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SS610E



Electronic Condensate
Overflow Switch For Mini-Split Systems

A condensate pump is an essential component to a properly functioning mini-split system and is **required by International Mechanical Code.**

IMC 307.2.3.1 Water-level monitoring devices

On downflow units and all other coils that do not have a secondary drain or provisions to install a secondary or auxiliary drain pan, a water-level monitoring device shall be installed inside the primary drain pan. This device shall shut off the equipment served in the event that the primary drain becomes restricted. Devices installed in the drain line shall not be permitted.



Auxiliary and secondary drain systems

In addition to the requirements of Section 307.2.1, where damage to any building components could occur as a result of overflow from the equipment primary condensate removal system, **one of the following auxiliary protection methods shall be provided for each cooling coil or fuel-fired appliance that produces condensate:**

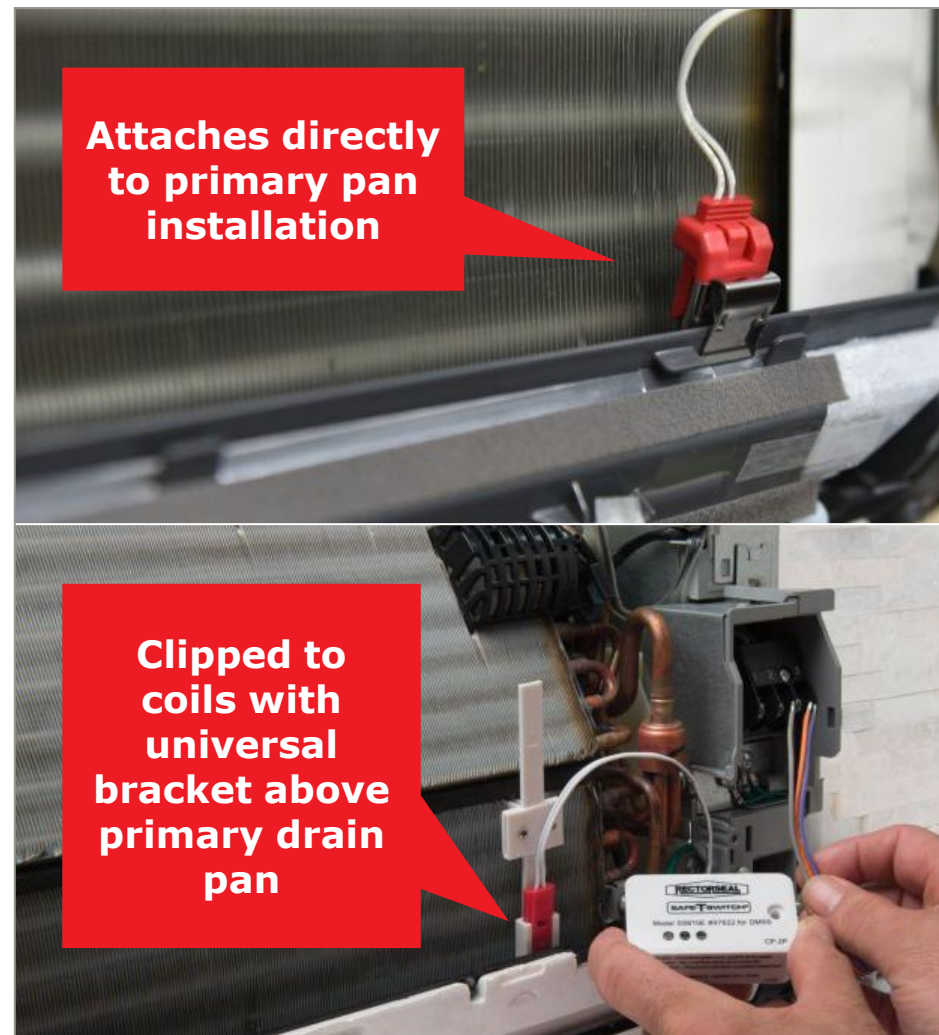


IMC CODE 307.2.3.4

A water-level detection device conforming to UL 508 shall be provided that will shut off the equipment served in the event that the primary drain is blocked. The device shall be installed in the primary drain line, the overflow drain line, or in the equipment-supplied drain pan, located at a point higher than the primary drain line connection and below the overflow rim of such pan.

