technical

## **ASK JOE HETZEL**

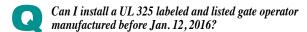
## **DASMA Technical Director**

## The new UL 325 changes

With the Jan. 12, 2016, enactment of changes to UL 325 affecting gate operator manufacturing and installing, questions arose during presentations at the AFA Fencetech event in January. Here are some questions about the changes and UL 325.

UL 325 requires a minimum of two entrapment-protection devices for each area considered to be an entrapment zone and requires that if B1 (non-contact sensor) and/or B2 (contact sensor) devices are used as entrapment protection, they must now be monitored. If we install more than two devices for an area, do they all need to be monitored?

JOE: Yes. The standard does not provide any monitoring limits. It simply says that if B1 or B2 devices are used for entrapment protection, the devices must be monitored, UL 325 labeled and listed, and approved by the operator manufacturer.



JOE: Yes. As with any labeled and listed operator, terms and conditions must be followed. They are typically reflected in the manufacturer's installation instructions. Manufacturers that wish to continue labeling and listing their products must comply with requirements in place at the time of manufacture.

Does entrapment protection need to be considered for the gate moving in both the opening and closing directions?

JOE: Yes. If there is an entrapment zone in the direction of gate travel, then that zone must be protected. All entrapment zones must be identified by the installer regardless of direction of movement.

Are all Type C devices (clutches, pressure-relief and forcelimiting devices) entrapment-protection devices?

JOE: No. They need to be tested with the gate operator to be considered as part of the operator labeling and listing. UL 325 has specific tests for this. The gate operator installation instructions will indicate whether these devices can be used as entrapmentprotection devices.

Can any gate entrapment-protection device be used with any gate operator?

JOE: No. An entrapment-protection device and a gate operator must be tested as a system, and the device itself must be UL 325 labeled and listed. A list of compatible devices should be shown in the gate operator manufacturer's installation instructions.

Can a Type E (audio alarm) still be used as an entrapmentprotection device?

**JOE:** No. Type E is a warning device and has been eliminated as an entrapment-protection device as of Jan. 12, 2016.

Do warning placards still need to be installed to be visible on both sides of the gate?

JOE: Yes. However, the placards do not necessarily need to be installed on the gate itself.

Installing dealers are encouraged to maintain a library of current installation instructions from gate operator manufacturers. Installers should be educated and trained to use these instructions for all installations.

Never assume that a manual has not changed. Industry standards, best practices, safety standards, and manufacturers' products are constantly evolving. The latest manufacturer instructions are essential for proper installation, maintenance, and operation of any product.

Why do different manufacturers have different requirements in regards to the type and number of monitored devices required for the gate operator to function?

**RICK SEDIVY:** I've received this question several times. Here's the short answer. Manufacturers don't have different requirements about the type and number of monitored devices.

There have been no significant changes to UL 325 entrapment protection requirements for gate operators since 2000. There was a minor change in eliminating Type E devices as an entrapment protection device. However, there have been no changes concerning the number of devices, where you place the devices, or what areas need to be protected!

Every manufacturer's instruction manual has drawings that show potential entrapment areas of a gate system. Every manufacturer has terminals for the connection of B1 and/or B2 devices. This has not changed.

What has changed is that manufacturers are now required to monitor these terminals for the connection and the correct operation of the entrapment protection device connected to it. The question is not how many devices need to be connected to a particular brand of gate operator. The question is, and has always been: How many entrapment protection devices are required for the gate system design to comply with UL 325 requirements?

The manufacturer doesn't know the answer to that question. Only the installer or system designer can answer that question by designing a system that ensures that all potential entrapment areas are protected.

