Day-Brite CFI

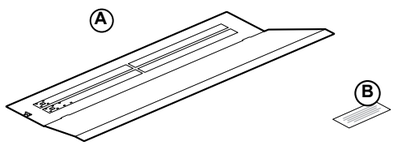
EvoKit GX LED 2x4 & 2x2 Installation guide

This installation guide is only valid for the following EvoKit models :

Products 2x4

Products 2x2

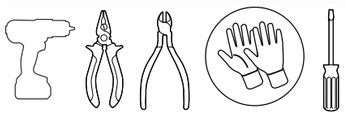
Set contains



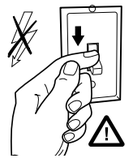
A LED Panel
B Label

Installers should examine all parts that are not intended to be replaced by the retrofit kit for damage and replace any damaged parts prior to installation of the retrofit kit.

Tools required and warning precautions electronic static



Activity	Charge Voltage (dependent on rel. humidity)	
	10 - 20%	65 - 90%
Walking on a carpet	35000V	1500V
Walking on a vinyl floor	12000V	250V
Sitting in an office chair (Movements in the chair)	6000V	100V
Handling a plastic bag	20000V	1200V



⚠WARNING

LED electronics can be damaged by electro static discharge (ESD) shock. Before installation, discharge yourself by touching a grounded bare metal surface to remove this hazard. to avoid damage, do not touch the LED module.

⚠WARNING

FAILURE TO FOLLOW THESE INSTRUCTIONS AND WARNINGS MAY RESULT IN SERIOUS INJURY OR SIGNIFICANT PROPERTY DAMAGE.

For your protection, carefully read these warnings and instructions in their entirety before installing or maintaining this equipment. These instructions do not attempt to cover all installation and maintenance situations. If you do not understand these instructions or if additional information is required, contact your local representative. Retain these instructions for maintenance reference.

⚠WARNING

RISK OF FIRE OR ELECTRIC SHOCK

The EvoKit must be installed and maintained by a professional electrician in accordance with the applicable federal, state and local laws, regulations and electrical codes, and the installation instructions provided in this document. This professional should be familiar with the construction and operation of this product and any hazards involved. If not qualified, do not attempt installation. Contact a qualified electrician.

Do not install in a damaged fixture. Before installation, turn power off.

⚠WARNING

RISK OF FIRE, ELECTRIC SHOCK OR PERSONAL INJURY

THE RETROFIT KIT IS ACCEPTED AS A COMPONENT OF A LUMINAIRE WHERE THE SUITABILITY OF THE COMBINATION SHALL BE DETERMINED BY AUTHORITIES HAVING JURISDICTION. PRODUCT MUST BE INSTALLED BY A QUALIFIED ELECTRICIAN IN ACCORDANCE WITH THE APPLICABLE AND APPROPRIATE ELECTRICAL CODES. THE INSTALLATION GUIDE DOES NOT SUPERSEDE LOCAL OR NATIONAL REGULATIONS FOR ELECTRICAL INSTALLATIONS.

⚠WARNING

RISK OF PERSONAL INJURY

To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects. Wear gloves to prevent cuts or abrasions when removing from carton, handling and maintaining this equipment.

Notice

Do not use abrasive materials, glass cleaners or other solvents on cover plate or lens. To clean the faceplate, use a mild soap solution.

Handle components with care. Do not drop, slide or scratch any of the components to prevent visual damage to the product, loss of functionality or difficulties during installation.

Caution

This kit is designed for permanent installation in dry and damp (Non-Hazardous) locations in accordance with the National Electrical Code and all applicable local codes. Do not use in areas of limited ventilation or in high ambient enclosures.

Only those open holes indicated in these instructions may be made or altered as a result of kit installation. Do not leave any other open holes in an enclosure of wiring or electrical components. Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.

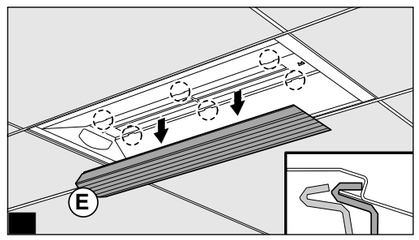
Host lighting luminaire

The EvoKitGX is designed for installation in a wide variety of 2x4 and 2x2 indoor luminaries that have previouslybeen retrofitted with earlier versions of the EvoKit and will reuse some of the original retrofit components.