Overview

- Installs directly on primary drain pan or clipped to coils above primary drain pan
- Onboard LED indicator can be mounted to side of unit
- Can be wired in both normally open and normally closed systems
- Meets IMC requirements
- Inexpensive insurance
- Multi-voltage
- No batteries required





Product updates



Enhanced transformer: Additional step down transformer, which better regulates voltage between the pin probe and ground, ensuring that it can support a broader range of applications

More wiring options: Added extra wiring, allowing the switch to be configured in normally closed or normally open installation (to cut the power) and to do so without a wiring harness

	Size (mm)	Power supply	Wire specification	Output capacity	Output type
SS610E 	63 x 35 x 23	15-250V AC	Gray (Common); Purple (NC); Orange (NO)	5A 250V AC, 5A 100V DC	Either NC or NO (one at a time)
Upgraded SS610E 	63 x 50 x 26	110-230V AC	Gray (Com-NC); Striped Gray (Com-NO); Purple (NC); Orange (NO)	5A 250V AC, 5A 30V DC	NC and NO operate independently. Fully compatible with DPLS2 applications

Product updates

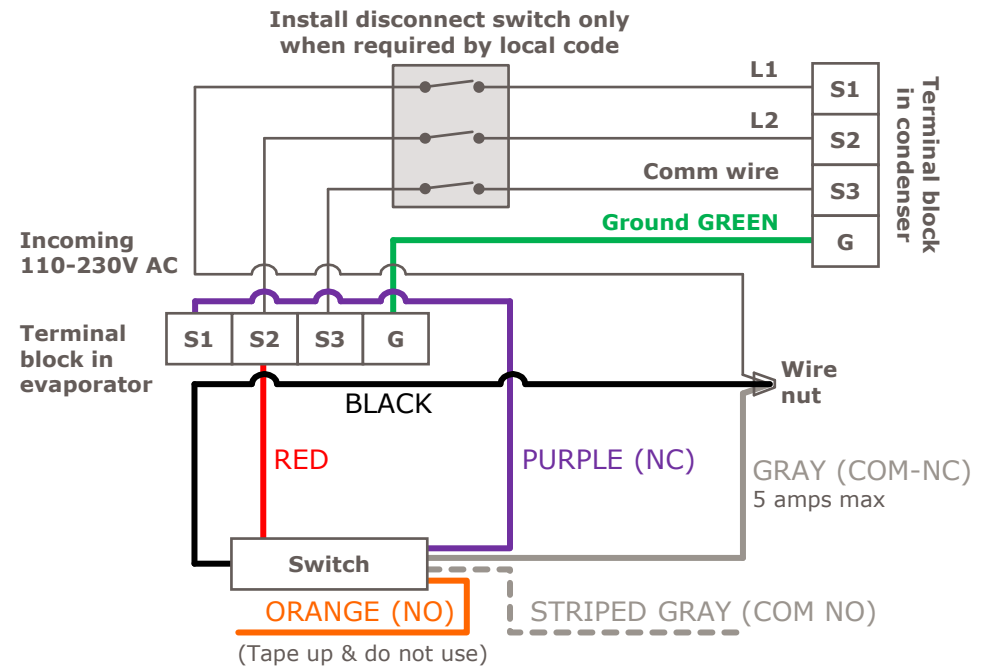
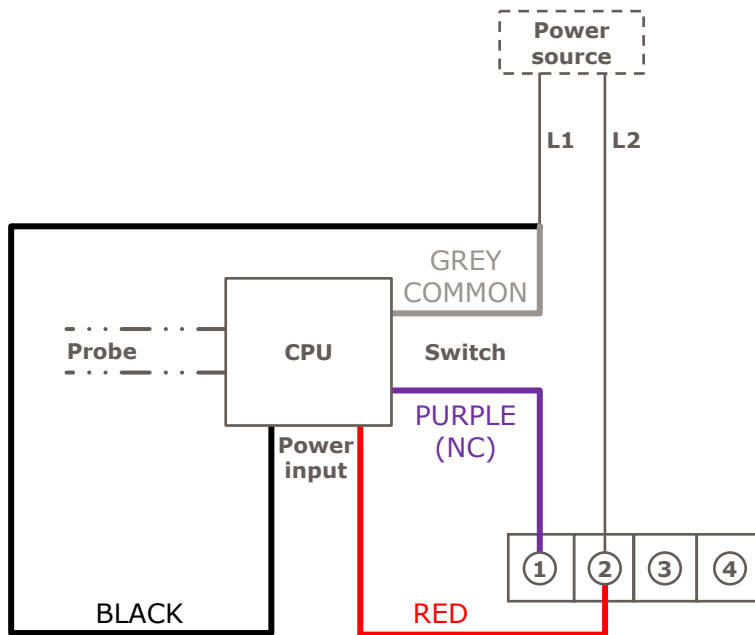


