



Installation Instruction EPP-1935-11/11

Screened Separable Elbow Connector 400 A for Bushing Profile Type B in accordance to EN 50181 and Single Core Polymeric Insulated Cable with Wire Shield 36 kV

Type: RSES-64xx

Safety Warning:

It is essential to observe the applicable safety regulations for working with high voltage equipment. For precise safety information please contact the responsible authority.

Tyco Electronics Raychem GmbH Energy Division Finsinger Feld 1 85521 Ottobrunn/Germany 0049-89-6089-0 tel 0049-89-6096-345 fax www.te.com

Before Starting

Check to ensure that the kit you are going to use fits the cable.

Refer to the kit label and the title of the installation instruction.

Components or working steps may have been improved since you last installed this product.

Carefully read and follow the steps in the installation instruction.

Kit Contents



Cross Section	Ø Core In: 24 k		Reference No.	Reference No. Cross Section		Ø Core Insulation 36 kV	
mm²	min	max	Al/Cu	mm²	min	max	Al/Cu
70–95	22.4-35.5		RSES-6451	50-95	22.4-35.5		RSES-6451
95-240			RSES-6452	95-150			RSES-6452
185-300			RSES-6454	120-240	28.9-42.0		RSES-6453
				185-300	20.9-42.0		RSES-6455

The Information contained in these installation instructions is for use only by installers trained to make electrical power installations and is intended to describe the correct method of installation for this product. However, TE Connectivity has no control over the field conditions which influence product installation.

It is the user's responsibility to determine the suitability of the installation method in the user's field conditions. TE Connectivity's only obligations are those in TE Connectivity's standard Conditions of Sale for this product and in no case will TE Connectivity be liable for any other incidental, indirect or consequential damages arising from the use or misuse of the products.

Raychem, TE Connectivity and TE connectivity (logo) are trademarks.

© 2011 Tyco Electronics Raychem GmbH.

Cable Preparation



Clean and degrease the end of the oversheath for a length of 1 metre with solvent wipe.



Cable with wire shield

Position the cable with sufficient overlap to the bushing centre.

Mark the oversheath 235 mm below the bushing centre.

Cut the cable 600 mm above the mark and remove the oversheath over this distance. Cut off Cu-spiral screening tape flush with end of outer sheath. **Edges** projecting beyond the outer sheath **must be avoided**, so that the stress cone cannot be damaged during push on procedure.

Wrap one turn of sealant tape (grey) with no overlap and slight tension around the end of the oversheath.

Cut the tape and push ends together.

Bend the shielding wires back onto the oversheath.

Avoid crossing the individual wires. Temporarily secure the wires with a tape or wire binder.



Cut the core according to the drawing. Remove the core screen with appropriate screen cutting tool according to the drawing. The surface of the insulation should be free from all traces of conductive material. Compare the diameter over insulation with application range as shown in **Table 1** as well as with marking of supplied stress cone.



Cut back the insulation according to dimension **K given in drawing details**.

Mechanical lugs

Dimension **K** is identical to depth of bore. Barrel butts against insulation.



EPP-1935-11/11 Page 3/6

Core Preparation

Table 2 – Use of inserts

Lug Type Cross Section (Stranded mm ² (RM)	BLMC-25/95-14	BLMC-95/240-14	BLMC-185/300-14
35	YES		-
50	YES		-
70	NO		-
95	NO	YES	-
120	-	YES	-
150	-	YES	-
185	-	NO	YES
240	-	NO	YES
300	-	-	NO



Recommendation for large cross sections

Convenient push on process of the stress cone requires chamfering of the insulation for cross section 240 mm² and above. See drawing!

Apply onto the inner surface of the stress cone at the bottom end a 3 cm long sausage of assembly grease and spread it evenly over the inner surface. Use assembly grease without sponge top. Push the stress cone in one sequence with a twisting movement over the assembly aid completely onto the insulation until the inner collar of the stress cone stops at the oversheath cut back of the cable.

Note: The arrow on the stress cone should point onto the cable sheath. Remove the assembly aid from the conductor.



7

Slide the small protective bag (assembly aid) over the exposed conductor and tie it down with a PVC tape as shown in the drawing. Gently lubricate the outer surface of the protective bag and the core insulation with a thin layer of assembly grease. Apply the grease layer with the sponge top as shown.

Mechanical lugs with inserts

The insert has to be used as noted in **Table 2**.

Ensure that the retention of the insert is locked into the appropriate hole in the barrel. Align the palm hole with the bushing centre.

Install the cable lug using a lug fixture. Tighten the bolt set alternately in several equal steps until the heads shear off.

Remove any sharp edges.





Mounting of connector body



Apply a thin layer of grease onto the outer surface of the stress cone with the sponge top.



Clean and degrease the bottom and front end of the screened connector body and apply a thin layer of grease onto the inner surface without the sponge top as shown.

Note: Use one way glove to evenly lubricate the inner surface at a length of approximately 50 mm.

Push screened connector body with no interruption onto the stress cone and hold it. Continue **immediately** with the next step.



Insert the contact pin into the elbow and fasten it with the Allen key. Apply enough torque until the Allen key is deformed.



Clean the conical surface of the bushing and lubricate it with the assembly grease as shown.



EPP-1935-11/11 Page 5/6



Insert the hooks of the bail restraint into the eyes of the bushing latch. Align front end of elbow with bushing centre and slide the elbow onto the bushing.



Place the bail restraint over the elbow until the positioning plate mates its proper groove.

Add two additional turns of the nut for final fixation of the product.

Ensure that the grounding lead is fastened tightly.

Fix the shielding wires with a wire binder (four layers) at the end of the stress cone. Gather the wires together to form an earth lead. Install the connection lug supplied in the kit at the end of the shielding wires.

Perform connection to ground.



Screened separable connector completed.

Please dispose of all waste according to environmental regulations.





EPP-1935-11/11 Page 6/6