

DMMS IEC 60669-2-1:2002+AMD1:2008+AMD2:2015 Ed.4.2-Switches for household and similar fixed electrical installations - Part 2-1: Particular requirements - Electronic switches  
Scope

This clause of part 1 applies except as follows.

Replacement:

This standard applies to electronic switches and to associated electronic extension units for household and similar fixed electrical installations either indoors or outdoors. It applies to electronic switches for a.c. only, for the operation of lamp circuits and the control of the brightness of lamps (dimmers) as well as the control of the speed of motors (for example, those used in ventilating fans) and for other purposes (for example, heating controls), with a rated voltage not exceeding 250 V and a rated current not exceeding 16 A. The operation and/or control as mentioned above are performed by a person via an actuating member, a sensing surface or a sensing unit, by means of touch, proximity, turn, optical, acoustic, thermal or any other influence. This standard also applies to general purpose electronic switches with included automatic functions where the operation and/or the control is made initiated by a change of a physical means quantity, for example light, temperature, humidity, time, wind velocity, presence of persons, etc. This standard also applies to boxes for electronic switches, with the exception of mounting boxes for flush-type electronic switches. This standard also applies to electronic RCS and electronic TDS with a rated voltage not exceeding 440 V and a rated current not exceeding 25 A, intended for household and similar fixed electrical installations, either indoors or outdoors. NOTE 1 Switches including only passive components such as resistors, capacitors, inductors, PTC and NTC components, varistors, printed wiring boards and connectors are not considered as electronic switches. NOTE 2 Electronic switches may have control circuits with a.c. or d.c. rated control voltages. Electronic switches complying with this standard are suitable for use at ambient temperature not normally exceeding 25 °C but occasionally reaching 35 °C. In locations where special conditions prevail, such as in ships, vehicles and the like and in hazardous locations, for example, where explosions are liable to occur, special constructions may be required. NOTE 3 This standard is not intended to cover devices which are designed to be incorporated in appliances or are intended to be delivered together with a specific appliance and which are within the scope of IEC 60730 or IEC 61058-1. Examples of designs of electronic switches and functions are shown in annex AA.

NOTE 2.4 Electronic switches without a mechanical switch in the main circuit do not provide a “full off-state”. Therefore, the circuit on the load side should be considered to be live.