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Updated SS610E



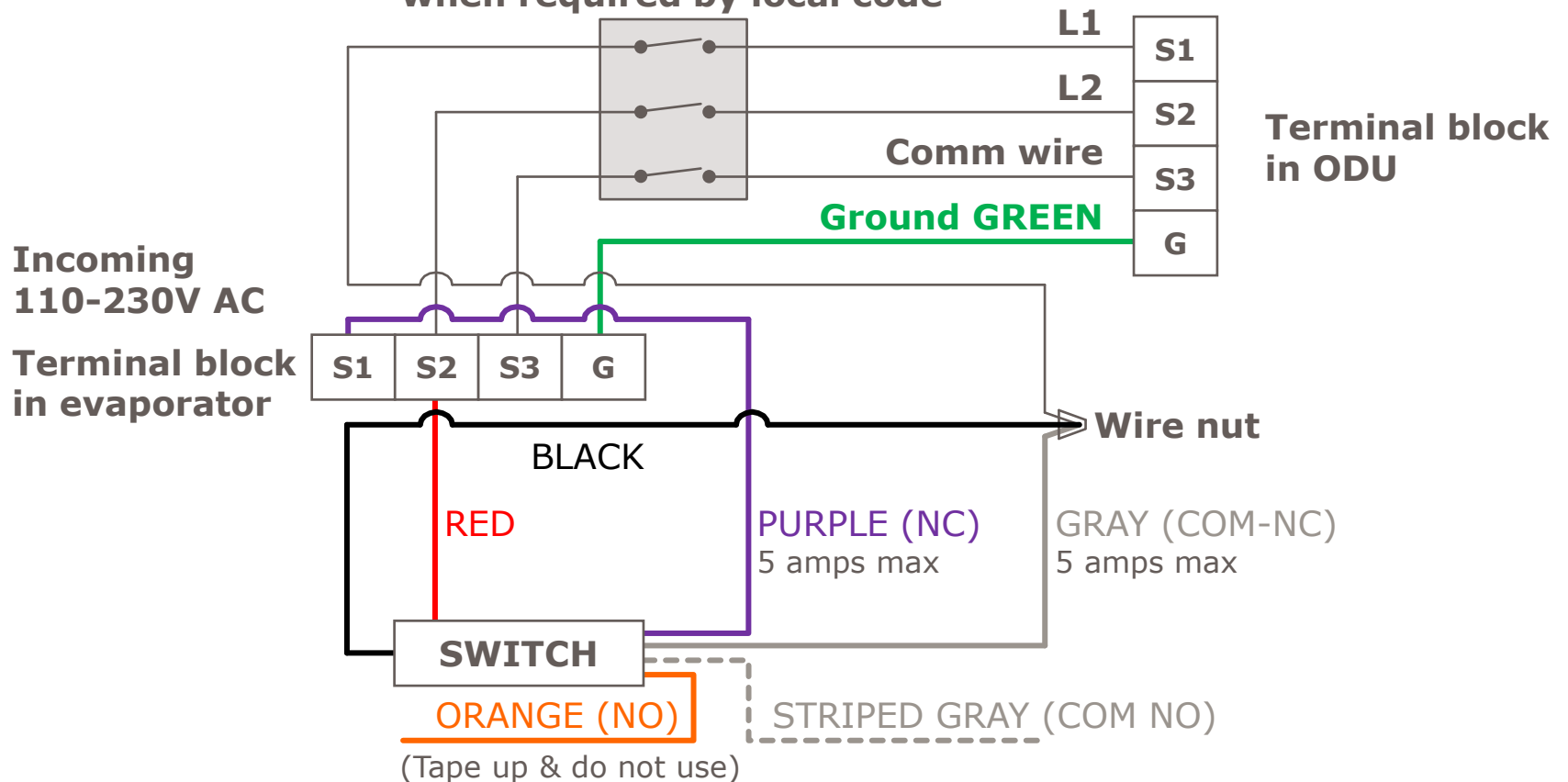
Wiring diagram



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110-230V AC

