

# Three-pole disconnecter OWEL 3,3-36 kV

## APPLICATION

Three-pole indoor disconnecter OWEL is designed for closing and opening electrical circuits, where no current flows. In the open position, disconnecter creates a visible and safe insulation clearance. Earthing switches mounted on disconnectors, are designed for short-circuiting and earthing networks, previously disconnected from the voltage.

## ADVANTAGES

- » simple and modular design allows for reconfiguration
- » the device requires no spare parts
- » possibility of installing the plane motion and rotary motion string drives
- » choice of mounting the drive side (left/right)
- » cooperation with motor drives NS-EL 30-03, NSP 3-04
- » cooperation with manual drives NR1-01, NRWO-4, NR-3



## OPERATING CONDITIONS

Disconnectors are suitable for working in conditions of interior, at temperatures in range of -5 up to +50°C.

## AUXILIARY CONTACTS

Auxiliary contact LP-1 can be installed on both left and right sides of the disconnecter. The connector can have up to eight pairs of auxiliary contacts NO/NC.

## COMPLIANCE WITH STANDARDS

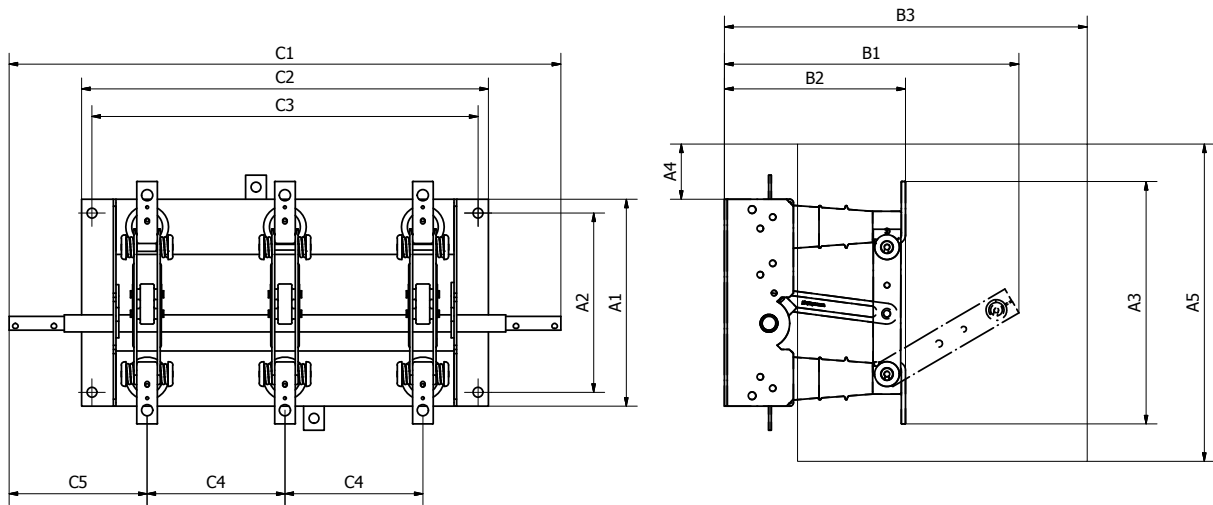
- » PN-EN 62271-102:2005/AC:2005 High voltage switchgear and controlgear. Part 102: AC high voltage disconnectors and earthing switches.
- » PN-EN 62271-1:2009 High voltage switchgear and controlgear. Part 1: Common provisions.

## CONSTRUCTION AND OPERATION

Disconnecter OWEL has secant design. The base is a steel frame on which the insulators are mounted. On the basis there are post insulators mounted, on which there is the current path mounted. Interpolar isolation is an air gap, in the version with smaller interpolar divider, the disconnectors are equipped with insulation compartments. Disconnectors OWEL may be driven with motor drives type NS-EL 30-03, NSP 30-04 or manual drives type NR-1, NRWO4 or NR-3. The design of disconnectors allows for extension with earthing switches. Earthing switch can be placed lower (from the side of inseparable contact) or it can be placed upper (from the side of separable contact). Disconnector with integrated earthing switch (upper or lower) is equipped with mechanical lock, providing proper switching. On the basis of the disconnector there is earth electrode – type terminal with bolt M12 x 40. Disconnectors can be equipped with an auxiliary contact, coupled with the device at the opposite end of the drive shaft.

