



INSTALLATION INSTRUCTIONS

SLCAB_BF1 Heaters and SLMCAB_BF1 Self-Regulating Heater Cables in CLASS I DIVISION I Areas

Introduction

These instructions provide for the installation of BriskHeat SLCAB(3,5,8,10)(120,240)BF1 and SLMCAB(5,10,15)(120,240)BF1 self-regulating heating cables in Class I Division I areas.

Description

These heaters employ a semi-conductive self-regulating conductive core covered with an insulating jacket. This jacket is covered by a tinned copper braid, which is further covered by a fluoropolymer outer jacket.

Required Components for Installation

Power Input Kit

Termination Kit

Pipe straps or clamps, for pipe sizes other than 2" to 6" (51mm to 152mm)

Ground fault protection device with nominal 30 mA or lower trip level

Required Tools for Installation

Pipe wrench

Crescent wrench or socket wrench set

Wire cutters/strippers

Crimping tool

Razor blades or razor knife

Screw driver

Installation Precautions

All Division 1 hazardous area installations require ground fault protection devices with a nominal 30 mA trip setting. Lower trip levels may also be used.

Attaching Heater to Pipe

1. Use fiberglass tape or appropriate pipe straps, secure heater to pipe.
2. To ensure maximum heat transfer, lay heater as flat as possible on pipe and cover with required amount of insulation.

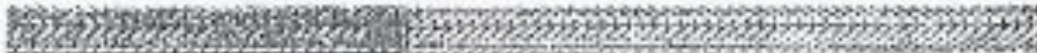
Power Input Connection Instructions
Using Power Input Kit

Power Input Kit SLCABUC1 Contents

<u>Description</u>	<u>Quantity</u>
Connection Box with Cover	1
Seal Fitting	1
Standoff "T" Fitting	1
3/4NPT Threaded Plug	1
16-14AWG Insulated Butt Connector	2
Closed End Crimp Connector	1
Tube of Silicone Sealant	1
Roll of Fiberglass Tape	1
Sealing Compound	1
Packing Fiber	1
Pipe Straps, for pipe 2in to 6in (51mm to 152mm)	2
Caution Label	1
Instruction Sheet	1

Instructions

1. Remove the outer jacket 5in (127mm) from the end of product, exposing the metallic braid.

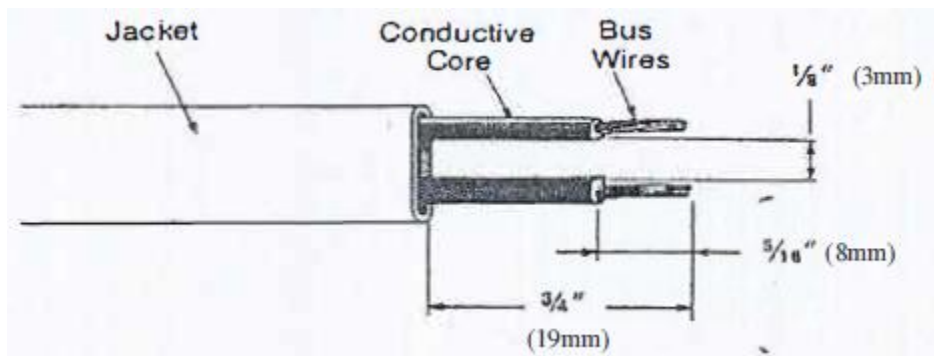


2. Unravel the metallic braid 2in (51mm) from end of product exposing the inner jacket. Twist unraveled braid into pigtail and trim end to blunt edge.

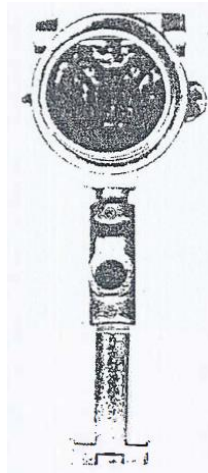


3. Remove the heater inner jacket 3/4in (19mm) from the end, exposing the black core.
4. Cut out a strip of core material about 1/8in (3mm) wide by 3/4in (19mm) long from the center of the heater.

5. Remove 5/16in (8mm) of core material from each conductor, being careful not to cut the conductor strands.



6. Attach crimp connector to each of the exposed conductors.
7. Fasten standoff T fitting to seal fitting and seal fitting to connection box.



8. Insert the entire heater end (pigtail and bus wire ends) through standoff T fitting and seal fitting and box, bring 6in (152mm) of heater through front of box.
9. Temporarily fasten standoff T fitting to the pipe using appropriate metal pipe straps or clamps.
10. Bring power wires into the box, connect power wires to heater bus wires.
11. Using fiberglass tape, wrap each of the 2 connectors separately, completely covering the crimp connectors.

12. Place a generous amount of RTV sealer over and around the taped power connection, making sure all exposed core is covered.
13. Using fiberglass tape, wrap power connections together, completely covering RTV sealant.
14. Insert the ground wire and pigtailed metallic braid into closed end crimp connector. Firmly crimp.
15. Remove recessed plugs from seal fitting.
16. Loosen standoff T fitting to pipe assembly and pull slightly away from pipe to allow the heater to be pulled through the box, seal fitting and T until the end of the outer jacket (jacket over braid) is centered in the large hole in the seal fitting.
17. Retighten standoff T fitting to pipe. Firmly secure.
18. Tuck any extra power wires into the box and tighten cover firmly. Install plugs in any unused box hub.
19. Place packing material around inside base of seal fitting at the connection to the standoff T fitting.
20. Place large recessed plug back in seal fitting. Screw in until met with resistance.
21. Take sealing compound pouch and knead it until compound and liquid are thoroughly mixed.
22. Cut off corner of pouch and pour mix into seal fitting.
23. Close fitting opening with small recessed plug.
24. Tighten large recessed plug on seal fitting.
25. Do not disturb for 24 hours until the compound has completed cured.

