

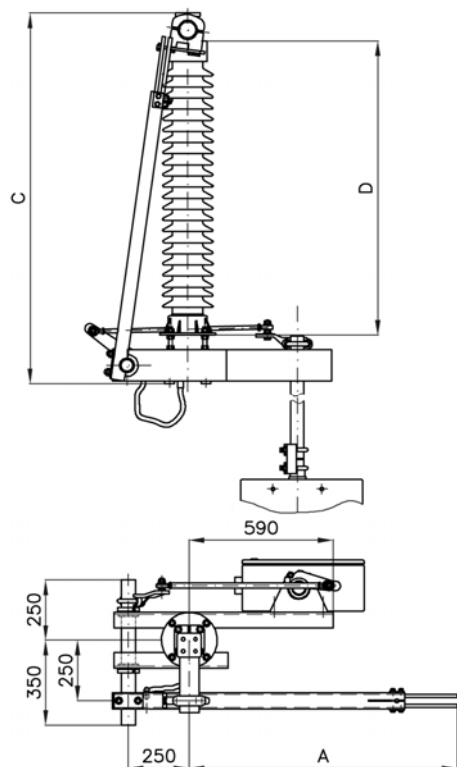
Earthing Switches

types TEC 72,5÷300 kV and TEB 420÷550 kV

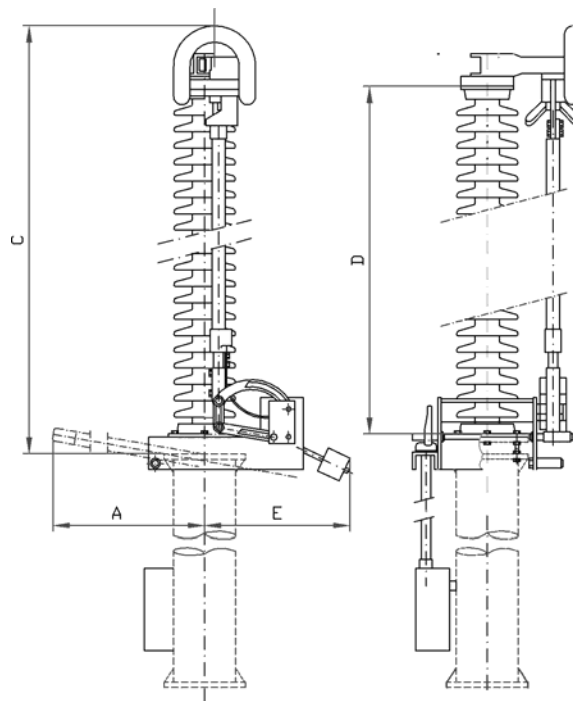
Earthing switches are used for earthing and short-circuiting disconnected sections of substation or plant. Earthing switches type TEC and TEB are suitable for outdoor installations. They can be supplied as the single-column free-standing earthing switch or as earthing switch built-on the same base frame together with disconnectors type SGF, TFB or SDB.

In earthing switch type TEB, in the end position, the earthing blade is inserted upwards into earthing contact where it is held in place.

The earthing switches are designed according to the publication IEC 62271-102; IEC 62271-1 and most other national regulations.



Earthing switch type TEC



Earthing switch type TEB

	Main dimensions	kV	TEC 72.5	TEC 123	TEC 145	TEC 245	TEC 300	TEB 420	TEB 550
A	Contact arm (OPEN))	mm	665	1105	1380	2175	2520	3750	4380
C	Height of earthing switch	mm	1085	1535	1815	2615	2965	3350	4000
D	Height of support insulator	mm	770	1220	1500	2300	2650	2950	3700
E	Earthing switch counterpoise (OPEN)	mm	-	-	-	-	-	1030	1030
	Weight								
	3-pole group –including insulators of standard design and operating mechanisms	kg	220	325	355	625	655	1440	1680

Technical data of earthing switches type TEC and TEB

Earthing switch		TEC 72,5	TEC 123	TEC 145	TEC 245	TEC300	TEB 420	TEB 550
Rated voltage	kV	72,5	123	145	245	300	420	420
Rated peak withstand current	kA	100 /125	100 /125	100 /125	100 /125	100-125	100/125/160	100/125/160
Rated short-time withstand current (r.m.s.)	kA	40	40 / 50		40 / 50	40-50-63	40/50/63	40/50/63
Rated power-frequency withstand voltage to earth 50 Hz, 1min	kV	140	230	275	460	380	520	620
Rated lighting impulse withstand voltage to earth 1,2 / 50µs	kV	325	550	650	1050	1050	1425	1550
Rated switching impulse withstand voltage to earth 250/2500 µs	kV	-	-	-	-	850	1050	1175
Discharge inception voltage	kV	>46	>80	>110	>160	> 190	>270	>350
Radio interference voltage	µV	-	<2500	<2500	<2500	< 2500	<2500	<2500
Inducted current switching ability according to IEC 62271-102 annex C -class A * for electromagnetic coupling for electrostatic coupling	A/kV	-	50/0,5	50/1	80/1,4	80/1,4	80/1,4	80/1,4
	A/kV	-	0,4/3	0,4/3	1,25/5	1,25/5	1,25/5	1,25/5
Inducted current switching ability according to IEC 62271-102 annex C -class B * for electromagnetic coupling for electrostatic coupling	A/kV	-	80/2	80/2	80/2	160/10	160/10	160/10
	A/kV	-	2/6	2/6	3/12	10/15	10/15	10/15
Insulator design: minimum failing load overall height	kN	4 - 6 - 8	4,0-6,0-8,0	4,0-6,0-8,0	4,0-6,0-8,0	6,0-8,0	6,0-8,0	6,0-8,0
	mm	770	1220	1500	2300	2650	2650	2650
Admissible mechanical terminal load: ** static and dynamic static portion	kN	2 - 3 - 4	3,0-4,5-6,0	3,0-4,5-6,0	3,2-5,1-6,0	5,1-6,0	5,1-6,0	5,1-6,0
	kN	1 - 2 - 3	1,5-2,5-3,0	1,5-2,5-3,0	1,5-2,5-2,5	2,5-2,5	2,5-2,5	2,5-2,5

* as an option

** values apply to support insulators of standard design given in the table

Example:

TEC 245 / 125



peak withstand current of 125 kA
rated voltage 245 kV
earthing switch type

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