

☒ **CTL Provisional DECISION SHEET (PDSH)**  
☐ **CTL DECISION SHEET (DSH)**

| Standard(s) (incl. year)                           | Subclause(s)   | Tracking No. |
|----------------------------------------------------|----------------|--------------|
| IEC 60335-2-7:2024                                 | Clause 22.104. | 2290         |
| Category                                           |                |              |
| HOUS                                               |                |              |
| Subject                                            | Keywords       | Developed by |
| Robust test for door interlock of washing machines | Door interlock | ETF 1        |

**Question**

1. Some washing machines have a door lock with a rotary latch mechanism, wherein the latch is engaged by turning the handle, and the latch does not rotate when the washing machine is in operation (see picture 1).

When the appliance is de-energized, the door can be opened without applying a force other than turning the latch.

How should the opening force of this appliance be measured?

Is Clause 22.104 applicable for washing machines with this structure?



Picture 1. A door lock with a rotary latch mechanism

2. Doors of some washing machines are opened by pushing it in normal use and have no handle. (see picture 2).

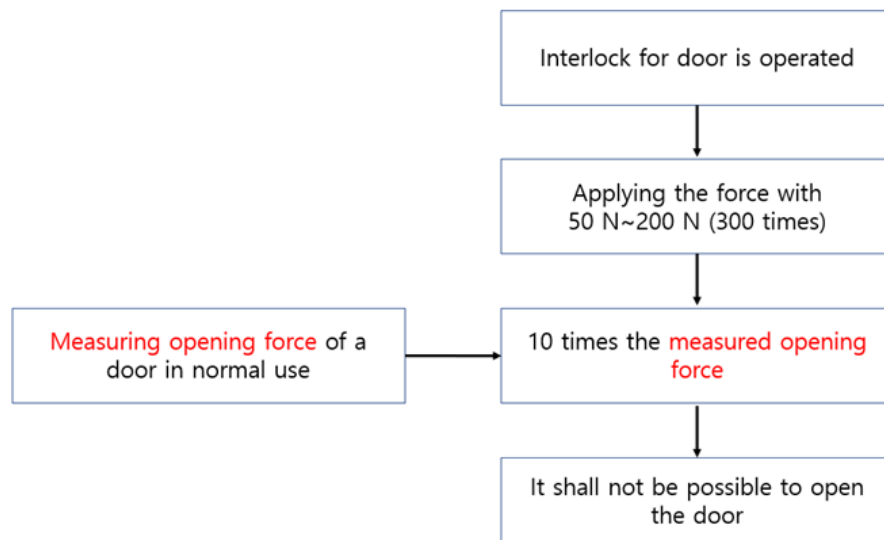
How should the opening force of this appliance be measured?

Is Clause 22.104 applicable for washing machines with this structure?



Picture 2. A washing machine opened by pushing it in normal use without handle.

### Decision



### Explanatory notes

Enquiry: 2290

Date: 2025

PDSH: 2290

Year of publication: 2025

To be approved at CTL plenary: 2026

### DSH

Publication date: N/A

The proposed decision was discussed and taken by MT 65 of IEC TC 61 with the following rationale:

The intention of this test is to evaluate the door lock's ability to withstand the stress occurring during normal operation. It shall be ensured that door lock cannot be forced open.

Although the normal door opening force is used as an input for this test, the door lock is not only subjected to this opening force in normal operation. The main stress factor for the door lock is rather the force occurring during normal washing cycles, such as wet laundry pressing against the door. Therefore, the test force should be independent from the opening force and MT65 sees the need to modify the requirement accordingly.

To MT65's understanding, both of above cases can still be covered by the current requirements:

1. The door with the rotary latch mechanism requires a torque to be applied to the rotary knob, but almost no force to be opened. Here, the minimum forces shall be applied during the tests of cl. 22.104 as defined by the standard.
2. Judging from Picture 2, the appliance with the push-to-open door has drum dimensions above the limits defined in cl. 20.107. In this case, the door can be opened by pushing from the inside with a force not exceeding 70 N. This opening force shall be measured and be the input parameter for the test forces of cl. 22.104.