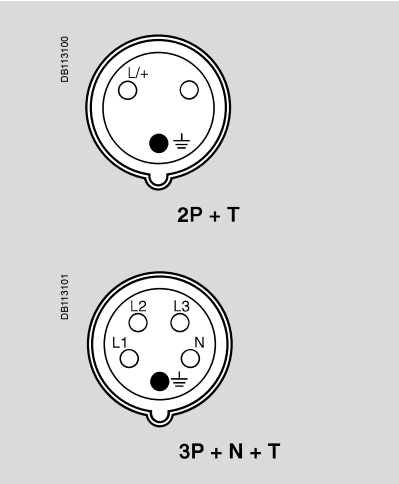
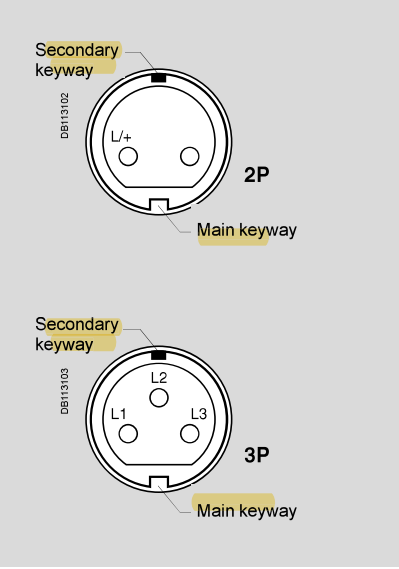
General information



Low voltage socket



Extra-low voltage socket

Principal provisions

The standards cover the use of plugs and sockets with either alternate current, frequency of up to 500 Hz, or direct current, divided into two main classes:
- extra-low voltage plugs and sockets, with operating voltage of up to 50 V
- low voltage plugs and sockets, with operating voltage of 50 V to 690 V.

The standards cover rated currents of 16 and 32 A with 2P and 3P configurations for extra-low voltage, and rated currents of 16, 32, 63 and 125 A with 2P+⏚, 3P+⏚ and 3P+N+⏚ for low voltage.

There is a specific model for each use, with different rated characteristics of voltage, frequency, polarity and application, incorporating safety hindrances which make it impossible to insert any plug in a socket which is not the exact corresponding type.
Non-interchangeability is ensured by compliance with the different standardised dimension tables which indicate different ground contact positions in relation to a standard fixed reference of the connection.

Low voltage versions > 50 V

In the low voltage versions non-interchangeability is ensured by means of two elements:
- a guide spline on the socket which matches with a corresponding nib on the plug
- a ground contact larger than the other contacts, in a different clock position according to the rated operating characteristics.

The clock position (h) of the ground contact is checked by observing, with the socket viewed from the front, the position of the ground contact in relation to the main keyway (guide spline), always positioned at 6 o'clock.

Extra-low voltage versions < 50 V

Also for these versions, with no ground contact, non-interchangeability is ensured by means of two reference elements:
- a guide spline on the plug which matches with a corresponding nib on the socket, always at a fixed 6 o'clock position
- a secondary keyway, also this a spline on the plug to which corresponds a nib on the socket, at different clock positions according to the operating characteristics.

The clock position (h) of the secondary keyway is checked by observing, with the socket viewed from the front, the position of the nib in relation to the main keyway, always positioned at 6 o'clock.

Coded colours

For easy identification of the operating voltage, the standard indicates conventional coded colours which may involve the entire device or only one part (e.g., lift cover, ring, etc.).

Rated operating voltage	Colour (1)
De 10 à 25 V	Violet
De 40 à 50 V	White
De 100 à 130 V	Yellow
De 200 à 250 V	Blue
De 380 à 480 V	Red
De 500 à 690 V	Black

(1): for a frequency above 60 Hz and up to 500 Hz included, the green colour can be used, if necessary, in conjunction with the colour of the rated operating voltage.

Clock reference

The range comprises all versions covered by the standards, including the more specific ones. Although the catalogue covers only some standard models, it is possible to have all the different clock positions specified by the standard; the following are some of the positions for this range:

Application		Clock position ground contact
Common use		h 6
Refrigerated containers		h 3
Marines, wharf and ship installations		h 11
Power supply through isol.transformer (TST)		h 12
Direct current	50 to 250 V	h 3
	Above 250 V	h 8
Hight-frequency	100 to 300 Hz	h 10
	Above 300 to 500 Hz	h 2
Special voltage	100 to 130 V	h 4
	480 to 500 V	h 7
	600 to 690 V	h 5

Possible variations are indicated in the table at page 62.