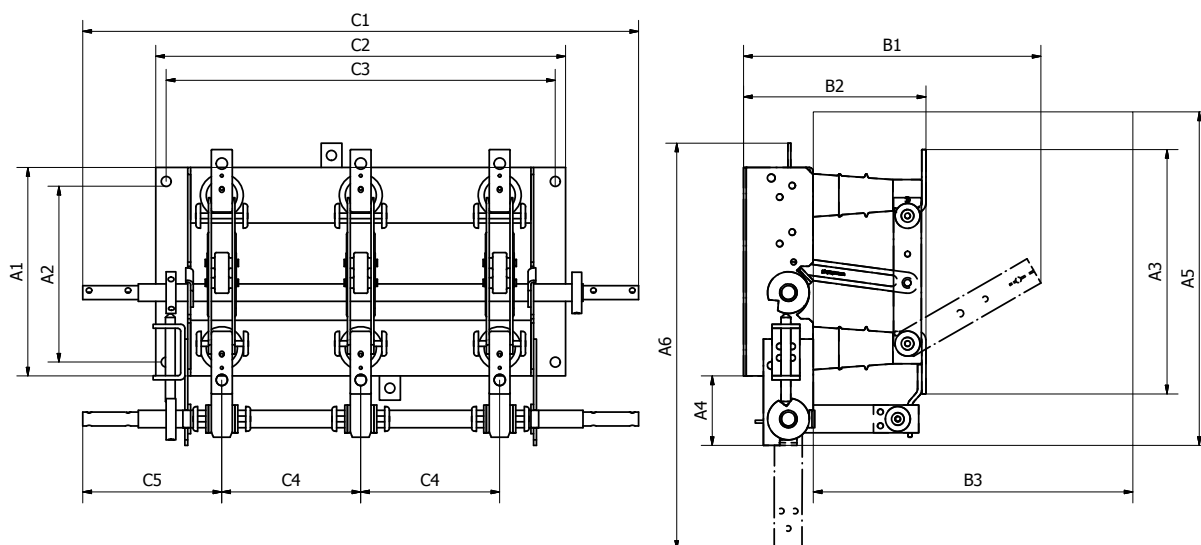
### TECHNICAL DATA OF DISCONNECTORS (7,2 UP TO 36 kV; 800 UP TO 1600 A)

	UNIT	7,2/8/Z/160...	12/8/Z/200...	12/8/Z/125...	12/16/Z/200...	17,5/8/Z/160...	17,5/8/Z/210...	17,5/16/Z/180...	17,5/16/Z/240...	24/8/Z/275...	24/8/Z/160...	24/16/Z/275...	36/8/Z/360...	36/16/Z/390...
Rated continuous current	A	800	800	800	1600	800	800	1600	1600	800	800	1600	800	1600
Rated peak current	kA	80	80	80	80	80	80	80	80	80	80	80	50	50
Rated current 1 s.	kA	31,5	31,5	31,5	31,5	31,5	31,5	31,5	31,5	31,5	31,5	31,5	20	20
Interpolar divider in air	mm	160	200	125	200	160	210	180	240	275	160	275	360	390
Weight of disconnector	kg	20	25	24	50	46	48	68	70	39	38	70	78	90
Weight of disconnector with earthing switch	kg	28	35	33	59	56	58	78	80	49	47	81	90	104
Frequency	Hz	50												
Rated voltage	kV	7,2	12			17,5			24			36		
Surge impulse voltage: » to earth and interpolar » interclamp	kV	60	75			95			125			170		
		70	85			110			145			195		
Test voltage 1 s.: » to earth and interpolar » interclamp	kV	20	28 (42 GOST)			38			50			70		
		23	32			45			60			80		



