New Edwards Multi-Criteria Smoke Detector First to Meet 2020 UL Safety Standard

BRADENTON, Florida, Sept. 24, 2018 — Fire detection is reaching new, advanced levels, designed to help save more lives. Edwards, continuing in its legacy as the inventor of the alarm bell, is the first multi-criteria smoke detector manufacturer to receive certification to the UL standard for Fire Alarm Systems UL 268, 7th edition, set to take effect May, 2020. The new Signature Optica smoke detectors utilize a next-generation sensor that better distinguishes the type of fire and the danger it creates, as well as reducing nuisance alarms. Edwards is part of UTC Climate, Controls & Security, a unit of United Technologies Corp. (NYSE:UTX).

The significantly revised standard incorporates three new tests, including a new cooking nuisance alarm test and two polyurethane foam tests for smoldering and flaming fires. These new tests better represent the smoke profiles and behavior of modern building fires to help ensure next-generation sensors are designed to give building occupants enough time to evacuate safely. All UL-certified smoke detectors are required to meet the enhanced requirements in 2020, representing a major change in the life-safety industry.

The Edwards Signature Optica detectors will differentiate between truly threatening fast-flaming or smoldering fires and nuisances such as burning food or steam. The new detectors may also improve overall occupant safety, as commercial buildings typically contain furnishings comprised of synthetic materials such as
polyurethane foam that are known to ignite and burn faster than traditional materials. This is a major advancement for commercial building operators, especially in hospitality, healthcare and other facilities that can be prone to nuisance alarms.

“Through our research, we know that fire dynamics have changed over the last several decades,” said Chris Hasbrook, Vice President and GM for UL’s Building and Life Safety division. “We know manufacturers like Edwards have been actively working toward meeting the new smoke detector requirements and we are happy to see the first certification mark on a multi-criteria smoke detector. While expanding the smoke detector’s ability to respond to a range of types of smoke generated from various types of fires, today’s smoke alarm will be more technologically advanced and have the ability to help reduce cooking nuisance alarms, and that’s extremely important for fire safety.”

The technology in Signature Optica represents a more sophisticated detection methodology. As particles enter the chamber, the size of the particles is analyzed by a series of algorithms and consolidated into ratios to determine if the particles stem from a real fire or a nuisance source. This innovative approach was quickly matured using advanced design principles and the Edwards state-of-the-art fire test room. Signature Optica detectors can be retrofitted to existing Edwards systems without replacing control panels or software.

“Edwards is providing customers with the tools they need to alarm faster with greater accuracy, building on our 146-year legacy of fire and life-safety innovation,” said Edwards General Manager Angie Gomez. “The new Signature Optica smoke detectors will enhance protection of people and property while minimizing false alarms that cause business interruption and unnecessary responses by fire departments.”
In 2014 alone, according to the NFPA Journal, U.S. fire departments responded to 2.5 million false alarms.

The Signature Optica detector line will become commercially available in the coming months. For more information, contact us at edwards.fire@fs.utc.com.

**About Edwards**
Since 1872, Edwards™ has led the way with innovative fire detection and alarm solutions. From economical control panels to high-end life safety and emergency communications platforms, this rich legacy of inventiveness and uncompromising quality has distinguished Edwards life safety systems as the technologies of choice among building owners and designers the World over. Edwards is part of UTC Climate, Controls, & Security, a unit of United Technologies Corp., a leading provider to the aerospace and building systems industries worldwide.