

**TCB 24-52 kV Double-break disconnecter**

HV Switching



## We know how

Our range of double-break disconnectors is designed to ensure the best performances and reliability, which are the result of our 70-year old experience.

Over 100,000 disconnectors installed in more than 100 countries worldwide are the guarantee of best-buys.

## The TCB 24-52 kV double-break disconnecter

The TCB 24-52kV consists of a supporting base on which three insulators are mounted; two of these insulators are bolted directly to the base, while the third one is fastened to a rotating support.

The insulators carry, at their top, the main circuit, which consists of a swivel arm and two fixed contacts.

The arm is made of an aluminium tube bolted at the top of the central rotating insulator with silver plated copper fingers (silver thickness depends on the rated current).

The fixed contacts are also silver plated and are bolted directly on the top of the side insulators; flat terminals are made of aluminium.

The base frame and the rotary support are made of hot-dip galvanised steel profiles. Bearings are suitably protected to ensure maintenance-free operation for the whole life of the equipment.

The insulators comply with either IEC or ANSI standards; special heights and creepage distances are also available upon request.

Integrated earthing switches are available for mounting on each or both side of the pole.

The three poles are usually operated simultaneously, either manual or electrically, by a single operating mechanism.

Upon request, the equipment can be fitted with special devices to switch small currents; suitable shields, where needed, are also available to operate under severe ice conditions (up to 20 mm).

Like all our models, the TCB meets the latest international standards (IEC, ANSI) and it can also be customised according to clients' particular specifications

The whole design and manufacturing process is ruled by ISO 9001 certified procedures, to guarantee perfect performance reproducibility from type-testing to series production.

Due to lifetime greased (or self-lubricated) hinges and to self-wiping contacts, the maintenance of the TCB is ensured by its motion. The use of corrosion-free (or coated) materials for all components ensures exceptional reliability for many years of service. The mechanical endurance performance exceeds IEC standard requirements.

## Ratings and dimensions

The values in the table refer to IEC standards only.

Rated voltage		$U_r$ (kV)	24	36	52
Rated power-frequency withstand voltage	TE	$U_d$ (kV)	50	70	95
	AID	$U_d$ (kV)	60	80	110
Rated lightning impulse withstand voltage	TE	$U_p$ (kV <sub>p</sub> )	125	170	250
	AID	$U_p$ (kV <sub>p</sub> )	145	195	290

TE: To Earth

AID: Across the Isolating Distance

Rated continuous current	$I_r$ (A)	up to 8000 (depending on rated voltage)
Rated short-time withstand current	$I_k$ (kA)	up to 63 / 3 s (depending on rated current)
Rated peak withstand current	$I_p$ (kA <sub>p</sub> )	up to 170 (depending on rated current)

Dimensions (mm)	A1	580	680	860
	A2*	860	860	-
	B	305	445	560
	C	360	500	500
	D1	400	500	650
	x D2*	650	650	-
	E	60	60	60
	F	4 $\varnothing$ 14	4 $\varnothing$ 14	4 $\varnothing$ 14

\* for currents above 2500 A