Install disconnect switch only when required by local code



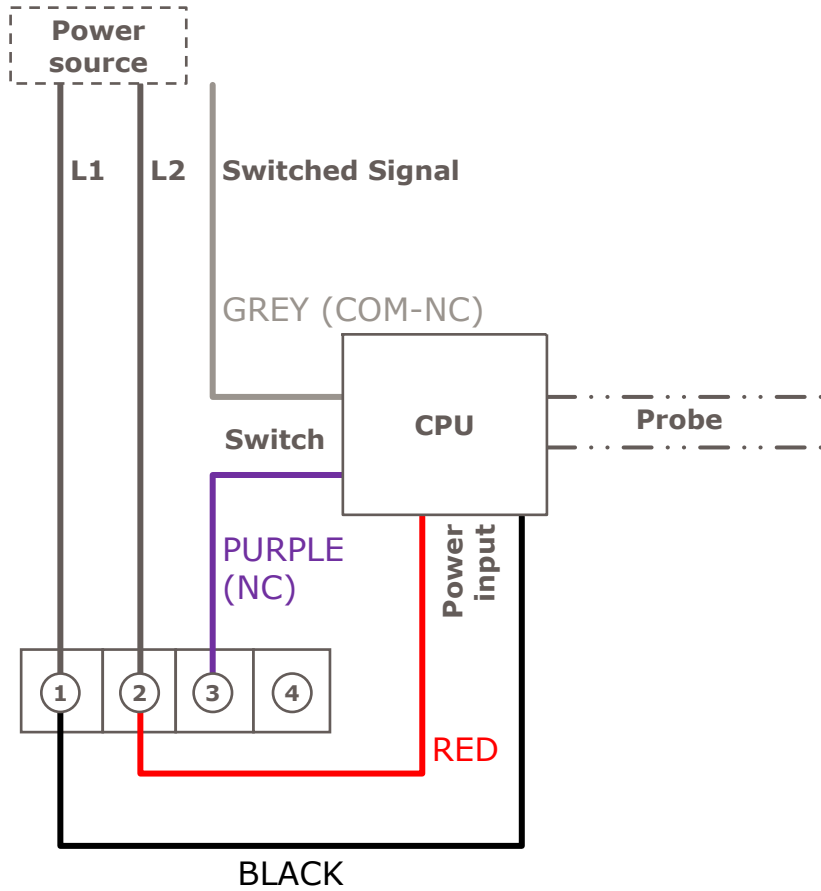
Wiring options



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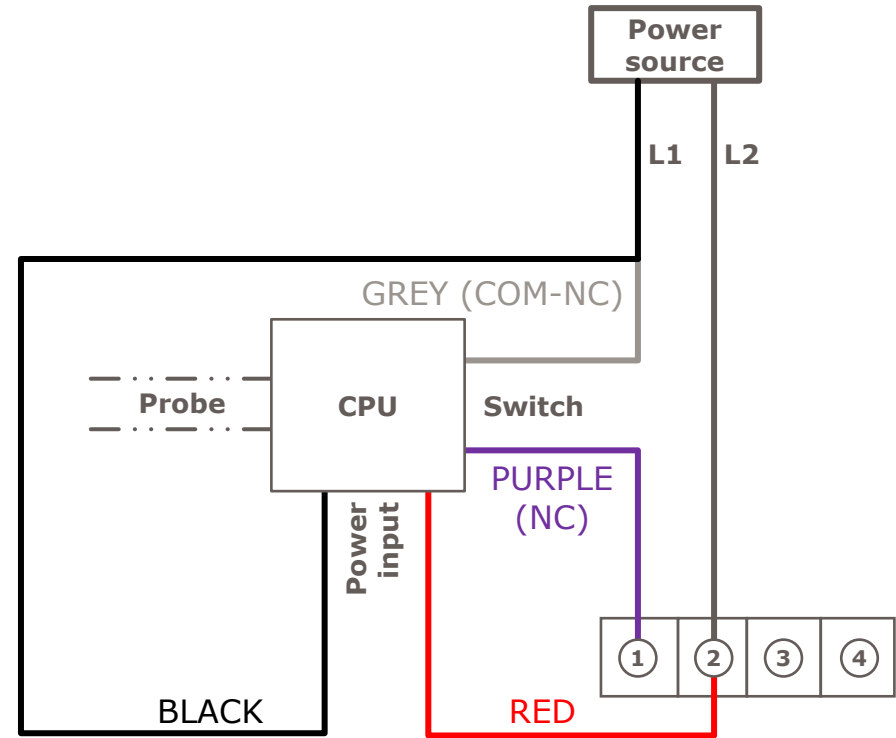
Wiring option 1

