

THIRD EDITION UL 1449 SPD Type Expansion

Just when you thought you had it all figured out, here come some additional changes to UL 1449-Third Edition.

Effective **April 19, 2010**, Underwriters Laboratories has published a new release to the standard which includes an expansion of the SPD Types. This was done primarily to address and distinguish between requirements for discrete SPD components (e.g. MOVs, SADs, GDTs...) and component assemblies. For your convenience, the full list and Type descriptions are provided below:

1.1 These requirements cover Surge Protective Devices (SPDs) designed for repeated limiting of transient voltage surges as specified in the standard on 50 or 60 Hz power circuits not exceeding 1000 V and designated as follows:

Type 1- Permanently connected SPDs intended for installation between the secondary of the service transformer and the line side of the service equipment overcurrent device, as well as the load side, including watt-hour meter socket enclosures and intended to be installed without an external overcurrent protective device.

Type 2- Permanently connected SPDs intended for installation on the load side of the service equipment overcurrent device; including SPDs located at the branch panel.

Type 3 - Point of utilization SPDs, installed at a minimum conductor length of 10 meters (30 feet) from the electrical service panel to the point of utilization, for example cord connected, direct plug-in, receptacle type and SPDs installed at the utilization equipment being protected. See marking in 64.2. The distance (10 meters) is exclusive of conductors provided with or used to attach SPDs.

Type 4 Component Assemblies- Component assembly consisting of one or more Type 5 components together with a disconnect (integral or external) or a means of complying with the limited current tests in 39.4.

Type 1, 2, 3 Component Assemblies- Consists of a Type 4 component assembly with internal or external short circuit protection.

Type 5 - Discrete component surge suppressors, such as MOVs that may be mounted on a PWB, connected by its leads or provided within an enclosure with mounting means and wiring terminations. 1.1 revised April 19, 2010

So how does this affect product listings?

Essentially Type 1 and Type 2 SPDs remain permanently connected stand-alone LISTED SPDs (panel units).

Type 3 SPDs remain LISTED cord connected or direct plug in units.

Type 1,2,3 component assemblies as well as Type 4 component assemblies and Type 5 devices, fall under the Recognized Component program and have conditions of acceptability. These are not stand alone products, if you will, in that they do not include the final enclosure.

One thought worth noting, Type 1, 2, or 3 component assemblies will be marked as Type 1, 2, or 3; however, they will not bear the UL Listed mark, but rather the UL Recognized Component mark.