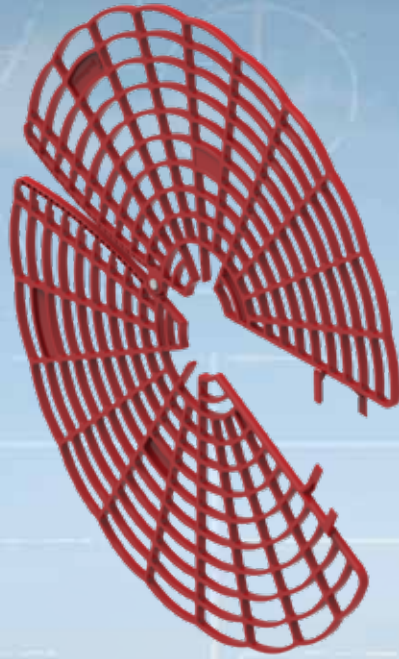




BUS INSULATOR ANIMAL GUARD (BISG-24)

WILDLIFE AND ASSET PROTECTION PRODUCTS

KEY FEATURES

- Energized installation by one person
- Quick and easy wedge driven design
- Excellent tracking resistance
- Fits insulation core diameters ranging from 2.5" (62 mm) through 5.0" (125 mm)
- Rugged, non-tracking, UV-resistant polymer
- REACH and RoHS compliant

TE Connectivity's (TE) Raychem BISG-24 improved isolation guard prevents animal-caused outages in electrical substation equipment.

BISG discs have been successfully eliminating outages from squirrels, raccoons, opossums, cats and other animals in substations for years. The BISG-24 guard has been designed to provide the same great protection with added features. Its "invisible" design allows easier visibility of switch blades and other equipment components through the guard. This new design allows for easy field modifications and can be reduced by trimming along the grill ribs for tight phase-to-phase insulator applications.

Superior high voltage outdoor materials are used in the BISG-24 guard design. The rugged, non-tracking, UV-resistant polymer ensures long-term performance even in the most extreme environmental conditions.

The BISG-24 guard can be installed on energized equipment by one person. The new design incorporates a wedge device, which makes hot-stick installations on vertical and horizontal mounted insulators quick and easy.

Customers can count on consistent, high quality products, driven by TE's proven innovation and backed by our extraordinary customer support.

Bus Insulator Animal Guard (BISG-24)

TE's Wildlife and Asset Protection products and systems of tubes, tapes, sheets, pre-formed covers and barriers provide a proven, cost-effective and easy-to-install solution to bird, animal and weather related outages.



PRODUCT PERFORMANCE

Test

Power Arc	14.4 kV RMS, No evidence of burns or flames
Test Current	10 kA RMS 10 cycles, No dislodging of BISG guard from insulator location
Wind Tunnel	70 MPH for 10 min., No dislodging of BISG guard from insulator location

Physical

Key Material Properties	Test Method	Required
Tensile Strength	ASTM D2628	17 MPa min., 2450 psi min.
Ultimate Elongation	ASTM D2638	25% min.

Electrical

Tracking and Erosion	ASTM 2303 Resistance	No tracking, erosion to top surface or flame. Stop Voltage Method Failure after 1 hr. at 2.5 kV 1 hr. at 2.75 kV 1 hr. at 3.0 kV Initiate at 2.5 kV and 20 min at 3.25 kV
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Selection

Description	Insulator Core Diameter Range	Overall Product Diameter*	Color	Std. Pack
BISG-24-01(B10)	2.5" - 5.0" (62 mm - 125 mm)	24" (600 mm)	Red	10
BISG-G-24-01(B10)	2.5" - 5.0" (62 mm - 125 mm)	24" (600 mm)	Gray	10

* Overall product diameter can be trimmed down to 17" (432 mm) diameter.

