Hygiene in medical technology

Antimicrobial equipment switches and circuit breakers

Medical equipment and their components must meet high standards of hygiene to ensure patient and staff safety. Therefore, SCHURTER offers special switches and circuit breakers provided with antimicrobial covers for use in equipment for medical technology.

Hygiene in hospitals protects patients and health care professionals (Source: SCHURTER AG)

Human skin is densely populated with bacteria and fungi. Researchers have identified more than 4,700 types of bacteria that live on the palms of our hands, with each person carrying as many as 150 different types. The composition of these bacterial colonies differs considerably from person to person, even from one hand to the other; in fact, 83 percent of the bacteria on one of a person’s hands are not present on the other hand. This wide variety of bacteria normally presents no danger for healthy people. However, pathogens such as flu and cold viruses and pestilential intestinal bacteria spread just as easily through direct hand contact or by touching interaction elements such as switches and door handles. The result is a large range of possible bacteria that can collect on equipment controls operated by people.

SCHURTER has addressed this problem specifically and now offers the proven TA35 equipment switch and circuit breaker with an antimicrobial cover. The circuit breaker is already used to provide thermal overcurrent protection in high-quality applications around the world. Its new antimicrobial properties further expand its range of use into sensitive applications where the spread of bacteria must not occur. These include medical and laboratory equipment, such as switches for electrically adjustable patient beds, anesthesia workstations, medical ventilators and centrifuges in laboratory settings as well as apparatus used in the food industry.

The antimicrobial properties of the switches are achieved with silver ions, which in high concentrations act as a bactericide. Their effectiveness against the growth of the bacterial strains Escherichia coli and Staphylococcus aureus, which are particularly feared in the medical area, have been tested and confirmed according to ISO 22196. However, silver ions also inhibit the growth of countless other organisms. They are not applied as a coating but are mixed directly into the plastic, which provides for considerably long-lasting effectiveness. The transparent protective coating of the TA35 is also waterproof and dustproof, meeting the requirements of Protection Class IP65, and is resistant to common cleaning and disinfectant agents. Thus, SCHURTER contributes to more cleanliness, which also leads to reduced numbers of corrupted results in laboratory analyses and fewer disease transmissions in medical care centers. As a result, the spread of contagious diseases such as the MRSA (Methicillin-resistant Staphylococcus aureus) infection, which more than 160,000 patients suffer from each year in German hospitals alone, may be impeded in patient care facilities.

TA35 technical features:
- Rated current: 50 mA - 20 A
- Standards: IEC 60934, UL 1077, CSA C22.2 235, GB 17701
- 1-, 2- and 3-pole designs
- Lighted or unlighted rocker in six colors
- Wide range of labels or customer-specific symbols
- Efficient snap-in assembly in plates from 1 to 4 mm thick
- 6.3 x 0.8 mm quick-connect terminals

E. coli, a feared strain of bacteria (Source: shutterstock)

TA35 with antimicrobial properties from SCHURTER (Source: SCHURTER AG)
Company
SCHURTER continues to be a progressive innovator and manufacturer of electronic and electrical components worldwide. Our products ensure safe and clean supply of power, while making equipment easy to use. We offer a broad range of standard products including circuit protection, connectors, EMC products, switches and input systems, as well as electronic manufacturing services. Moreover, SCHURTER is ready to work with our customers to meet their application specific requirements, not covered in our standard range. You can rely on SCHURTER’s global network of companies and partners to guarantee a high level of local service and product delivery.

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