

## OSM/IN DECISION

<b>Standard:</b>	EN 61058-1:2002 + A2:2008	<b>Sub clause:</b>	13 – 17	<b>Sheet N°:</b>	OSM/IN 243
<b>Subject:</b>	Rotary switches for “cooking range” (Endurance test)	<b>Key words:</b>	- cooking range switch - multiple poles	<b>Meeting N°:</b>	19 (2009)
				<b>Item:</b>	4.1.2

**Question:** Acceptability of mechanism of a rotary multiway switch to be used in “cooking range”.

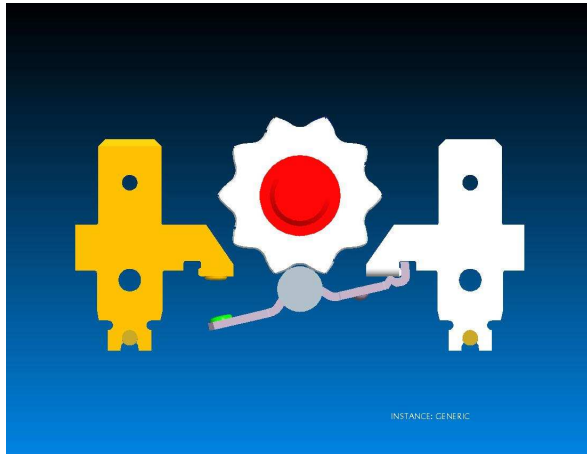
Description:

New sample of a switch met requirements of clauses 13, 14, 15 and 16.

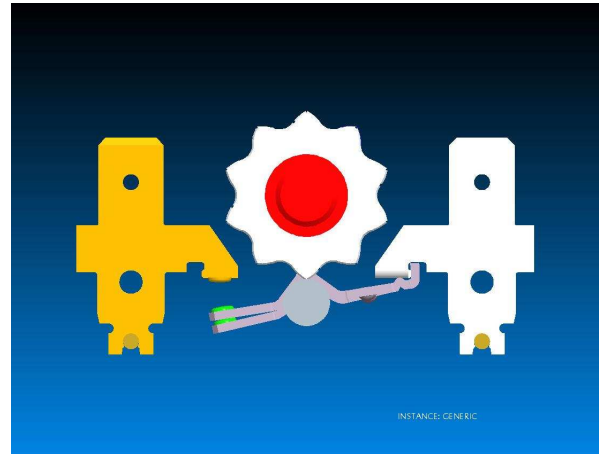
After endurance test (Cl. 17) switch met requirement of:

Sub-cl. 17.2.5.2 Thermal compliance; in closed position  
and

Sub-cl. 17.2.5.3 Insulating compliance (1500V); in fully open position (Figure 1) and in intermediate position of locking mechanism (Figure 2)



**Figure 1**  
(Switch locked in fully open position)



**Figure 2**  
(Switch rest in an intermediate position)

It is requested the interpretation of the following requirement:

**17.2.5 Evaluation of compliance**

**17.2.5.1 Functional compliance (TE1)**

After all the appropriate tests of 17.2.4, the switch is deemed to comply if

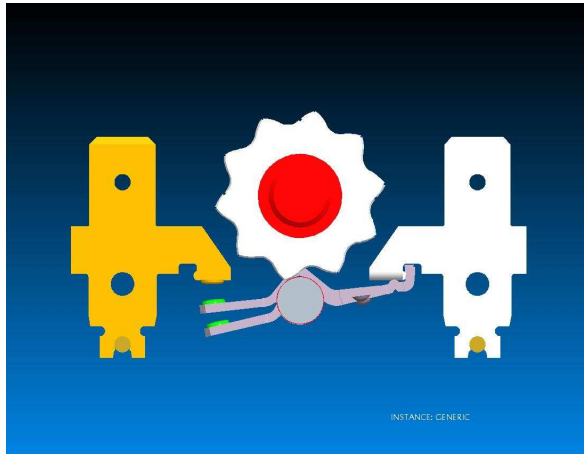
- all actions function as declared;
- ...

*To be continued*

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After the appropriate tests of 17.2.4 locking mechanism is worn out to such extent that requirements of Sub-cl. 13.2 and Sub-cl. 13.3 are not met anymore. It is possible to set actuating mean in several positions in which moving contacts are rest in positions in which compliance with Sub-cl. 13.2 and 13.3 are not met. An example is shown in Figure 3.



**Figure 3**  
**(Switch in semi-OFF position)**  
**Requirements of Cl.15.3 (75% of corresponding test voltage) are not met**

Is it required that requirements of Cl. 13 are met after tests of Cl. 17 ?

Or it is enough that switch withstand heating test in closed position and dielectric strength test with 75% of corresponding test voltage in fully open position?

**Decision:**

Although the compliance criteria of Clause 17 are met in this case, the criteria of Clause 13 shall also be met.

This can be considered as invoked by the requirements of clause 4, ie: “*In general compliance is to be checked by carrying out all the relevant tests.*”. Obviously in this case the requirements of clause 13, following clause 17, are “*the relevant tests*”.

**Explanatory notes: -**