TECHNICAL REPORT

EDR-5517	Bus Insulator Squirrel Guard (BISG-24-01) Mechanical/Electrical Evaluation
EDR-5311	Rigid Red Barrier Board (RRBB) Product Qualification Report BISG Material Test Report

INSTALLATION INSTRUCTIONS

EPP-3146-6/18	Installation Instructions for BISG-24-01
PII-56149	

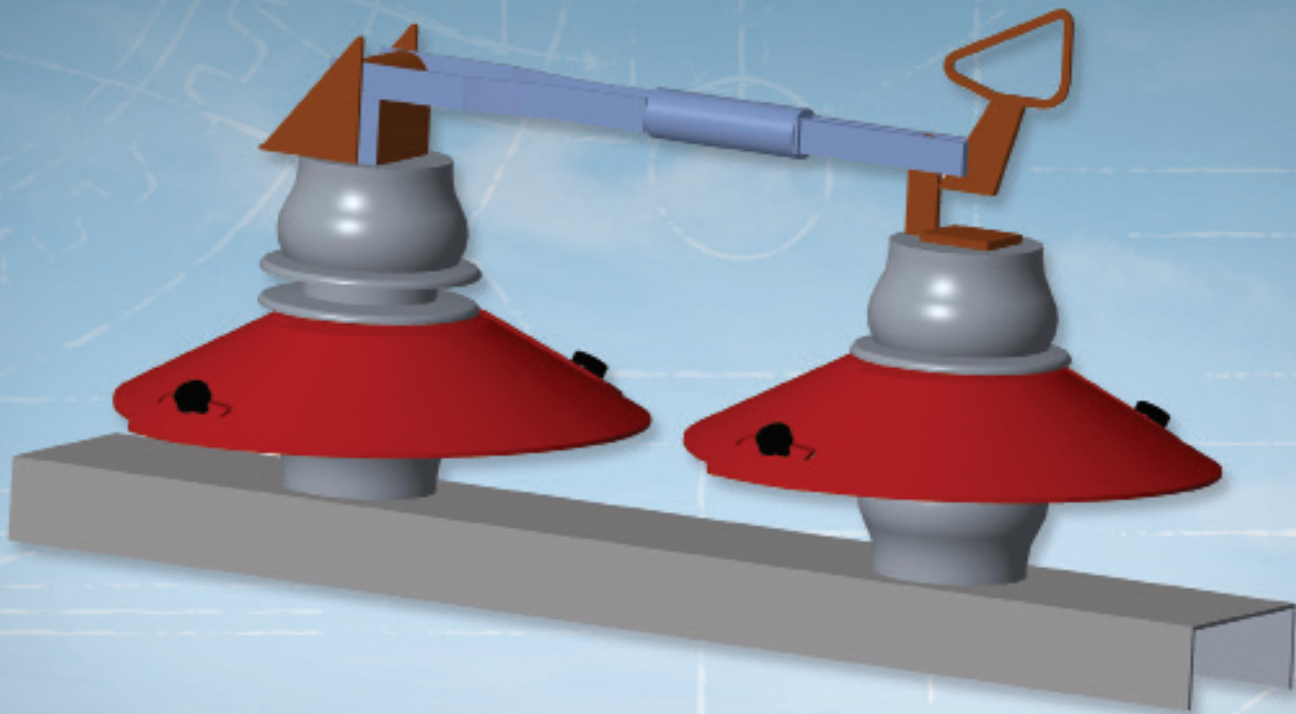
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ISOLATING GUARD FOR DISCONNECT SWITCHES (BISG-100/400)

WILDLIFE AND ASSET PROTECTION PRODUCTS

KEY FEATURES

- Works on disconnect switches to prevent animal caused flashovers
- Rugged, non-tracking
- UV-resistant polymeric ensures long-term performance even in the most extreme environmental conditions
- Fast and easy to install, with a bolted design
- Provides a tight and secure fit to the insulator and bushing
- Design eliminates loosening or drooping caused by wind, snow, ice, or animals
- REACH and RoHS compliant

TE Connectivity's (TE) Raychem BISG isolating devices have been successfully eliminating outages from squirrels, raccoons, opossums, cats, and other animals in substations for years. The BISG guard is designed with a solid material pattern and steep angle to provide protection on disconnect switches with additional guano/pollution protection. This steep design aids in the self-cleaning and run-off of pollutants, prevents birds and animals from perching while maintaining accessibility. Same high-performance material: the rugged non-tracking, UV-resistant polymer ensures long-term performance even in the most extreme environmental conditions.

The BISG-100/400 guard allows easy installation with a bolted design that positively and tightly secures the device onto the insulator or bushing, eliminating loosening or drooping caused by wind, snow, ice, or animals.

