



Grid Solutions
a GE and Alstom joint venture

S3C

Double side break disconnecter

Grid Solutions, a GE and Alstom joint venture, is the world's largest manufacturer of disconnectors with units installed in more than 130 countries around the world.



CUSTOMER BENEFITS

- Proven reliability, high performance
- Small centre-to-centre distance between poles
- Reduced phase-to-phase distance
- Built-in earthing switches and arc restrictors available
- Virtually maintenance-free
- Easy start-up and commissioning

From 72.5 kV to 300 kV

Grid Solutions' disconnectors are the result of over 75 years of experience in developing high voltage switches that have proven their reliability in the scorching climates of Arizona (USA), Australia and Sudan, in the extremely cold territories of Canada, Russia and Sweden, in the tropical weather of Panama, Indonesia, Malaysia and Venezuela and in regions with intense seismic activity such as Chile and California (USA).

DESIGNED FOR RELIABILITY

The S3C is a low profile, reduced phase-to-phase distance double side break switch which offers additional space savings - a key advantage when designing your substation. The optimum mechanical and electrical characteristics of the current carrying parts are ensured through the use of high strength aluminium alloys combined with silver-plated copper contacts.

The rectangular aluminium blade is attached to the top of the centre rotating insulator and moves smoothly from a fully open to a fully closed position in the stop in the jaw. A galvanised structural steel channel base supports the insulators and the live parts ensuring a high-strength, rigid design. The centre insulator stack rotates on weather sealed, greaseless rotor bearings on which no maintenance is required.

Grid Solutions' experts are pleased to propose customised solutions including vertical, underhung and phase-over-phase.

PERFORMANCE

Contact pressure is applied to the reverse loop copper jaw fingers by stainless steel springs which are insulated at one end, eliminating any possibility of annealing the springs due to their carrying current. Jaw contact pressure is increased as

current rises due to the reverse loop finger design. Thanks to its innovative design, magnetic forces due to fault currents tend to push the blade deeper into the jaw rather than out.

QUALITY

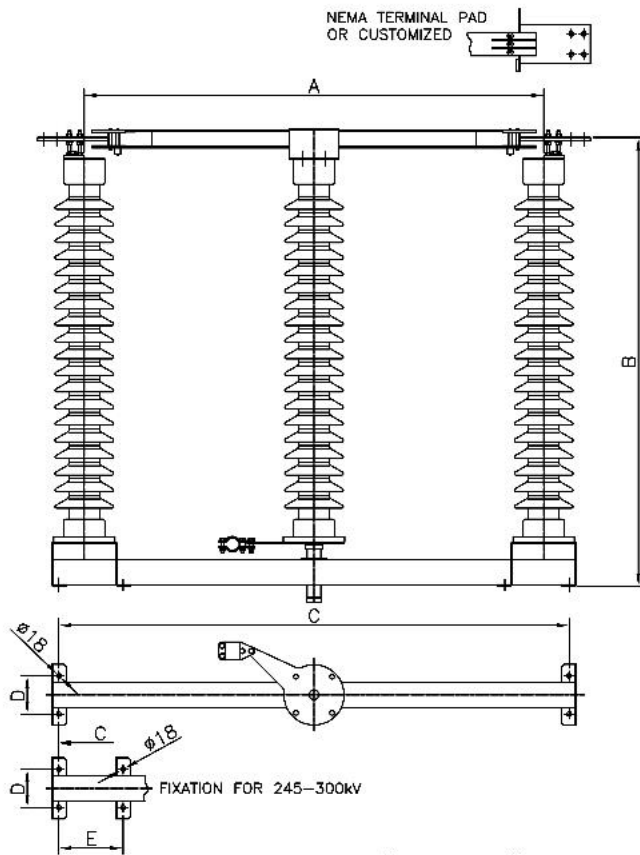
Grid Solutions prides itself on being the leading supplier of disconnectors in the world. Our design principles, the technical know-how and experience of our experts and the careful selection of suppliers to ensure that only top quality materials are used during production ensure an excellent life cycle cost.

CERTIFICATION

All Grid Solutions' disconnector manufacturing sites worldwide are certified according to ISO 9001, ISO 14001 and OHSAS 18001. Grid Solutions designs, manufactures, tests and delivers its disconnectors in accordance with the latest ANSI and IEC standards, as well as GB Chinese national standards.

INSTALLATION AND MAINTENANCE

The S3C does not require any special tools to be adjusted and is recognised worldwide as an easy to install and adjust disconnector. The S3C is virtually maintenance-free thanks to its lifetime greased or self-lubricating parts and corrosion-free materials.

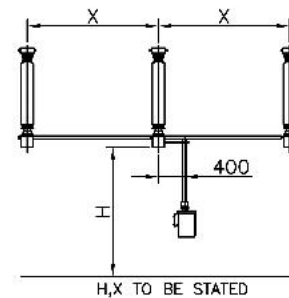


EARTHING SWITCHES

The S3C can be fitted with one or two earthing switches that are mechanically or key interlocked with the disconnecter blades.

OPTIONAL DEVICES

The S3C can be fitted with several types of arc restrictors: from the simplest arcing horn to the more performant bus transfer contacts (IEC 62271-102 Annex B) to whip type interrupters (line charging or transformer magnetising currents).



Customised layouts available on request.
Phase-to-phase distance defined by substation layout.

Technical data (IEC)

Rated voltage kV	Rated current A / Short time current kA	BIL kV	A mm	B mm	C mm	D mm	E mm
72.5	3150 / 50	325	1100	1004	1200	130	
100	3150 / 50	450	1500	1276	1200	150	
123	3150 / 50	550	1500	1476	1200	150	
145	4000 / 63	650	1800	1757	2000	150	
170	4000 / 63	750	2000	1979	2200	170	
245R	4000 / 63	950	2400	2413	2600	220	270
245	4000 / 63	1050	2800	2613	3000	220	270
300	3150 / 50	1050	3200	2963	3400	220	270

For more information please contact
GE Grid Solutions

Worldwide Contact Center

Web: www.GEGridSolutions.com/contact
Phone: +44 (0) 1785 250 070

www.GEGridSolutions.com

