

OSM/EE DECISION SHEET

Category	Standard:		Clause	Document no.	
MEAS	EN 61010-1:2010 EN 61010-1:2010 + A1:2019		4.4.2.14 Voltage selectors	OSM-EE 24/5	
Subject		Key words		Meeting	
Voltage selectors				Helsinki 2024	

Question

In 61010-1 standard voltage selector that can be operated by operator is set to each possible setting with the equipment connected to each of its rated input voltages.

The question arises when equipment has fuse(s) with different rating depending on the selected voltage and that is replaceable by operator.

For example, T3.15H/250V with 230V setting and T6.3H/250V with 115V setting.

How different fuses should be considered in testing?

Decision

The EUT is to be tested with the mains selector in the most unfavourable position(s), and with the most unfavourable fuse(s). This is considered as an abnormal operating condition

Explanatory notes

Table 1

Rated voltage	Voltage setting 230V	Voltage setting 230V	Voltage setting 115V	Voltage setting 115V
115/230V	Fuse T3.15H/250V	Fuse T6.3H/250V	Fuse T6.3H/250V	Fuse T3.15H/250V
Input voltage	Normal	Abnormal	Abnormal	Abnormal
230V		Fuse doesn't match voltage setting	Input voltage doesn't match voltage setting	Input voltage and fuse doesn't match voltage setting
Input voltage 115V	Abnormal Input voltage doesn't match voltage setting	Abnormal Input voltage and fuse doesn't match voltage setting	Normal	Abnormal Fuse doesn't match voltage setting