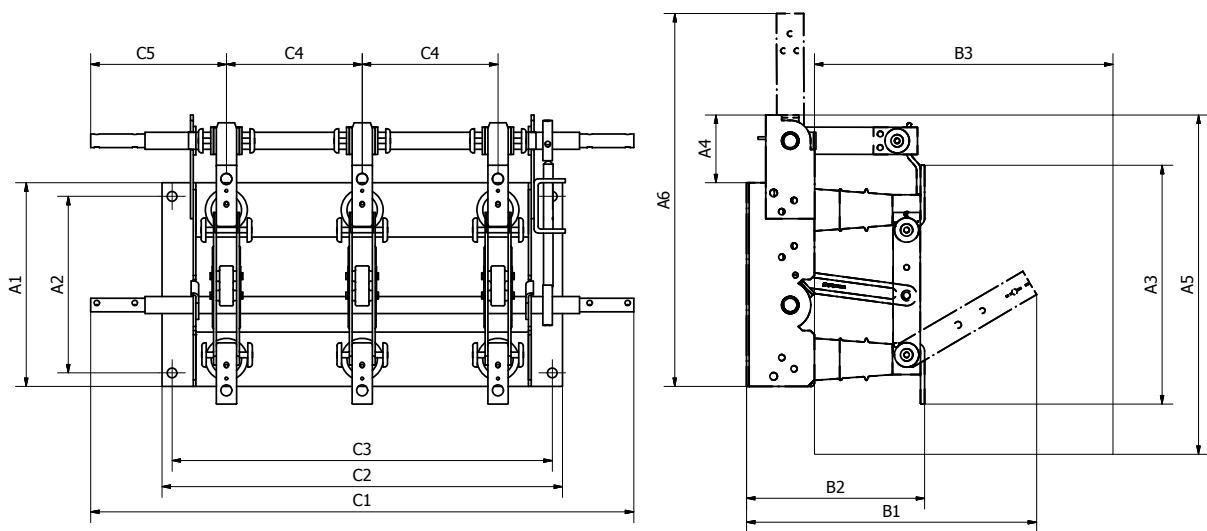
	OWEL 7,2/8/Z/160	OWEL 12/4/Z/200	OWEL 12/8/Z/125	OWEL 12/8/Z/160	OWEL 12/8/Z/200	OWEL 12/16/Z/200	OWEL 17/8/Z/160	OWEL 17/8/Z/210	OWEL 17/16/Z/180	OWEL 17/16/Z/240	OWEL 24/8/Z/275	OWEL 36/16/Z/390
A1	300	300	300	300	300	360	333	333	405	405	396	565
A2	260	260	260	260	260	320	300	303	370	370	360	525
A3	352	352	352	352	352	428	387	387	473	473	450	633
A4	-	-	120	120	-	-	85	-	65	-	-	-
A5	-	-	540	540	-	-	510	-	600	-	-	-
B1	425	425	425	425	425	475	470	470	520	520	620	925
B2	263	263	263	263	263	275	280	280	312	312	373	460
B3	-	-	455	455	-	-	563	-	632	-	-	-
C1	700	724	630	650	800	800	650	750	750	870	1059	1460
C2	510	590	440	510	590	590	464	564	530	650	730	1020
C3	480	560	410	480	560	560	434	534	490	610	700	990
C4	160	200	125	160	200	200	160	210	180	240	275	390
C5	190	162	190	165	200	200	165	165	195	195	255	340