Interfering communication line



Wiring option 2

Interfering power line

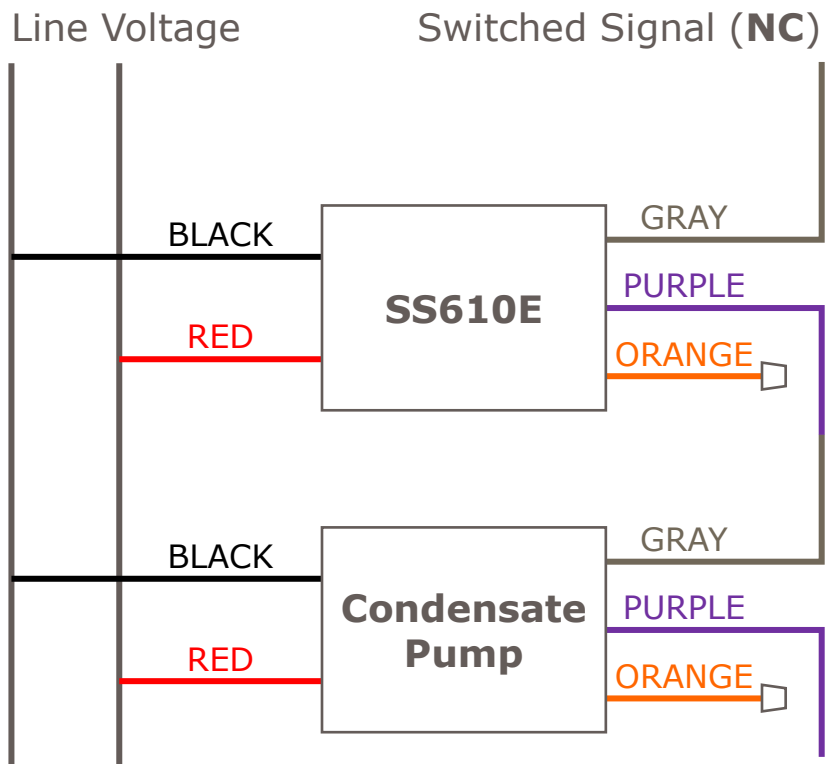


Wiring options 1 and 2 illustrate wiring terminal of a typical ductless mini-split system. Systems from different manufacturers may be wired differently. Please refer to air conditioner's manuals for correct wiring terminal layout and wiring instructions or using the QR code on back of package. Connect to RectorSeal's website for more wiring options.

Normally Closed vs Normally Open

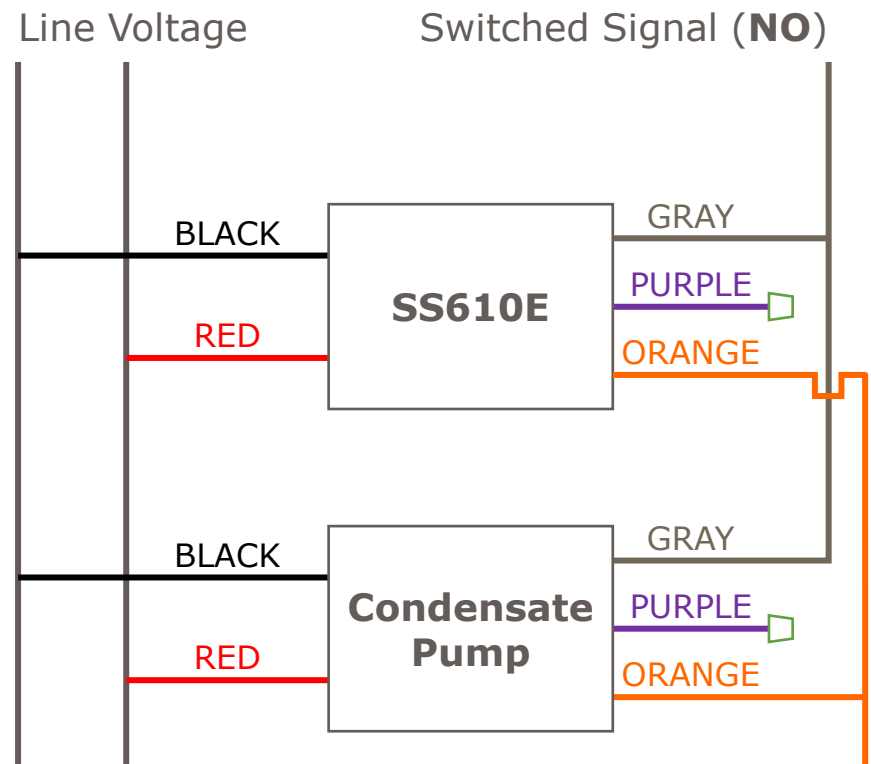
For **Normally Closed (NC)** circuit, SS610E and condensate pump shall be “wired in series”

