



DS3A
DOUBLE BREAK DISCONNECTOR
(direct entry)
123 - 245 kV
reliability and virtually no maintenance

Idea DS3A disconnecter 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 disconnecter. The DS3A disconnecter 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 disconnecter virtually maintenance free.

Standards — The DS3A disconnecter 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 DS3A 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.

Modularity — the DS3A disconnecter is designed with maximum modularity providing the possibility at any time ,even after installation on site to:

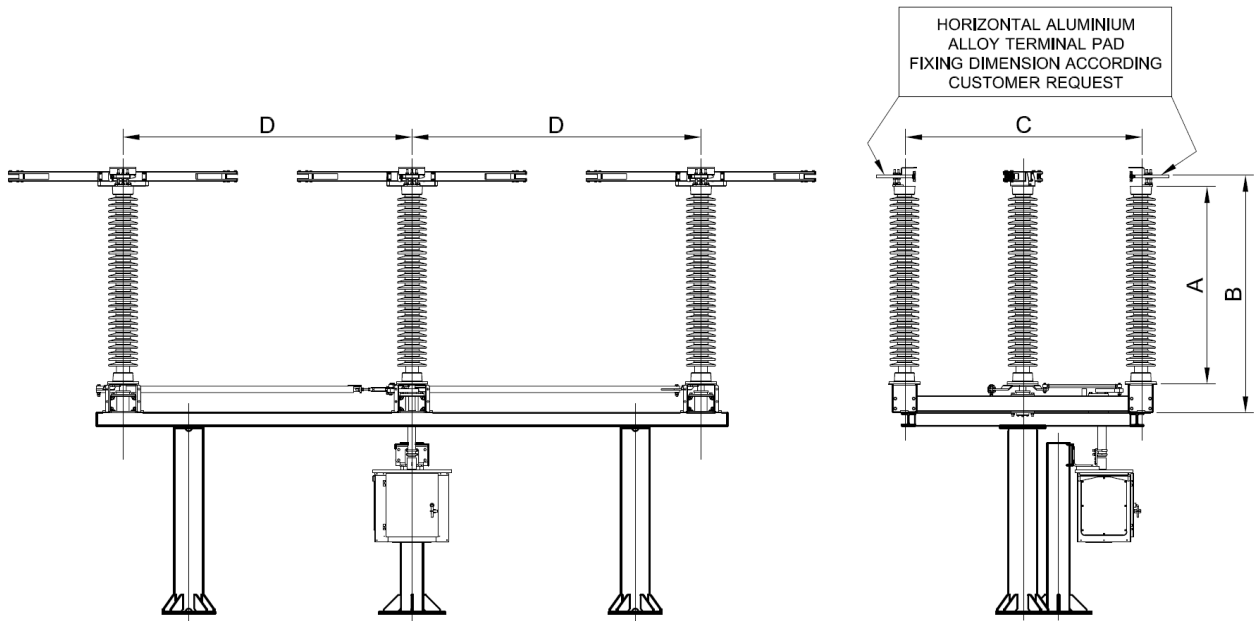
- Upgrade of rated nominal current
- Mounting of one or two earthing switch
- Installation of horizontal pad
- Replacement of manual to motorized operating mechanism
- Assembly of the device for the bus transfer current switching

Interlocking facilities between disconnecter 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 – DS3A

Rated Voltage (kV)	Outline Dimension (mm)			
	A	B	C	D
123	1220	1510	1500	Depend on the substation layout
145	1500	1810	1800	
170	1700	2010	2000	
245	2300	2640	2800	

TECHNICAL DATA

Technical data – DS3A

Rated voltage (Ur)	kV	123	145	170	245
Rated frequency (fr)	Hz	50/60	50/60	50/60	50/60
Rated nominal current (Ir) up to	A	3150	3150	3150	2000
Rated short-withstand current, rated duration of short circuit (Ik, tk) up to	kA/s	50/3	50/3	50/3	40/3
Rated peak withstand current (Ip)	kAp	130	130	130	104
Rated power frequency withstand voltage for 1 minute					
To earth and between poles	kV	230	275	325	460
Across the insulating distance	kV	265	315	375	530
Rated lightning impulse withstand voltage (1.2/50 μs)					
To earth and between poles	kVp	550	650	750	1050
Across the isolating distance	kVp	630	750	860	1200

OPERATING MECHANISM

DOUBLE BREAK DISCONNECTOR DS3A 123-245kV

ADVANCED DESIGN F



The three phase disconnect 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 D32A bases internally, eternally or perpendicular .

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