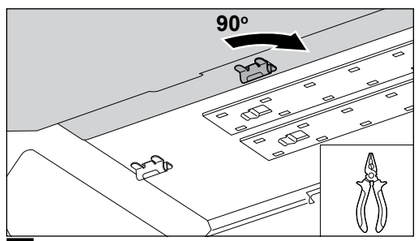
Previous EvoKit Products*	6NC	New Gen X Service Kit
2x2 3500K up to 3200 lumens; 0-10V Evokit G1 to G5	116715	EvoKit HE 2x2 32L 21W 835 UNV 0-10 GX
2x2 4000K up to 3200 lumens; 0-10V Evokit G1 to G5	116673	EvoKit HE 2x2 32L 20W 840 UNV 0-10 GX
2x4 3500K up to 4200 lumens; 0-10V Evokit G1 to G5	116707	EvoKit HE 2x4 42L 26W 835 UNV 0-10 GX
2x4 4000K up to 4200 lumens; 0-10V Evokit G1 to G5	116665	EvoKit HE 2x4 42L 26W 840 UNV 0-10 GX
2x2 3500K up to 3200 lumens; SR or SWZ, SWZDT & SWZCS Evokit G1 to G5	116731	EvoKit HE 2x2 32L 20W 835 UNV SR GX
2x2 4000K up to 3200 lumens; SR or SWZ, SWZDT & SWZCS Evokit G1 to G5	116699	EvoKit HE 2x2 32L 20W 840 UNV SR GX
2x4 3500K up to 4200 lumens; SR or SWZ, SWZDT & SWZCS Evokit G1 to G5	116723	EvoKit HE 2x4 42L 26W 835 UNV SR GX
2x4 4000K up to 4200 lumens; SR or SWZ, SWZDT & SWZCS Evokit G1 to G5	116681	EvoKit HE 2x4 42L 26W 840 UNV SR GX

*For a detailed list of suggested replacement options, please visit www.philips.com/evokit or reach out to your sales representative for more information.

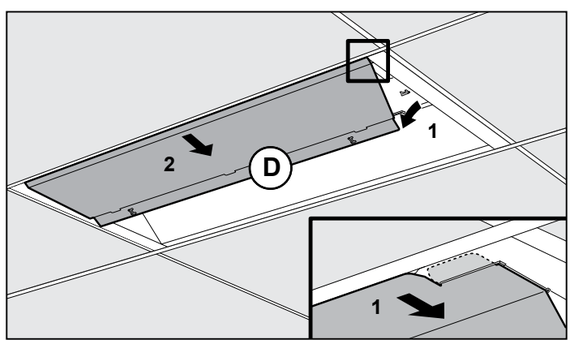
Uninstall components from prior EvoKit installation



Squeeze the diffuser (E) slightly together on the sides to release it from the tabs on one side from either panel. Carefully lower the diffuser on the released side and slide it out from the tabs on the opposite panel. Do not damage the diffuser as it will be reused.

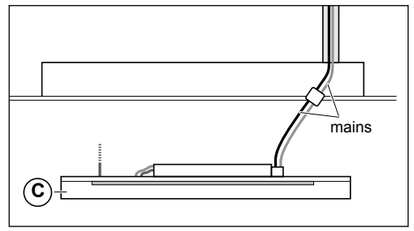


2 Detach the panels by turning each fastener 90 degrees.



3 Carefully lower (1) the closing panel (D) slightly on the released side and slide out the closing panel tabs from each of the end panels. Remove the closing panel by pulling straight out (2). Do not bend the tabs while uninstalling as the closing panel will be reused.

Disconnect mains connection

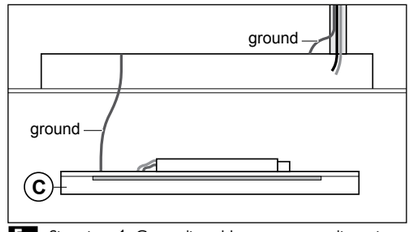


4 Locate the connected mains wires hidden behind the LED Panel (B). With the power turned off, disconnect the mains wires.

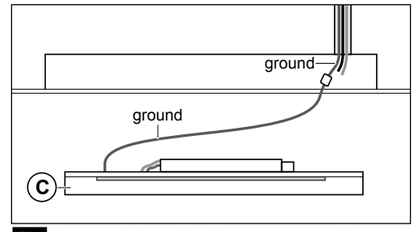
⚠WARNING

To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.

