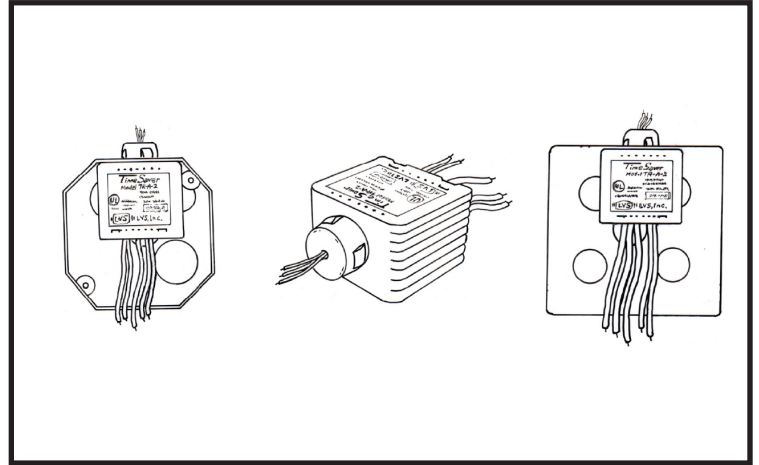
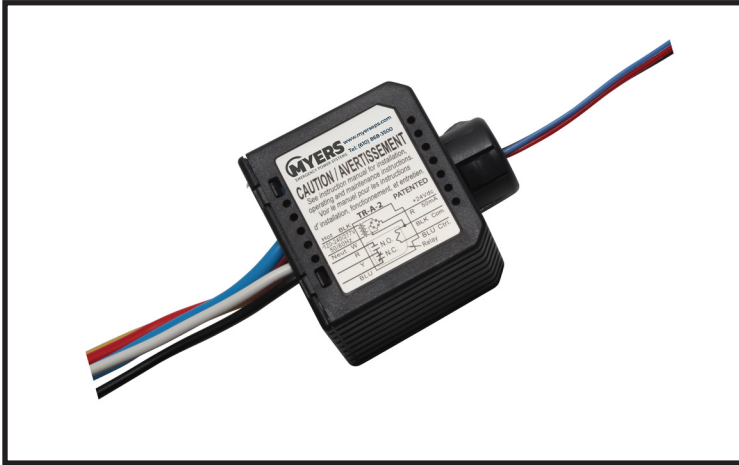


TR-A-2

UL924 Shunt Relay for Fire Alarm/Auxiliary Control



APPLICATION

The UL924 Listed TR-A-2 emergency shunt relay provides a dry N.O./N.C. contact closure that changes position when there is a utility power interruption.

The TR-A-2 includes an integral 24V DC Class 2 power source for interfacing with auxiliary relays, fire alarm contacts, and more. The TR-A-2 relay can also be controlled by a low voltage switching signal, such as a door jamb switch.

The TR-A-2 comes in the industry's smallest package and fits in almost any junction box or enclosure with standard 1/2" KO. It is ideal for many lighting control applications.

SPECIFICATIONS

ELECTRICAL	MODEL NUMBER	TR-A-2
	SENSING INPUT	120V-240V/277V 50-60Hz Input
	DRY CONTACT OUTPUT	N.O./N/C (Form C) Contact
	20A RATING	120V-277V
	WARRANTY	5 year replacement warranty

MECHANICAL	FLAME RATING	UL9V-5A
	TEMPERATURE	32° F - 131° F (0° C - 55° C)
	SIZE (WITH MOUNTING EARS)	51mm x 34mm x 58mm
	SHIPPING WEIGHT	5 oz
	COLOR	Black

INSTALLATION

! IMPORTANT SAFEGUARDS !

WHEN USING ELECTRICAL EQUIPMENT, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED, INCLUDING THE FOLLOWING.