For **Normally Open (NO)** circuit, SS610E and condensate pump shall be “wired in parallel”



PURPLE – Normally CLOSED

GRAY wired in SERIES



ORANGE – Normally OPEN

GRAY wire in PARALLEL

- 1. Turn on main power supply** to air conditioner.
- 2. The CPU will display a Green Light.** If the Green LED does not come on, turn off power and check switch wiring.
- 3. Start air conditioner indoor unit.** If the indoor unit does not come on, turn off power and check switch wiring.
- 4. Test the switch** by shorting across the Probes Pins with water or a metallic conductor. If wired correctly, the indoor unit will stop and the Red LED will come on after 5-10 seconds. When released, after 5-10 seconds the Red LED will go off, the Green and Amber LEDs will come on and the indoor unit will restart. If the switch does not cycle, turn off power and check switch wiring. To turn off Amber light, see manual history reset tag on CPU wire.
- 5. Test the Sensor position** by turning on the air conditioner to produce a normal condensate flow. If the Sensor is in water, the switch will activate and shut down the unit. Next, block the drain to allow the pan to fill with water. The switch should activate before the pan overflows. If necessary, adjust Sensor height as described in Installation section above.

Marketing and packaging



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- Submittal data sheets available for engineers and OEM partners
- Updated product packaging
- Easy installation instructions



SUBMITTAL DATA SHEET



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Safe-T-Switch SS610E

Electronic Condensate Overflow Switch
Designed for Ductless Minisplits

Project Information:

Job Name: _____
 Location: _____
 Engineer: _____
 Submitted to: _____
 Submitted by: _____
 Reference: _____

Submittal Information:

Approval: _____
 Date: _____
 Construction: _____
 Unit #: _____
 Drawing #: _____

(Sec. I) Ordering Information:

Product Code - 97622
 Model - SS610E
 Carton Qty - 12
 Carton Weight - 4 lbs.

(Sec. II) Product Specifications:

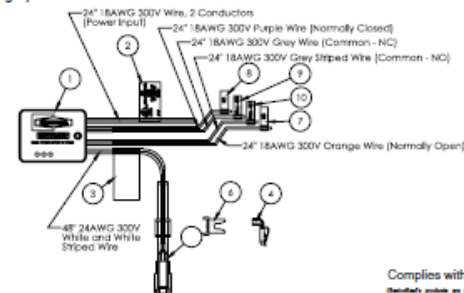
CPU Length - 2.5"
 CPU Width - 2"
 CPU Height - 1"
 Power Supply - 110 to 230 Volts AC
 Switching Capacity - 0 to 250 Volts AC, 5 A, 1250VA; 0 to 30 Volts DC, 5A, 150W
 Contact - NC/NO
 Probe Cable Length - 4'
 Lead Cable Length - 2'
 Power Consumption - 3 Watt

(Sec. III) Carton Contents:

(Fig. I) Product Image:



(Fig. II) Part List:



1. CP-2P
2. UL tag
3. Reset instruction tag
4. Bracket assembly
5. Ratchet assembly
6. Coil clip for 5mm
7. Tag, Normally open
8. Tag, Normally closed
9. Common Tag, Normally closed
10. Common tag, Normally open

Complies with 2009 - 2012 IMC & IRC

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