Disconnect ground connection (Situation 1 - 2)

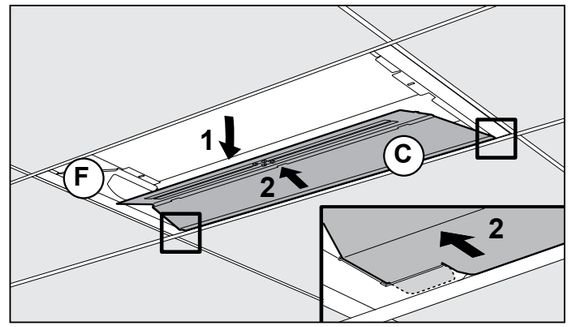


5a Situation 1 Grounding: Unscrew grounding wire from LED Panel (B) to original troffer.

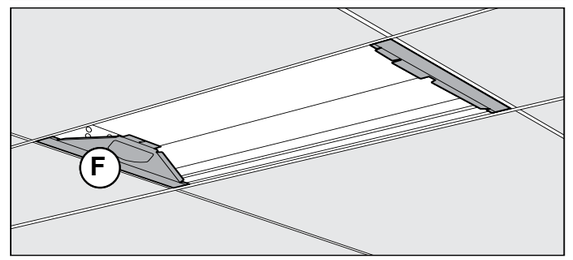


5b Situation 2 Grounding: Disconnect grounding wire from the incoming conduit ground lead.

Uninstall LED Panel (C)

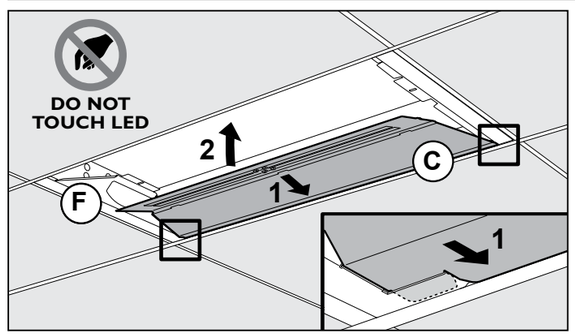


6 Uninstall the LED panel (C) by pushing outward on the two end panels (F) at both ends of the ceiling grid to release the LED panel. Carefully lower (1) the LED panel slightly on the released side and slide out the LED panel tabs from each of the end panels. Remove the LED panel by pulling straight out (2).



As pictured, there are only the two end panels (F) remaining installed. These will be reused and will remain installed. The installation of the new GX LED panel can proceed.

Install GX LED Panel (C)



7 Install GX LED panel (C) in between troffer and T-grid (1), making sure the tabs at each corner of the LED panel slides into the respective slots in the end panels (F). Push carefully upward (2) on both ends of the LED panel until it catches in place on top of both of the end panels.

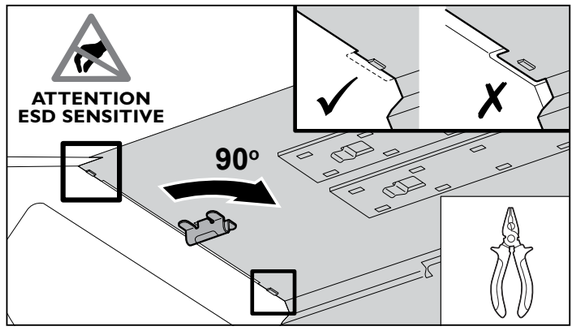
Notice

Do not touch the LEDs with hands or tooling! Touching LEDs can lead to failure of the product.

⚠WARNING

RISK OF PERSONAL INJURY

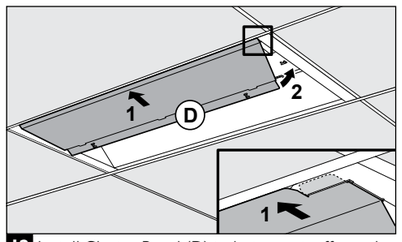
While installing the LED panel (B) and Closing Panel (D), make sure the electrical wiring is not clamped between panels.



