## Interpretation Sheet 4

## EN 60898-1:2003

English version

## Foreword

This Interpretation Sheet to the European Standard EN 60898-1:2003 was prepared by the Interpretation Panel of the Technical Committee CENELEC TC 23E, Circuit breakers and similar devices for household and similar applications. The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC on 2007-05-07.

## Subclauses 9.10.2.1 and 9.10.2.2

### 9.10.2.1 General test conditions

For the lower values of the test current of 9.10.2.2, 9.10.2.3 and 9.10.2.4 respectively the test is made once, at any convenient voltage.

For the upper values of the test current the test is made at rated voltage $U_{\mathrm{n}}$ (phase to neutral) with a power factor between 0,95 and 1 .

The sequence of operation is

$$
\mathrm{O}-\mathrm{t}-\mathrm{CO}-\mathrm{t}-\mathrm{CO}-\mathrm{t}-\mathrm{CO}
$$

The interval $t$ being as defined in 9.12.11.1.

The tripping time of the O operation is measured.

After each operation the indicating means shall show the open position of the contacts.

### 9.10.2.2 For circuit-breakers of the B-type

A current equal to $3 I_{\mathrm{n}}$ is passed through all poles starting from cold.

The opening time shall not be less than 0,1 s.

A current equal to $5 \mathrm{I}_{\mathrm{n}}$ is then passed through all poles, again starting from cold.

The circuit-breaker shall trip in a time less than 0,1 s.

## Question:

For the upper values of the test current, shall the test be carried out in a single-pole configuration, pole by pole or in a circuit the connections of which are shown in Figures 3 to 6, according to the number of poles, at rated voltage?

## Interpretation:

According to the test conditions in 9.2, item b :

The tests are carried out with single-phase current, with all poles connected in series, except for the tests of 9.8.2, 9.10.2 and 9.11.

Therefore, each of the protected poles of the circuit-breaker is subjected separately to a test in a circuit the connections of which are shown in Figure 3.

Same interpretation for Type-C in 9.10.2.3 and Type-D in 9.10.2.4.
The additional impedances $Z_{1}$ are adjusted so as to obtain a current of 5 , 10 or 20 times $I_{n}$, respectively for Type B, C or D device, at a power factor between 0,95 and 1 .