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. This product can be used with LED, ballast, tungsten and general use loads
2. Make sure all connections are in accordance with the National Electrical Code and local regulations.
3. To reduce the risk of electric shock, disconnect both normal and emergency power supplies before servicing.
4. This product is intended to be used to control indoor and outdoor located loads.
5. An unswitched AC power source is required. (120 or 277VAC)
6. Do not install near gas or electric heaters.
7. Do not attempt to service a sealed Emergency Shunt Relay. If malfunctioning, return to the manufacturer, LVS, Inc. 2555 Nicholson St., San Leandro, CA 94577
8. The use of accessory equipment is not recommended by the manufacturer and may cause an unsafe condition.
9. Do not use this product for other than intended use.
10. Servicing should be performed by qualified service personnel.
11. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.

SAVE THESE INSTRUCTIONS

In order to install TR-A-2 in accordance with national/local code requirements, a qualified electrician should review and understand the installation instructions: Check voltage and current requirements. Verify and lock out circuit breakers on both normal power and 24 hours emergency circuit. Install a self-adhesive 2" x 3" caution label in each fixture or load controlled by TR-A-2 unit cautioning that this load is supplied from 2 different power sources, regular and emergency. Review wiring diagram and connect wires, one group at a time in accordance with the numeric identification.

In order to provide a safe light level, when regular power is interrupted, it is recommended that a minimum of two 4' fluorescent tubes providing approximately 5000 lumen are controlled by a 24 hour emergency circuit and are spaced no farther than 24' in any direction from each other in a normal 9' white ceiling environment.

INSTALLATION

If TR-A-2 does not function properly on startup perform the following tests:

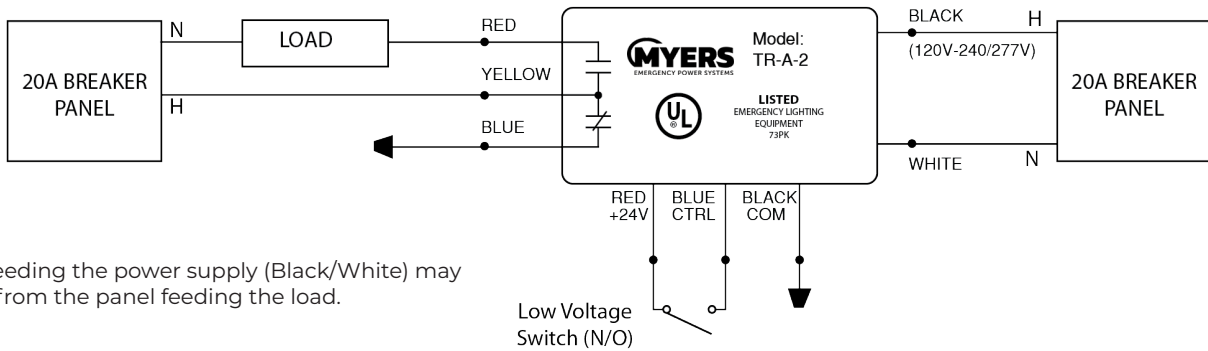
- 1)** Turn regular branch circuit breaker to "OFF" position and verify that connected loads behave as desired. If not, verify that N/O and N/C sides of contact have been wired properly.
- 2)** No maintenance is required to keep TR-A-2 functional. However, regular testing should be performed when the lamps or ballasts have been replaced or when facility remodeling has taken place.

TR-A-2 should be installed in a listed junction box with 1/2" K.O. (knockout). Suggested sizes include: 4", 4-11/16" and single gang.



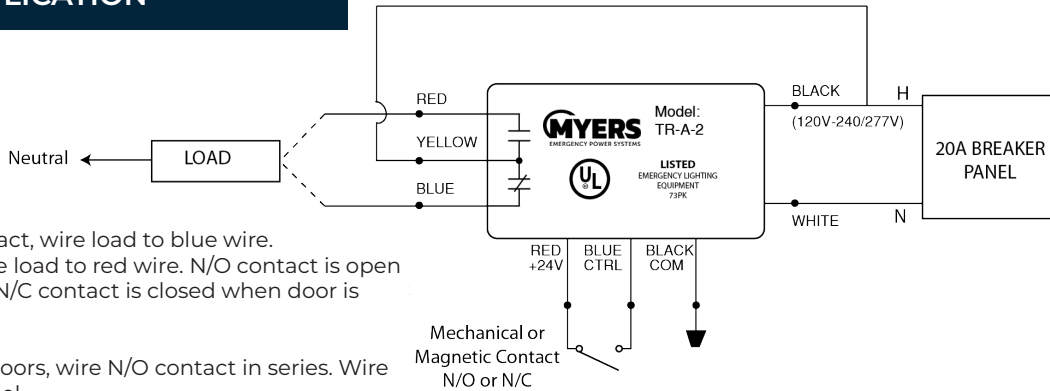
WIRING DIAGRAMS

LOW VOLTAGE SWITCHING APPLICATION



Note: Panel feeding the power supply (Black/White) may be the same from the panel feeding the load.