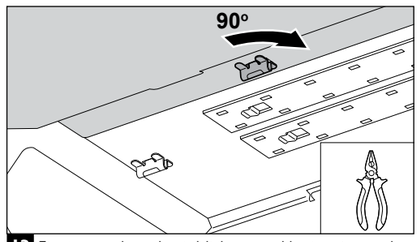
8 Push LED panel upward into position so that the tabs sits above the side panels (this may require a push up on the tabs while pushing outward on the side panels). Attach panels and establish ground by turning each fastener 90 degrees.

Notice

Do not touch the LEDs with hands or tooling! Touching LEDs can lead to failure of the product.



12 Install Closing Panel (D) in-between troffer and T-grid.



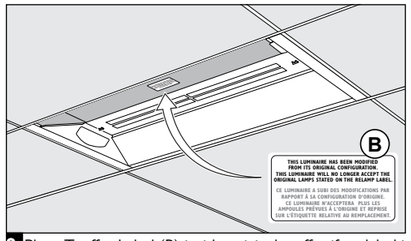
13 Fixate panels and establish ground by turning each fastener 90 degrees.

⚠WARNING

RISK OF FIRE OR ELECTRIC SHOCK

While installing the LED panel (B) and Closing Panel (D), make sure the electrical wiring is not clamped between panels.

Installation Troffer Label (B)



THIS LUMINAIRE HAS BEEN MODIFIED FROM ITS ORIGINAL CONFIGURATION. THIS LUMINAIRE WILL NO LONGER ACCEPT THE ORIGINAL LAMPS STATED ON THE RELAMP LABEL.

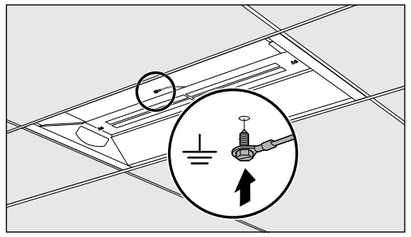
CE LUMINAIRE A SUBI DES MODIFICATIONS PAR RAPPORT À SA CONFIGURATION D'ORIGINE. CE LUMINAIRE N'ACCEPTERA PLUS LES AMPOULES PRÉVUES À L'ORIGINE ET REPRISE SUR L'ÉTIQUETTE RELATIVE AU REMPLACEMENT.

9 Place Troffer Label (B) inside original troffer if no label is present from the previous EvoKit installation.

Notice

It may be necessary to use the retrofit warning sticker included with the service kit in order to alert the end user that this luminaire will no longer operate on the originally intended lamps. The provided label is not needed if the troffer already has a label that was installed during the previous EvoKit installation.

Ground connection (Situation 1 - 2)



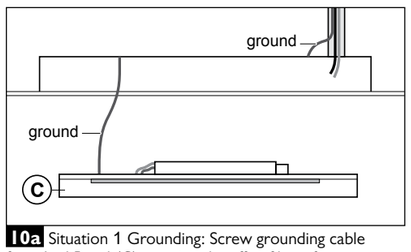
⚠WARNING

RISK OF PERSONAL INJURY

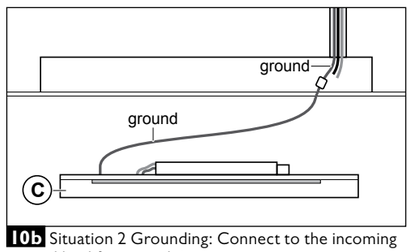
Proper grounding of EvoKit metal parts is required to ensure personal safety.

Notice

Make electrical connections to mains by employing applicable connectors in accordance with the applicable federal, state and local laws, regulations and electrical codes.

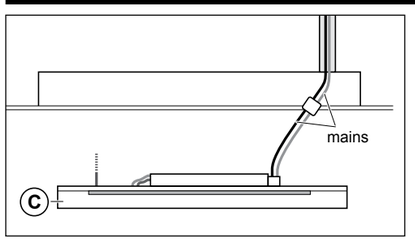


10a Situation 1 Grounding: Screw grounding cable from Led Panel (C) to original troffer if host fixture ground connection is made trough host fixture.



10b Situation 2 Grounding: Connect to the incoming ground lead from conduit.