Customers can count on consistent, high quality products, driven by TE's proven innovation and backed by our extraordinary customer support.

Isolating Guard for Disconnect Switches



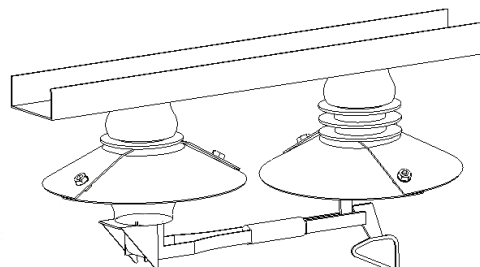
TE's Wildlife and Asset Protection products and systems of tubes, tapes, sheets, pre-formed covers and barriers provide a proven, cost-effective and easy-to-install solution to bird, animal and weather related outages.

PRODUCT SELECTION INFORMATION: DIMENSIONS IN INCHES (mm)

Description	Shed Diameter	Fits Core Diameter
BISG-100/400	16 (400)	1.50 - 4.50 (38 - 115)
BISG-G-100/400	16 (400)	1.50 - 4.50 (38 - 115)

ORDERING INFORMATION

Description	Standard Pack
BISG-100/400 (B3)	3
BISG-G-100/400 (B3)	3



PRODUCT PERFORMANCE

Test

Wind Tunnel	70 MPH for 10 min., No dislodging of BISG guard from insulator location
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Physical

Key Material Properties	Test Method	Required
Tensile Strength	ASTM D2628	17 MPa min., 2450 psi min
Ultimate Elongation	ASTM D2638	25% min

Electrical

Tracking and Erosion	ASTM 2303 Resistance	No tracking, erosion to top surface or flame. Stop Voltage Method Failure after 1 hr. at 2.5 kV 1 hr. at 2.75 kV 1 hr. at 3.0 kV Initiate at 2.5 kV and 20 min at 3.25 kV
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Selection

Description	Insulator Core Diameter Range	Overall Product Diameter*	Application	Color	Std. Pack
BISG-100/400 (B3)	1.50-4.50" (38-115 mm)	16" (400 mm)	Standard installation	Red	3
BISG-G-100-400 (B3)	1.5" - 4.50" (62 mm-125 mm)	16" (400 mm)	Standard installation	Gray	3

* Overall product diameter can be trimmed down to 17" (432 mm) diameter.

TECHNICAL REPORT

EDR-5311	Rigid Red Barrier Board (RRBB) Product Qualification Report BISG Material Test Report
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INSTALLATION INSTRUCTIONS

EPP-3148-0618 PII-70271	Installation Instructions for BISG-100/400
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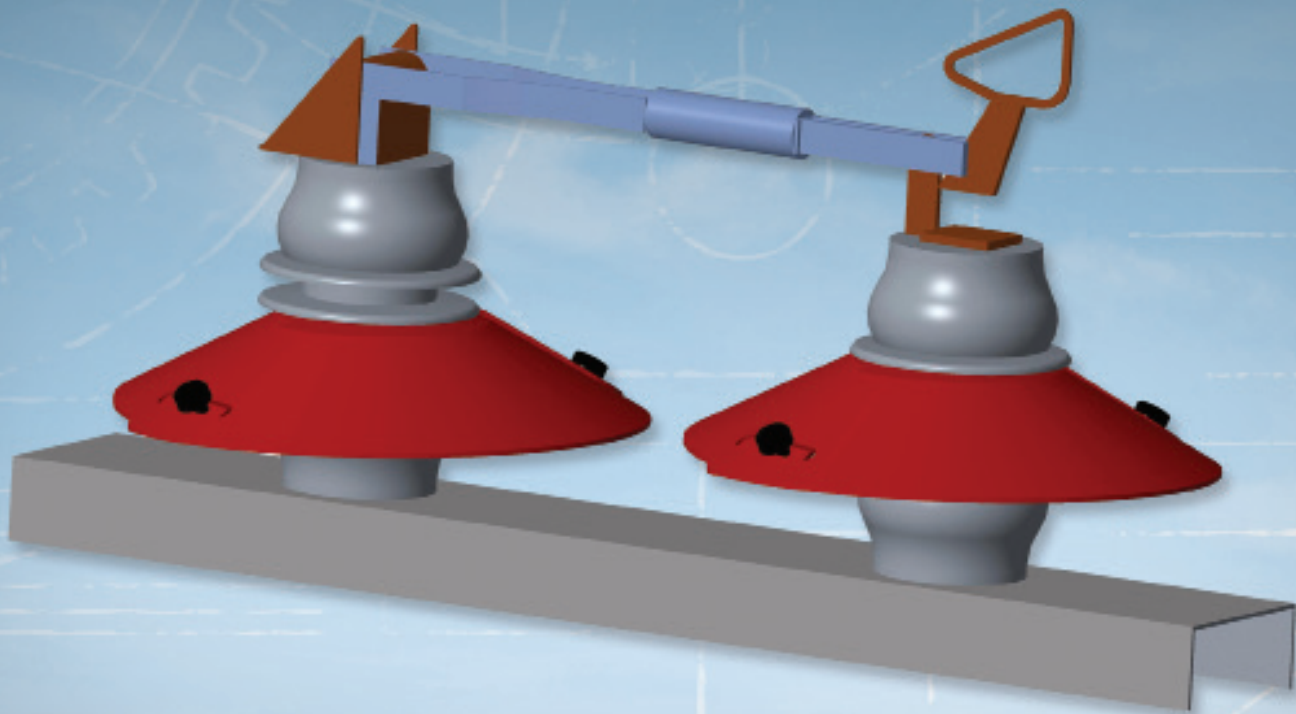
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Benelux:	+ 32 16 508 695
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China:	+ 86 (0) 400-820-6015



