



# DS3B DOUBLE BREAK DISCONNECTOR (double motion) 245 - 550 kV reliability and virtually no maintenance

Idea DS3B disconnector is designed with the most advanced techniques by a team of engineers with over 40 years of experience in the field of high and very high voltage disconnector.

The DS3B disconnector is designed to ensure the best performance and maximum reliability in the wide range of environmental conditions such as high ambient temperature, ice, wind, earthquake, industrial and marine polluted area.

Thanks to the advanced current path design and material, stainless steel contact springs, strong rotary pedestal on sealed ball bearing for low friction and smooth operation, make the disconnector virtually maintenance free.

Standards — The DS3B disconnector is designed to fully comply with IEC 62271-102 and IEC 62271-1 standards - other international standard such as ANSI or customers special specification can be customized upon request.

The strong rotary and support insulators designed for DS3B comply with IEC or ANSI standards with superior mechanical characteristics at high static pulling loads. Top quality ceramic or composite insulators can be supplied upon request.

The DS3B disconnector thanks to the double motion feature guarantees a low operating torque.

Modularity — the DS3B disconnector is designed with maximum modularity providing the possibility at any time ,even after installation on site to:

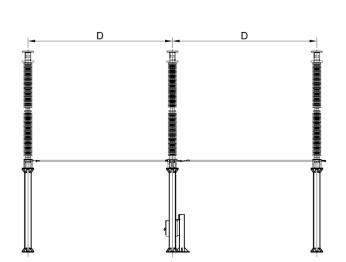
- Upgrade of rated nominal current
- Mounting of one or two earthing switch
- Assembly of the device for the bus transfer current switching

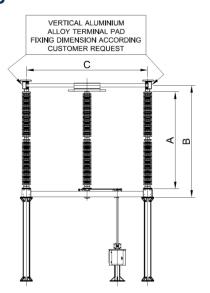
Interlocking facilities between disconnector and earthing switch and on operating mechanism on both open and closed position.

Customization — customized solution including parallel, in-line, diagonal, vertical, upside down and large phase distance available upon request.

Installation at site — the pre-assembled & adjusted delivery of live parts, bases and linkage allow a quick and easy set-up at site. Simple and comprehensive instruction manual facilitate the erection and final adjustments.

# **MAIN DIMENSIONS**





Main dimension – DS3B										
Rated Voltage (kV)	Outline Dimension (mm)									
	Α	В	С	D						
245	2300	2770	2800	Depend on the						
300	2650	3120	3200	substation layout						
362	2900	3420	3800							
420	3350	3870	4200							
550	4000	4550	5000							

# **TECHNICAL DATA**

Technical data – DS3B						
Rated voltage (Ur)	kV	245	300	362	420	550
Rated frequency (fr)	Hz	50/60	50/60	50/60	50/60	50/60
Rated nominal current (Ir) Up To	Α	5000	5000	5000	5000	5000
Rated short-withstand current, rated duration	kA/s	63/3	63/3	63/3	63/3	63/3
of short circuit (Ik, tk) Up To						
Rated peak withstand current (Ip) Up To	kAp	164	164	164	164	164
Rated power frequency withstand voltage for						
1 minute						
To earth and between poles	kV	460	395	450	520	620
Across the insulating distance	kV	530	435	520	610	800
Rated lightning impulse withstand voltage						
(1.2/50 μs)						
To earth and between poles	kVp	1050	1050	1175	1425	1550
Across the isolating distance	kVp	1200	1050	1175	1425	1550
			(+170)	(+205)	(+240)	(+315)
Rated switching impulse withstand voltage						
To earth	kVp	-	850	950	1050	1175
Between poles	kVp	-	1275	1425	1575	1760
Across the isolating distance	kVp	-	700	800	900	900
			(+245)	(+295)	(+345)	(+450)

# **OPERATING MECHANISM**

The three phase disconnector and earthing switch can be supplied by manual or motor operated mechanism, for each individual pole or one operating mechanism for three poles. The operation is guaranteed via a safe linkage system.

### MOTOR OPERATING MECHANISM TYPE MM

MM mechanism consist of corrosion-free, sand and water proof IP55 cabinet containing; DC or AC motor, local remote selector switch, closing/opening push button, motor protection, auxiliary contacts device, easy assembly terminal board, hand crank for manual operation, mechanical and electrical interlocking facilities for safe operation. A robust lubricated for life, two stage irreversible reduction gear system provide smooth and fast operation.

### MANUAL OPERATING MECHANISM TYPE HM

HM mechanism consist of a robust corrosion-free, sand and water proof IP55 mechanism containing; interlock facilities for safe operation, and the lever for manual closing/opening operation. The auxiliary contact assembly on the mechanism can be easily inspected and wired by removing the sealing protection.





### **EARTHING SWITCH**

One or two earthing switch can be assembled in any moment on request on the DS3A base. According to the requirements and substation layout, the earthing switch can be assembled parallel to the D32B bases internally, eternally or perpendicular.

## **CONTACT US**

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