

Raysulate BCIC Bird protection cap for medium voltage overhead lines





Raysulate BCIC Bird protection cap for medium voltage overhead lines

The bird protection cap was developed by Tyco Electronics Energy Division to protect birds and other animals against dangerous proximity to live conductors or the tops of insulators mounted on concrete or metal poles.

The cap is made from a flexible polymer, which has an especially high UV stability, track and weather resistance. The material used has given exceptional performance in many similar applications.



The design of the cap permits its application with different insulators up to 24 kV rating.

The bird protection cap was designed in accordance with the requirements for bird protection given in DIN VDE 0210/12.85 paragraph 8.10. A special feature is the all round protection offered. The length of conductor to be insulated may be varied by shortening the extensions individually.

Arrangements with the two insulators (double security) make suitable for bent conductors a necessity. The bird cap's flexible material allows it to conform to existing conductor arrangements.

Installation is very simple. No tools are required. The cap and the extension pieces are folded over the parts to be protected and are closed with channel clips.

This secure fixing arrangement assures maximum operating safety, even in adverse weather conditions such as storms (see the result of the wind tunnel tests overleaf).





Installation applications



To fit on different fixing arrangements and conductor clamps, the cap is designed to be flexible.



The bird protection cap BCIC is suitable for insulators with the following measurements.

A :	60 – 120 mm	1	
B: 130 – 160 mm			
C :	50 – 100 mm	1	
Z		B	
,		C C	
	5	$\overline{\langle}$	







*The extension pieces can be shortened if necessary.

Dimensions in mm

Bird Protection Cap for Medium Voltage Overhead Lines

Material specifications	Test method	Typical Value	
Density	ISO/R 1183, DIN 53479 Method A	1.3 g/cm ³	
Tensile strength	ISO 37, DIN 53455	10 MPa	
Ultimate elongation	ISO 37, DIN 53455	590%	
Low temperature flexibility Cold bath test	ASTM D 2671 Method C	passed	
Dielectric strength	IEC 243	200 kV/cm	
Electrical permittivity	IEC 250	3.4	
Volume resistivity	IEC 93, VDE 0303/3	10 ¹⁵ Ω cm	
Leakage current	in salt fog at 15 kV	< 2 mA	
AC voltage withstand test	phase to earth 24 kV, 1 min.	passed	
Resistance to bird droppings	aged in uric acid at 60°C, 1 week	no change in tensile strength or no change in ultimate elongation	
Temperature cycling	from –30°C to +60°C 2 cycles per day	after 50 cycles, no change in components/system	
Wind tunnel test	up to 175 km/h windspeed, no permanent deformation of the installed system		

Full technical details are given in Raychem test report UVR 8154 - available on request

Ordering information

Part number	BCIC-3312
Kit contents	1 bird protection cap 2 short closure channel clips
	2 extension pieces
	2 long closure channel clips 2 tie-wraps

The bird protection cap protects the conductor over a length of 2 m. The extension pieces may be cut to length.

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. ALR, AMP, AXICOM, B&H, BOWTHORPE EMP, CROMPTON INSTRUMENTS, DORMAN SMITH, DULMISON, GURO, HELLSTERN, LA PRAIRIE, MORLYNN, RAYCHEM, and SIMEL 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.

For more information and your country contact person, please visit us at: http://energy.tycoelectronics.com

Tyco Electronics Raychem GmbH, Energy Division Finsinger Feld 1, 85521 Ottobrunn/Munich, Germany Phone: +49-89-6089-0, Fax: +49-89-6096345