



IDEA45

BROCHURE N° CAT.DSPH.E.17.A



DSPH PANTOGRAPH DISCONNECTOR 123 – 550Kv

RELIABILITY AND VIRTUALLY NO MAINTENANCE

Idea DSPH 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 DSPH 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, with high quality silver plated copper contacts, sealed bush for low friction and smooth operation, make the disconnecter virtually maintenance free.

Standards — The DSPH 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 lower base support designed for DSPH 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 DSPH 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 earthing switch
- Up to 245kV installation in parallel or in diagonal
- Assembly of the device for the bus transfer current switching

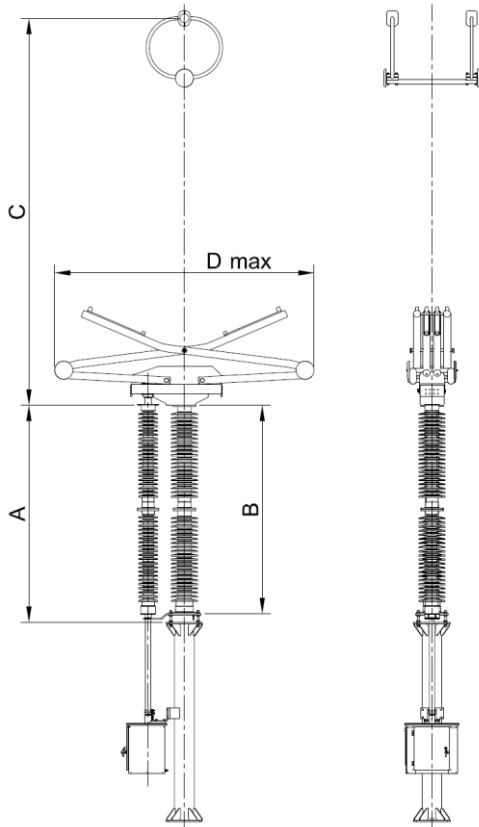
Interlocking facilities between disconnecter and earthing switch and on operating mechanism on both open and closed position.

Customization — customized solution including parallel, in-line, diagonal and large phase distance available upon request up up 245kV.

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.

Idea45 develop a special patented system for grant the operation with 20mm ice condition, without cover in mobile or fixed the contacts to ensure optimal functionality even in the worst climatic conditions.

MAIN DIMENSION



Main dimension – DSPH				
Rated Voltage (kV)	Outline Dimension (mm)			
	A	B	C	D max
123	1320	1220	2600	1700
145	1600	1500	3100	2100
170	1800	1700	3100	2100
245	2400	2300	4300	2900
300	2750	2650	4300	2900
362	3000	2900	4600	3300
420	3450	3350	5300	3900
550	4100	4000	6000	4300

TECHNICAL DATA

Technical data – DS2A									
Rated voltage (Ur)	kV	123	145	170	245	300	362	420	550
Rated frequency (fr)	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Rated nominal current (Ir) Up To	A	5000	5000	5000	5000	5000	5000	5000	5000
Rated short-withstand current, rated duration of short circuit (Ik, tk) Up To	kA/s	63/3	63/3	63/3	63/3	63/3	63/3	63/3	63/3
Rated peak withstand current (Ip) Up To	kAp	164	164	164	164	164	164	164	164
Rated power frequency withstand voltage for 1 minute									
To earth and between poles	kV	230	275	325	460	395	450	520	620
Across the insulating distance	kV	265	315	375	530	435	520	610	800
Rated lightning impulse withstand voltage (1.2/50 μs)									
To earth and between poles	kVp	550	650	750	1050	1050	1175	1425	1550
Across the isolating distance	kVp	630	750	860	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 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 DS2A base. According to the requirements and substation layout, the earthing switch can be assembled parallel to the DS2A bases internally, eternally or perpendicular.

Optionally, the earthing switch can be arranged for switching induced currents according IEC 62271-102 class A or B

Two type of earthing switch are available .

Single motion type up to 40 kA 3s

Double motion type up to 63 kA 3s

CONTACT US

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