

Changeover switches

Changeover switches with high operating load capacity and a high level disconnection insulation; high reliability and safety in abnormal situations, available in different construction models, with a wide range of currents, motorized units and various accessories.

series **CCF|CCP|SSF|SSL|SSB** series **CEC**

According to:
IEC 60947-3
IEC 61439-2
RoHS



Testing and approvals:



The changeover switches in the series **CCF|CCP|SSF|SSL|SSB**, are manufactured with high safety self-extinguishing materials, providing an excellent level of electrical insulation, low smoke emission and high resistance to electromechanical stress.

They comply with environmental requirements and undergo strict quality controls for a reliable product that meets the most demanding requirements.

They consist of a sandwich-type body containing self-cleaning blade type contacts,

with pre-arc zones to ensure long term, fault-free energy transmission and coated with silver alloy for long electromechanical life. The detent mechanism provides quick and independent switching due to the accumulation of elastic potential energy, which is transmitted at high speed to the contacts for arc extinction.

The compact models are with visible cut-off and performed internally the common output without the need for external connections.

Functional and ergonomic handle

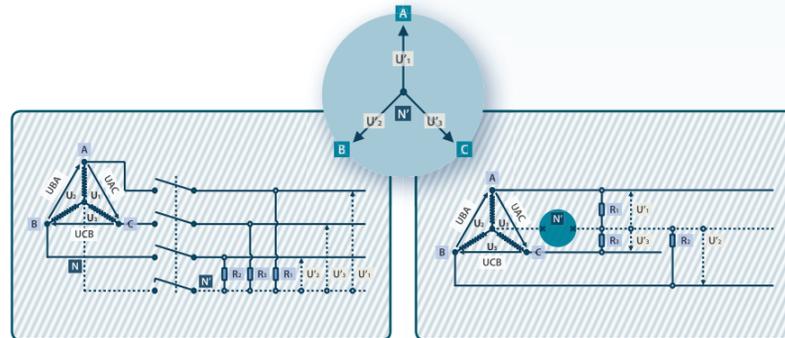
- > Good grip and excellent torque/resistance
- > Padlockable handle in **OFF** position (up to three locks Ø 5-8 mm)
- > Door interlock in **ON I - ON II** position
- > Self-centering shaft for door handle



Neutral pole early make & late break

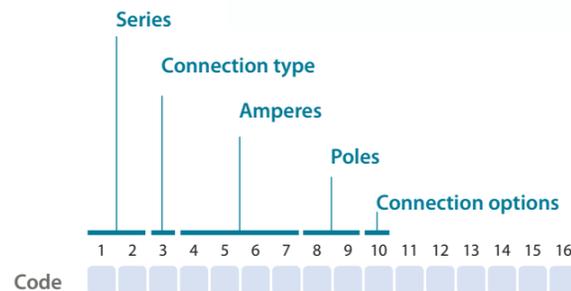
This safety feature prevents accidental overvoltage when making/breaking of loads connected between phase and neutral.

Due to the design in our 3P+N switch - disconnectors and changeover switches, the neutral contact closes before the main phases and opens later, thus ensuring this operation mode.



Range codification:

The **CCF|CCP|SSF|SSL|SSB** series, are identified by a code that describes their most important characteristics as described below.



series CCF



1 2 3 4 5
CCF

- Compact model.
- Visible cut-off.
- Common output from the front.
- Wide range of currents.
- Base mounting by screws.
- External or direct handle.

series CCP



1 2 3 4 5
CCP

- Compact model.
- Visible cut-off.
- Common output from the rear.
- Wide range of currents.
- Base mounting by screws.
- External or direct handle.

series SSF|SSL



1 2 3 4 5
SSF

- Back to back or line arrangement.
- Base mounting by screws.
- External or direct handle.

series SSB



By-pass

1 2 3 4 5
SSB

- Back to back arrangement.
- Base mounting by screws.
- External or direct handle.

series CEC



1 2 3 4 5
CEC

- Compact efficient changeover switches.
- Reduced size.
- Common output from the up.
- Flexible mounting.
- Innovative single mechanism for COS function.
- Lower energy losses.
- External or direct handle.

series CTR2



IP65

1 2 3 4 5
CTR2

- Manual changeover switch in metallic enclosure.
- External padlockable handle with locking door in ON I - ON II positions.

series CTRC



IP55

IP66

1 2 3 4 5
CTRC

- Motorized changeover switch in metallic enclosure.
- Outdoor lights position indicators (mains - 0 - generator).
- Power connections on the bottom for direct access.
- Power part protected against accidental contact.
- Physical separation between power and control parts.
- Including manual handle (for emergency operation or maintenance).
- Other special combinations under request.

series CTRC



IP66

1 2 3 4 5
CTRC

- Motorized changeover switch in metallic enclosure with automatic transfer switch for the generator control with automated switching Main - Gen management.
- Configurable through software programming.
- Power part protected against accidental contact.
- Including manual handle (for emergency operation or maintenance).