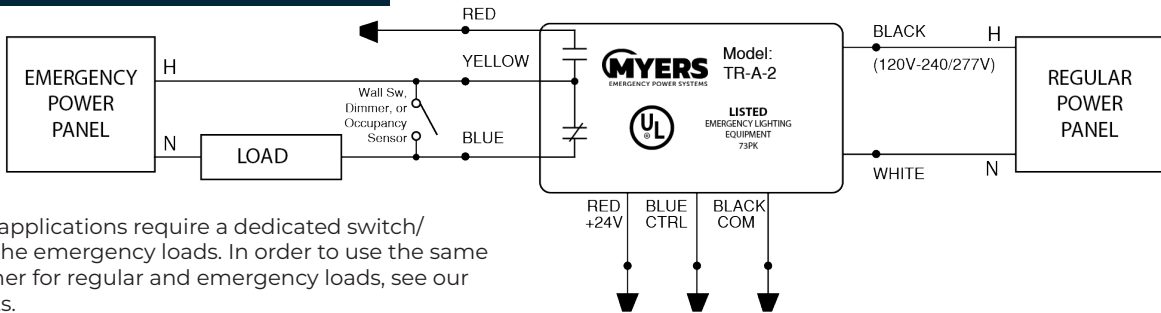
CLOSET LIGHT APPLICATION



Note 1: For N/O contact, wire load to blue wire. For N/C contact, wire load to red wire. N/O contact is open when door is open. N/C contact is closed when door is open.

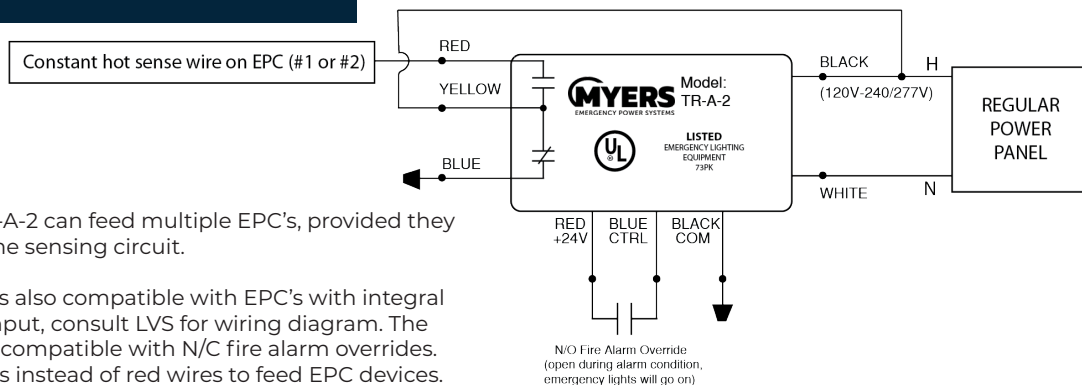
Note 2: For double doors, wire N/O contact in series. Wire N/C contact in parallel.

UL924 EMERGENCY LIGHTING SHUNT



Note: Shunt applications require a dedicated switch/dimmer for the emergency loads. In order to use the same switch/dimmer for regular and emergency loads, see our EPC products.

UL924 FIRE ALARM INTERFACE



Note: One TR-A-2 can feed multiple EPC's, provided they share the same sensing circuit.

Note: TR-A-2 is also compatible with EPC's with integral dry contact input, consult LVS for wiring diagram. The TR-A-2 is also compatible with N/C fire alarm overrides. Use blue wires instead of red wires to feed EPC devices.

N/O Fire Alarm Override (open during alarm condition, emergency lights will go on)