Mains connection

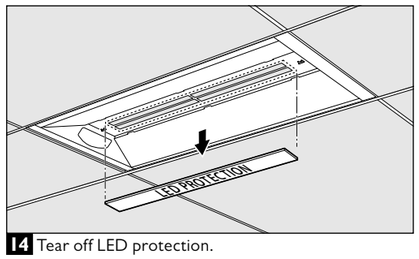


11 Connect main cables and hide connected wires behind LED Panel (C).

Installation Closing Panel (D)

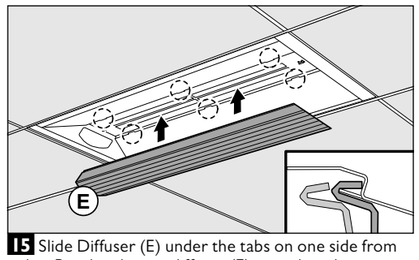
SpaceWise: Before installing the closing panel connect Spacewise.
See Spacewise installation instructions.

Remove LED protection



14 Tear off LED protection.

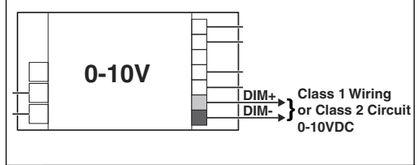
Installation Diffuser (E)



15 Slide Diffuser (E) under the tabs on one side from either Panel and press diffuser (E) over the tabs on opposite panel. The installation is now complete.

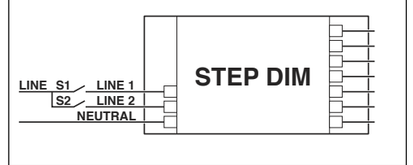
Connection 0-10V and STEP DIM (Optional)

EvoKit 0-10V wiring diagram



16a Optional: For connection EvoKit 0-10V input, use indicated connections on the driver.

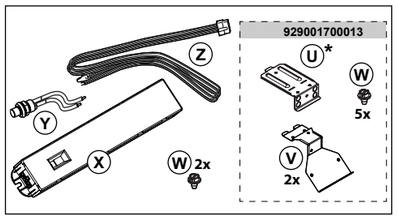
EvoKit STEP DIM wiring diagram



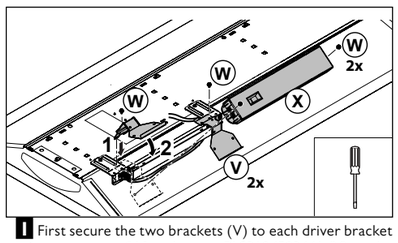
16b Optional: For connection STEP DIM, use indicated connections on the driver.

Initial installation Bodine BSL310 Emergency LED Driver (not valid for 347V input) (Sold separately)

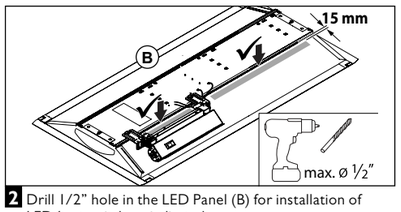
If the Bodine BSL310 Emergency LED Driver is to be installed into the EvoKit retrofit fixture, please follow these instructions and the instructions provided with the Emergency driver.



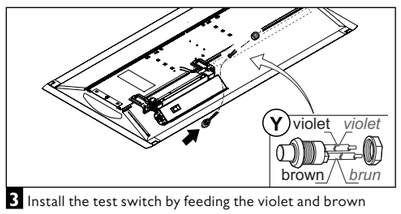
Components: Brackets (U, V), Screws (W), Emergency LED driver (X), Test switch (Y) Wiring harnass (Z).
(* required for 20W LED driver)



1 First secure the two brackets (V) to each driver bracket using two screws (W) and mount BLS310/503441 (X) on the back side of the LED panel (B) using two screws (W)..



2 Drill 1/2" hole in the LED Panel (B) for installation of LED/test switch on indicated area.



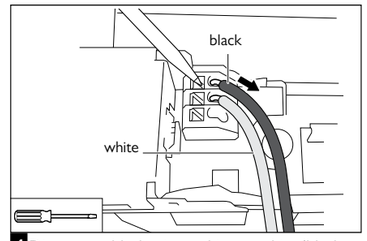
3 Install the test switch by feeding the violet and brown wires through this 1/2" hole and hand tighten the plastic nut included with the test switch/LED combo. Add connect from test switch to wiring harnass (Z) (violet - violet, brown - brown).