Dimensions of disconnectors in the basic version



	OWEL 7,2/8/UD/Z/160	OWEL 12/4/UD/Z/200	OWEL 12/8/UD/Z/125	OWEL 12/8/UD/Z/160	OWEL 12/8/UD/Z/200	OWEL 12/16/UD/Z/200	OWEL 17/8/UD/Z/160	OWEL 17/8/UD/Z/210	OWEL 17/16/UD/Z/180	OWEL 17/16/UD/Z/240	OWEL 24/8/UD/Z/275	OWEL 36/16/UD/Z/390
A1	300	300	300	300	300	360	333	333	405	405	396	565
A2	260	260	260	260	260	320	300	303	370	370	360	525
A3	352	352	352	352	352	428	387	387	473	473	450	633
A4	-	-	120	120	-	-	85	-	65	-	-	-
A5	-	-	540	540	-	-	510	-	600	-	-	-
A6	550	550	550	550	550	610	626	626	710	710	750	1000
B1	425	425	425	425	425	475	470	470	520	520	620	925
B2	263	263	263	263	263	275	280	280	312	312	373	460
B3	-	-	455	455	-	-	563	-	632	-	-	-
C1	700	724	630	650	800	800	650	750	750	870	1059	1460
C2	510	590	440	510	590	590	464	564	530	650	730	1020
C3	480	560	410	480	560	560	434	534	490	610	700	990
C4	160	200	125	160	200	200	160	210	180	240	275	390
C5	190	162	190	165	200	200	165	165	195	195	255	340

Dimensions of disconnectors in the basic version with lower earthing switch

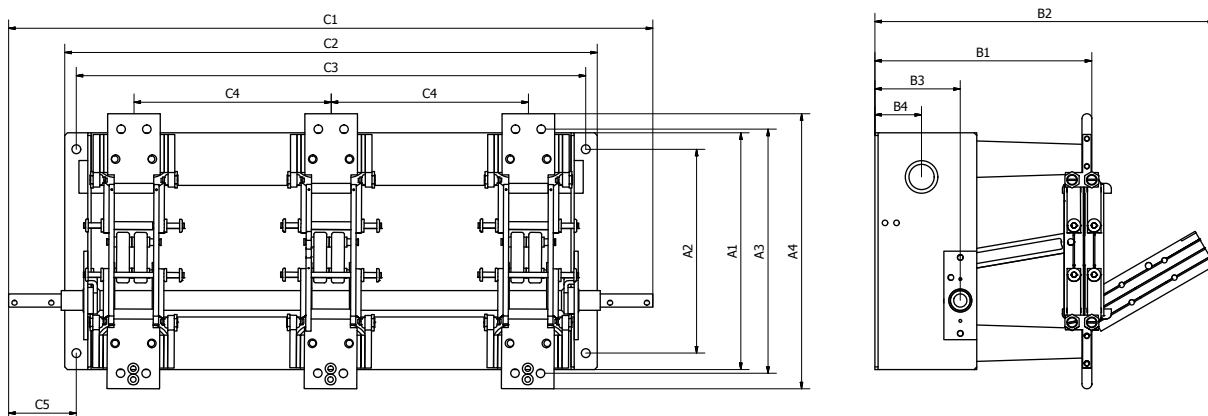


	OWEL 7,2/8/JG/Z/160	OWEL 12/4/JG/Z/200	OWEL 12/8/JG/Z/125	OWEL 12/8/JG/Z/160	OWEL 12/8/JG/Z/200	OWEL 12/16/JG/Z/200	OWEL 17/8/JG/Z/160	OWEL 17/8/JG/Z/210	OWEL 17/16/JG/Z/180	OWEL 17/16/JG/Z/240	OWEL 24/8/JG/Z/275	OWEL 36/16/JG/Z/390
A1	300	300	300	300	300	360	333	333	405	405	396	565
A2	260	260	260	260	260	320	300	303	370	370	360	525
A3	352	352	352	352	352	428	387	387	473	473	450	633
A4	-	-	120	120	-	-	85	-	65	-	-	-
A5	-	-	540	540	-	-	510	-	600	-	-	-
A6	550	550	550	550	550	610	626	626	710	710	750	1000
B1	425	425	425	425	425	475	470	470	520	520	620	925
B2	263	263	263	263	263	275	280	280	312	312	373	460
B3	-	-	455	455	-	-	563	-	632	-	-	-
C1	700	724	630	650	800	800	650	750	750	870	1059	1460
C2	510	590	440	510	590	590	464	564	530	650	730	1020
C3	480	560	410	480	560	560	434	534	490	610	700	990
C4	160	200	125	160	200	200	160	210	180	240	275	390
C5	190	162	190	165	200	200	165	165	195	195	255	340