ISOLATING GUARD FOR DISCONNECT SWITCHES (BISG-100/400)

WILDLIFE AND ASSET PROTECTION PRODUCTS

KEY FEATURES

- Works on disconnect switches to prevent animal caused flashovers
- Rugged, non-tracking
- UV-resistant polymeric ensures long-term performance even in the most extreme environmental conditions
- Fast and easy to install, with a bolted design
- Provides a tight and secure fit to the insulator and bushing
- Design eliminates loosening or drooping caused by wind, snow, ice, or animals
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Isolating Guard for Disconnect Switches



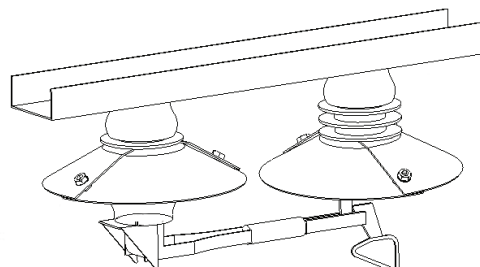
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BISG-100/400	16 (400)	1.50 - 4.50 (38 - 115)
BISG-G-100/400	16 (400)	1.50 - 4.50 (38 - 115)

ORDERING INFORMATION

Description	Standard Pack
BISG-100/400 (B3)	3
BISG-G-100/400 (B3)	3



PRODUCT PERFORMANCE

Test

Wind Tunnel	70 MPH for 10 min., No dislodging of BISG guard from insulator location
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Physical

Key Material Properties	Test Method	Required
Tensile Strength	ASTM D2628	17 MPa min., 2450 psi min
Ultimate Elongation	ASTM D2638	25% min

Electrical

Tracking and Erosion	ASTM 2303 Resistance	No tracking, erosion to top surface or flame. Stop Voltage Method Failure after 1 hr. at 2.5 kV 1 hr. at 2.75 kV 1 hr. at 3.0 kV Initiate at 2.5 kV and 20 min at 3.25 kV
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Selection

Description	Insulator Core Diameter Range	Overall Product Diameter*	Application	Color	Std. Pack
BISG-100/400 (B3)	1.50-4.50" (38-115 mm)	16" (400 mm)	Standard installation	Red	3
BISG-G-100-400 (B3)	1.5" - 4.50" (62 mm-125 mm)	16" (400 mm)	Standard installation	Gray	3

* Overall product diameter can be trimmed down to 17" (432 mm) diameter.

TECHNICAL REPORT

EDR-5311	Rigid Red Barrier Board (RRBB) Product Qualification Report BISG Material Test Report
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INSTALLATION INSTRUCTIONS

EPP-3148-0618 PII-70271	Installation Instructions for BISG-100/400
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