⚠WARNING

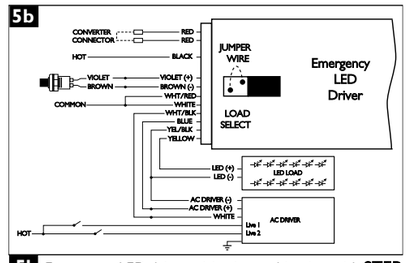
RISK OF PERSONAL INJURY

Ensure all warning and cautionary markings given in the Bodine BSL310 installation instructions are heeded.

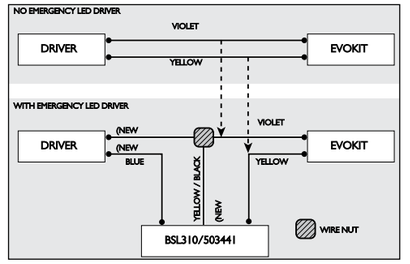
Notice Ensure an un-switched hot circuit is available to the fixture. This is required for proper emergency fixture operation.

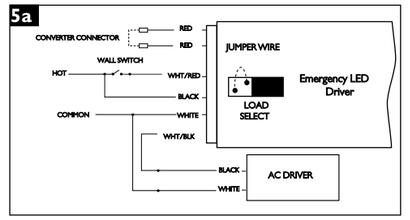


4 Disconnect black wire and insert white/black wire (Z) in the EvoKit driver.



5b Emergency LED driver wiring in combination with **STEP** version.

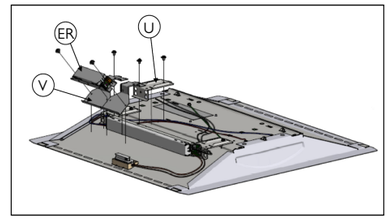




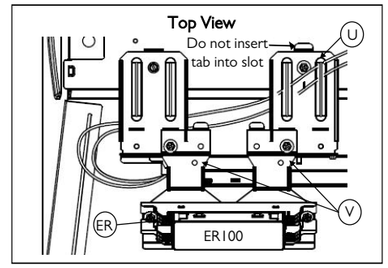
Emergency LED driver wiring in combination with **0-10V** version. Connect WHT/RED, BLACK and WHITE (2x) wires (Z) as per the BSL310/503441 wiring diagram. Connect the BSL310/503441 red to red as indicated in schematic (Z).

Notice For the EVOkit, do not connect the jumper wire / load select (yellow/red) on BSL310/503441.

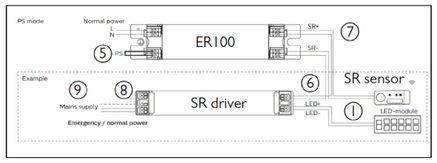
ER100 Emergency Relay Installation



Description	QTY	Comments
Driver Bracket **(U)**	1	Attach to EvoKit housing
Emergency Bracket **(V)**	2	Attach to driver brackets
ER100 E**mergency Relay** (ER)	1	Attach to emergency brackets
Wire Purple 175mm	1	Connect ER100 to SR Driver
Wire Brown 175mm	1	Connect ER100 to SR Driver
Wire White 805mm	1	Connect ER100 to EM neutral
Wire Black w/Red stripe 805mm	1	Connect ER100 to EM line
Wire Orange 50mm	1	Connect ER100 Jumper
Screw #8x.25 TYPE B serrated	5	Bracket and Relay Screw



1) Remove the purple and brown wires going to the sensor from the SR driver terminals.
2) Attach the driver bracket to the EvoKit housing with a #8 screw into the hole provided. **Note: It is not necessary to insert the driver bracket tab into the slot.**
3) Attach the two emergency brackets to the two SR driver brackets with two #8 screws into the holes provided.
4) Attach the ER100 emergency relay to the two emergency brackets with two #8 screws into the holes provided.



5) Insert the orange jumper wire into the two orange terminals on the ER100.
6) Use the shorter pair of purple and brown wires to make a connection from the purple and brown SR terminals of the SR driver to one set of the purple and brown terminals on the ER100.
7) Reconnect the purple and brown wires coming from the SR sensor to the other set of purple and brown terminals on the ER100.
8) Connect the white wire to the white terminal on the ER100 and connect the black w/red strip wire to the black terminal on the ER100.
9) The unconnected ends of the white wire and the black w/red stripe wire are to be connected to the emergency mains.

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