





## International short forms of types of conductors:

r (rigid)	sol (solid)		
	(conductors with circular cross section and sector type of conductors)		
s (stranded)			
	(conductors with circular cross section and sector type of conductors)		
f (flexible)			

## Reference to the preparation of aluminum conductors:

1. Clean the bared conductor end carefully by scraping off the oxide film, for example with a knife, (Please do not use rasps, emery paper or brushes!).
2. Immediately after removing the oxide film the conductor end is to rub in with acid and alkali free fat for example vaseline, and immediately to be connected in the terminal.
3. The prementioned processing steps are to be repeated, if the conductor was disconnected and connected again.
4. Due to the disposition to flowing of aluminum the terminals are to be re-tightened before start-up and after the first 200 operation hours.

## Term definitions

Rated values for setting up low-voltage switchgear are given in the standard IEC 60 439-1.

### **I<sub>cw</sub> Rated short-time withstand current**

The rated short-time current of a circuit of an assembly is the r.m.s. value of short-time current assigned to that circuit by the manufacturer which that circuit can carry without damage under the test conditions specified in 8.2.3 IEC 60 439-1. Unless otherwise stated by the manufacturer, the time is 1 s.

### **I<sub>e</sub> Rated operational current**

A rated operational current of an equipment is stated by the manufacturer and takes into account the rated operational voltage, the rated frequency, the rated duty, the utilization category and the type of protective enclosure, if appropriate.

### **I<sub>n</sub> Rated current**

The rated current of a circuit of an ASSEMBLY is stated by the manufacturer, taking into consideration the ratings of the components of the electrical equipment within the ASSEMBLY, their disposition and application. This current must be carried without the temperature-rise of the various parts of the ASSEMBLY exceeding the limits specified in 7.3. (tabel 2) when verified according to 8.2.1. IEC 60 439-1.

### **I<sub>PK</sub> Rated peak withstand current**

The rated peak withstand current of a circuit of an assembly is the value of peak current assigned to that circuit by the manufacturer which that circuit can withstand satisfactorily under the test conditions specified in 8.2.3. IEC 60 439-1.

### **U<sub>e</sub> Rated operational voltage**

The rated operational voltage of a circuit of an assembly is the value of voltage which, combined with the rated current of this circuit, determines its application. For polyphase circuits, it is stated as the voltage between phases.

### **U<sub>i</sub> Rated insulation voltage**

The rated insultaion voltage of a circuit of an assembly is the voltage value to which dielectric test voltages and creepage distances are referred. The maximum rated operational voltage of any circuit of the assembly shall not exceed its rated insulation voltage. It is assumed that the rated operational voltage of any circuit of an assembly will not, even temporarily, exceed 110 % of its rated insulation voltage.

### **TSK Type-tested low-voltage switchgear and controlgear assembly**

a low-voltage switchgear and controlgear assembly conforming to an established type or system without deviations likely to significantly influence the performance, from the typical assembly verified to be in accordance with this standard.

### **PTSK Partially type-tested low-voltage switchgear and controlgear assembly**

a low-voltage switchgear and controlgear assembly, containing both type-tested and non-type-tested arrangements, provided that the latter are derived (e.g. by calculation) from type-tested arrangements which have complied with the relevant tests (see table 7) IEC 60 439-1.