CTL DECISION SHEET (DSH)

| Standard(s) (incl. year) | Subclause(s) | Tracking No. | Year |
|--|---|--------------|--------------------------------|
| IEC 60335-1:2010 IEC 60335-1:2010/AMD1:2013 IEC 60335-1:2010/AMD2:2016 | 22.55 | 2162 | 2020 |
| Category | | | |
| HOUS | | | |
| Subject | Keywords | Developed by | Approved at |
| Stopping devices to be distinguished which are operated by the user | DistinguishableStop deviceIntended function | ETF 1 | 2022 CTL Plenary Meeting |

Question

An appliance has a single push-button switch that combines start, stop and mode cycle functions:

- The user starts the intended function of the appliance by a short pressing action on the push button. One long pressing action on the push button makes the appliance switch to a different mode.
- By further short pressing actions, the user is able to switch the appliance through different modes to the intended function.
- The user stops the intended function of the appliance by a long pressing action on the push button for about 2 seconds.

Is the design of the device to stop the intended function of the appliance in compliance with the requirement of clause 22.55?

22.55 Devices that are operated by the user to stop the intended function of the appliance, if any, shall be distinguished from other manual devices by means of shape, or size, or surface texture, or position. This requirement concerning position does not preclude use of a push on push off switch.

An indication when the device has been operated shall be given by:

- tactile feedback from the actuator or tactile feedback from the appliance such as stopping of the vibration on the body of the appliance or of a part of it; or
- reduction in heat output: or
- audible and visible feedback.

The sound of the motor or sound of an actuator switching from on to off is considered as an audible feedback. A switch with a stable off-position different from the on-position is considered visual and tactile feedback. The force feedback from the actuator when operating it is considered to be tactile feedback.

Compliance is checked by inspection and by manual test.



Decision

The requirement allows the combination of a push-on / push-off operation to start and stop the intended function only. Further functions to be made available to the operator while the appliance performs the intended function shall be operated using manual devices that can be distinguished from the push-on / push-off device to start and stop the intended function of the appliance.

IEC/TC 61 agreed as follows in the Web meeting held in December 2020:

The described construction is considered to meet the requirement in Clause 22.55, as the device can be distinguished (first paragraph of Clause 22.55); and when it is distinguished, there is an appropriate indication that the device has been correctly operated.

Explanatory notes

The question which turns up here is that the push-on / push-off operation of the switch may be enhanced by an operation to adjust the mode of the intended function of the appliance and the principle that the button which started the intended function of the appliance is to be pressed to stop the intended function while the appliance performs the intended function may be violated.

Against this concern, TC61 confirms that the described construction is condsidered to meet the requirement of Clause 22.55 because this requirement concerning position does not preclude the use of a push-on / push-off switch and:

- the device can be distiguished according to the fiirst pargraph of Clause 22.55 and
- there is an appropriate indication as required in the second paragraph of Clause 22.55.