End Termination Instructions
Using Termination Kit

Power Input Kit SLCABKC1 Contents

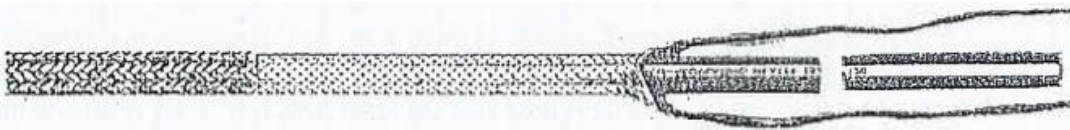
<u>Description</u>	<u>Quantity</u>
Connection Box with Cover	1
Seal Fitting	1
Standoff "T" Fitting	1
3/4NPT Threaded Plug	2
12-10 AWG Spade Tongue Terminal	1
Silicone Rubber End Boot	1
Silicone Sealant	1
Roll of Fiberglass Tape	1
Sealing Compound	1
Packing Fiber	1
Pipe Straps, for pipe 2in to 6in (51mm to 152mm)	2
Caution Label	1
Instruction Sheet	1

Instructions

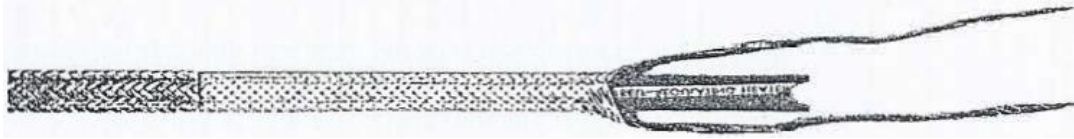
1. Remove the outer jacket 7in (178mm) from the end of product, exposing the metallic braid.



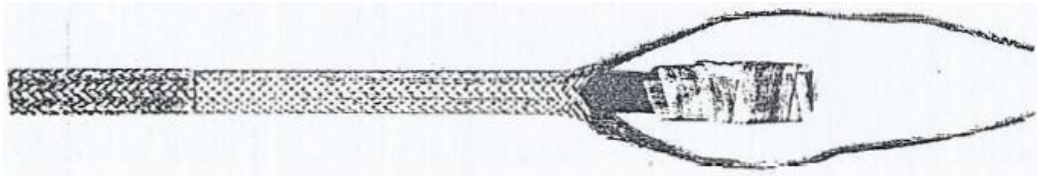
2. Unravel the metallic braid 3 1/2in (89mm) from end of product exposing the inner jacket.
3. Cut off 2in (51mm) of the heater.



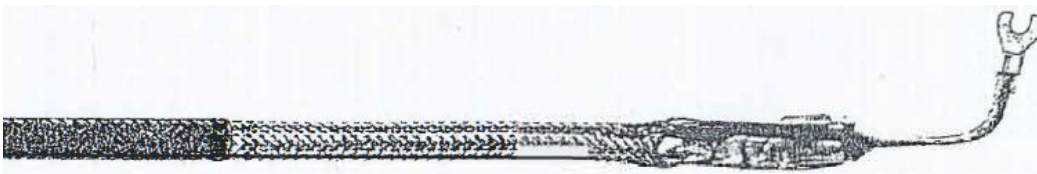
4. Cut a 3/8in (10mm) V-Shaped notch between the conductors.



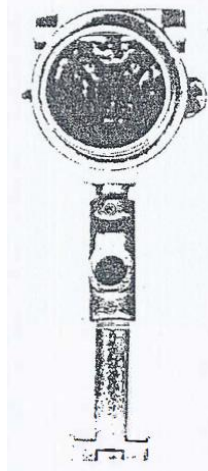
5. Place a generous amount of silicone sealant over the end of the product and into the end boot supplied.
6. Place end boot over end of product making sure it is all the way on.
7. Using fiberglass tape, secure the end boot to the inner jacket wrapping it so as to cover the entire end boot and the inner jacket 1/2in (13mm) from end boot.



8. Take unraveled braid and bring it up, around and over the taped end boot.
9. Twist the unraveled braid together into a pigtail and attach the Spade Tongue Terminal to the end of the pigtail.



10. Fasten standoff T fitting to seal fitting and the seal fitting to the connection box.



11. Insert the terminated end through the standoff T fitting and seal fitting so that the end of the outer jacket (jacket over the braid) is centered in the large hole in the seal fitting and the end of the heater is in the box.
12. Fasten standoff T fitting to the pipe using appropriate metal straps or clamps.
13. Attach the spade tongue terminal on end of braid to the grounding point inside box.
14. Place cover on connection box and tighten firmly. Place plugs in unused hubs of box.
15. Place packing material around inside base of fitting at the connection to the standoff T fitting.
16. Place large recessed plug back in seal fitting. Screw in until met with resistance.
17. Take sealing compound pouch and knead it until compound and liquid are thoroughly mixed.
18. Cut off corner of pouch and pour mix into seal fitting.
19. Close filling opening with small recessed plug.
20. Tighten large recessed plug on seal fitting.
21. Do not disturb for 24 hours until the compound has completely cured.



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