

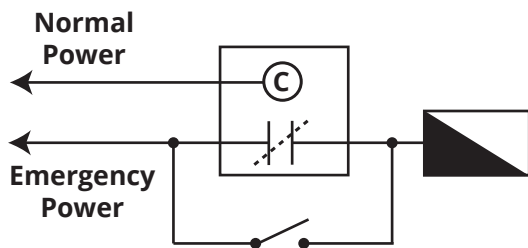
UL1008 Automatic Transfer Switches (ATS) & UL924 Automatic Load Control Relays (ALCR)

Why is the EPC-D-F (UL924 Listed) being replaced by the EPC-D-F-ATS (UL1008 Listed)?

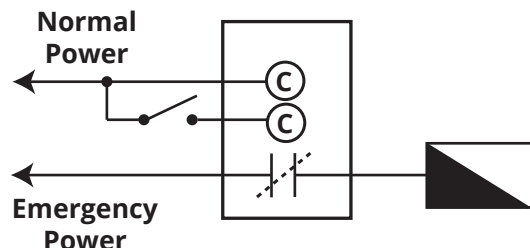
Several years ago, National Electrical Code (NEC), Article 700 requirements surrounding emergency lighting controls were updated to define two classes of devices which allowed emergency lighting to be switched or dimmed during normal operation, but overrode the emergency lighting to full brightness during emergency operation.

UL924 Automatic Load Control Relays (ALCR's): Emergency lighting controlled by ALCR's must always be fed by the emergency power source. The ALCR cannot transfer between power sources. The switching device may be on the normal or emergency circuit, provided that no transfer of power takes place.

UL1008 Automatic Transfer Switches (ATS's): Emergency lighting controlled by ATS's may be fed by the normal power source during normal operation, and the emergency power source during emergency operation. The ATS may transfer between power sources.

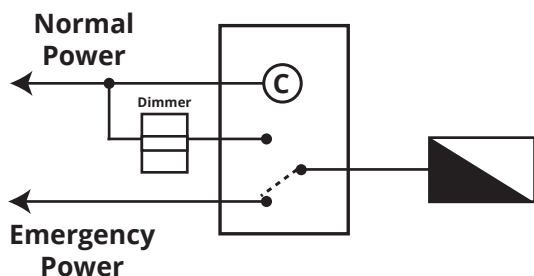


"SHUNT" ALCR EXAMPLE (such as RRU)



"BYPASS" ALCR EXAMPLE (such as EPC-1)

Although the majority of ALCR's do not transfer between power sources, a subclass of ALCR known as "transfer-capable ALCR's" was identified by UL as having this capability. In order to continue performing this function, these devices now require a UL1008 listing. Alternatively, the device could retain only a UL924 listing, provided that it not be used to perform a transfer function (illustrated below).



ATS EXAMPLE (Such as EPC-D-F)

Still have questions? A no-charge 30 minute webinar is available by contacting TechSupport@LVSCcontrols.com



Which ALCR's are "transfer-capable" and are affected by the changes?

The only LVS device affected by these changes is the EPC-D-F. Other manufacturer's devices which have the word "transfer" in their model or acronym are also likely affected (for example "GTD" or "ETS"). Although subtle, the changes to the standard significantly limit permitted applications for transfer-capable ALCR's. Essentially transfer capable ALCR's can only function as shunt relays and require a dedicated control/dimmer for the emergency lights. For 99% of your applications, where you want to use the same switch or dimmer for both normal and emergency lighting, standard (non-transfer capable) UL924 ALCR's (like the EPC-2/EPC-2-D) or UL1008 ATS's (like the EPC-D-F-ATS) will be the best solution.

In order to offer our customers the flexibility to design control systems where a transfer of power sources take place, we have developed a new EPC-D-F-ATS which is UL1008 listed. This device can fill the role of the EPC-D-F for all applications under the new NEC/UL standards. As of the writing of this whitepaper, LVS is one of only two manufacturers offering small single circuit UL1008 Emergency Listed Transfer Switches. Be careful to avoid "Optional Standby" UL1008 transfer switches on the market, as these are not approved for life safety use.

It can be difficult to get a clear answer from certain suppliers as to whether a device is an ATS or an ALCR. Even more difficult is determining acceptable and prohibited wiring diagrams for transfer-capable ALCR's. LVS is available to assist with questions on this topic. You can also visit www.ul.com/database to find whether a device is listed under UL1008 or UL924.

Should I use an ALCR or an ATS for my application?

Although specific project requirements vary, a good rule of thumb is that switched loads and 0-10V loads can and should be bypassed using ALCR's (like the EPC-2 or EPC-2-D). Line voltage dimmed loads usually require a ATS (like the EPC-D-F-ATS). Other specialized applications requiring ATS' can include hospitals, disaster areas, and multi-tenant spaces with sub-metering.

How does this affect the market?

It is important to be aware that UL1008 listed devices are typically more complex and expensive than UL924 listed devices. Therefore, understanding whether your application requires a UL924 listed or a UL1008 listed device is of critical importance.

LVS offers competitively priced UL924 and UL1008 listed devices and has the expertise to help you select the best solution for your project.

**Still have questions? A no-charge 30 minute webinar is available
by contacting TechSupport@LVSControls.com**



LVS, Inc. 2555 Nicholson Street, San Leandro, CA 94577-4216
Phone: 510-352-9600 1-800-982-4587 Fax: 510-352-6707
www.lvscontrols.com