Dimensions of disconnectors in the basic version with upper earthing switch

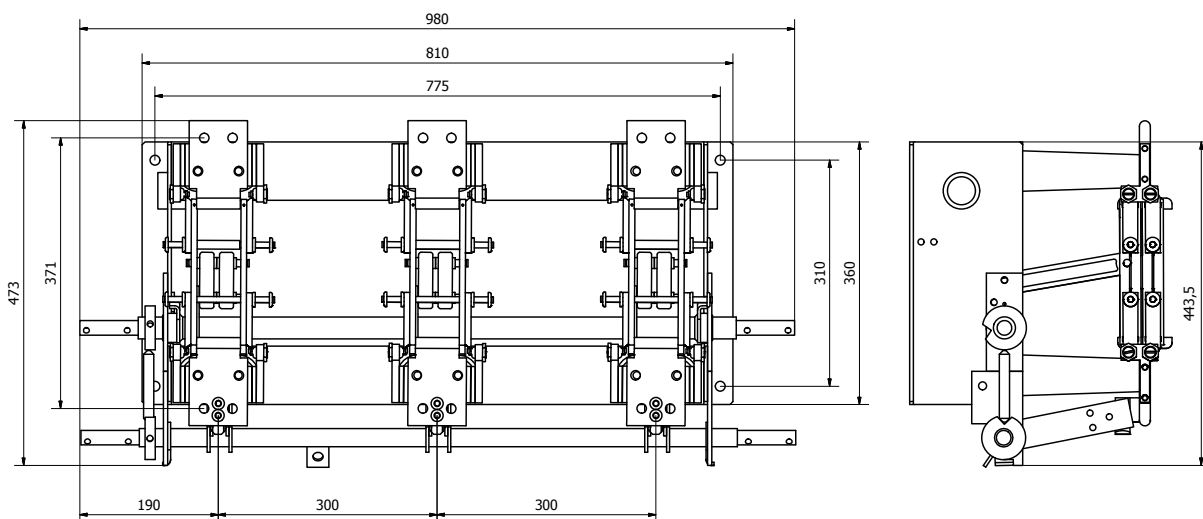
## TECHNICAL DATA OF THE DISCONNECTORS (3,6 UP TO 36 kV; 2500 UP TO 4000 A)

Rated operating voltage	kV	3,6	3,6	12	12	12	36	36
Rated continuous current	A	2500	4000	2500	2500	4000	2500	3150
Peak current	kA	80	80	80	80	80	80	80
Short-circuit current 1 s.	kA	31,5	31,5	31,5	31,5	31,5	31,5	31,5
Test voltage (50 Hz) for insulation: » to earth and interpolar » interclamp	kV	» 10 » 12		» 28/42 » 32			» 70 » 80	
Surge test voltage for insulation: » to earth and interpolar » interclamp	kV	» 40 » 46		» 75 » 85			» 170 » 195	
Interpolar divider in air insulation	mm	260	260	275	300	300	360	520
Frequency	Hz	50						
Weight of disconnector	kg	59	76	62	65	80	95	130
Weight of disconnector with earthing switch	kg	67	85	72	75	90	105	140



TYPE	DIMENSION [mm]												
	A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	C5
12/25/Z/275...	360	310	370	410	330	540	130	71	930	740	725	275	103
12/25/Z/300...	360	310	370	410	330	540	130	71	980	810	775	300	103
12/40/Z/300...	360	310	440	490	335	545	130	71	980	810	775	300	103

Dimensions of disconnectors in the basic version



Dimensions of disconnectors in the basic version with lower earthing switch  
Model OWEL 12/25/UD/Z/300