## COLLECTION OF CIG-OSM/IN DECISIONS



SAMPLE SELECTION FOR TESTS ON HOMOGENEOUS SERIES OF SWITCHES FOR APPLIANCES ACCORDING TO EN 61058

|  |  | $\begin{gathered} \hline \hline \text { Pattern } \\ \text { number } 4 \\ \text { centre off } \\ \text { 1P 5) } \\ \hline \end{gathered}$ | 2P 4) |  | Pattern number <br> 1P | 2P 4) | Pattern n. 2 2P | Pattern n. 1 | Pattern n. 5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S | CLAUSES |  | with | without |  |  |  |  |  |
| 8 | Markings | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 9 | Protection against electric shock | Yes | Yes | Yes |  |  |  |  |  |
| 10 | Provision for earthing | Yes | Yes |  |  |  |  |  |  |
| 11 | Terminals and terminations | Yes | Yes |  |  |  |  |  |  |
| 12 | Construction | Yes | Yes | Yes |  |  |  |  | Yes |
| 13 | Mechanism | Yes | Yes | * | Yes | Yes |  |  | Yes |
| 14 | IP Protection | Yes | Yes | * |  |  |  |  |  |
| 15 | Insulation resistance and dielectric strength | Yes | Yes | Yes | Yes | Yes |  |  | Yes |
| 16 | Heating 2) |  | Yes |  |  | Yes |  |  | Yes |
| 17 | Endurance 2) | Yes | Yes |  |  | Yes |  |  | Yes |
| 18 | Mechanical strength | Yes | Yes |  |  |  |  |  |  |
| 19 | Screws, current carrying parts and connections | Yes | Yes |  |  |  |  |  | Yes |
| 20 | Clearance, creepage distance and distances through insulation | Yes | Yes | Yes | Yes | Yes |  |  | Yes |
| 21 | Resistance to heat, fire and tracking 3) | Yes | Yes | * |  |  |  |  |  |
| 22 | Resistance to resting | Yes | Yes |  |  |  |  |  |  |


| Standard: EN 61058-1:1992 | Sub clause: General | Sheet no. OSM/IN 112b |  |
| :--- | :--- | :--- | :--- | :--- |
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## HOMOGENEOUS SERIES OF SWITCHES FOR

## APPLIANCES

An homogeneous series of switches shall have:

- same contacts
- same contact operating mechanism
- same basic body type.


## Notes:

A) If the series have micro and normal gap the test of clauses $13,15,16,17,18$ and 20 shall be carried out on both types.
B) If the series have different operating means but with the same contact blocks the worst operating means would be tested.
C) Different ratings: separate tests of clauses 16 and 17.
D) Switches with momentary contact shall be tested separately according to clauses 16 and 17.
E) NO/NC-contacts: separate tests according to clauses 16 and 17.
F) Different operating forces (declared by the manufacturer): separate tests according to Clauses 16 and 17 for switches with minimum and maximum operating force.
G) If a pattern number is not quoted on this Annex A (see pages 25 of 29 and 26 of 29) the test scheme shall be carried out according to the manufacturer instructions. In this case the test scheme shall be quoted on the Test Report.

Notes relevant to table on OSM/IN 120b/2:

1) Samples with all terminal types are to be tested according to Clause 11.
2) If the homogeneous series of switches contain switches with various types of terminals the heating test according to clause 16 is conducted on the smallest terminal size of each type. The endurance test according to clause 17 then carried out on the switches with terminal with the highest temperature rise.
3) The test of clause 21 shall be repeated if the material changing.
4) Pattern number 4 :

1 cycle $=\mathrm{O}-\mathrm{I}-\mathrm{O}-\mathrm{II}-\mathrm{O}$
Pattern number 6:
1 cycle $=$ I-II-I
for example: switches with 10.000 operating
1 set ( 3 samples) should be testes with 10.000 operatings on the left side and 10.000 operatings on the right side of the contact.
5) If a particular type is not included in the range the heading is removed and the remaining heading moved to the left.

| Pattern Number | Number of poles | Possible connection | Test Circuit |
| :---: | :---: | :---: | :---: |
| 1 | 1 | $q_{2}^{1}$ |  |
| 2 | 2 | $\left.\frac{1}{2}\right\}^{3}$ |  |
| 3 | 3 | $\frac{\left.\left.q^{1}\right\}_{2}^{3}\right\}^{5}}{46}$ |  |
| - | 4 |  |  |


| Pattern Number | Number of poles | Possible connection | Test Circuit |
| :---: | :---: | :---: | :---: |
| 4 | 1 | $29 \oint_{9}^{\downarrow}$ |  |
| 5 | 1 |  |  |
| 6 | 1 |  |  |
| 6/2 | 2 |  |  |

