erosion to top surface or flame failure after 300 minutes	No tracking or erosion to top surface or flame failure after 180 minutes

TECHNICAL REPORTS

Document Reference	Document
PPR-3326	BCIC Material Test Report
PPR-3699	BCIC+ Material Test Report
PPR-3696	BCAC Material Test Report
PPR-3697	BCAC+ Material Test Report
EDR-5620	BCIC-GT Product Test Report
PPR-3774	BCIC-GT Wind Resistance Test Report
EDR-5827	BCAC Dead End Product Test Report
EDR-5609	BCIC Raptor Cover Product Test Report

INSTALLATION INSTRUCTIONS

Document Reference	Document
EPP-4376	BCAC-DEADEND Installation Instructions
EPP-3767	BCIC-GT Installation Instructions
PII 70140	BCIC & BCAC Extension Arm Installation Instructions

BCAC-G-ARM-01 (B12)

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