



**Grid Solutions**  
a GE and Alstom joint venture

# S3C

## 72.5 kV to 300 kV double side break disconnect switch

Grid Solutions, a GE and Alstom joint venture, is the world's largest manufacturer of disconnect switches with over 140,000 units installed in more than 130 countries around the world.



### CUSTOMER BENEFITS

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

## The real performer in harsh conditions

Grid Solutions disconnect switches 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 aluminum alloys combined with silver-plated copper contacts.

A galvanized structural steel channel base supports the insulators and the live parts ensuring a high strength, rigid design. The center insulator stack rotates on weather sealed, greaseless rotor bearings on which no maintenance is required.

Grid Solutions experts are pleased to propose customized 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 disconnect switches 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 disconnect switch manufacturing sites worldwide are certified according to ISO 9001, ISO 14001 and OHSAS 18001.

Grid Solutions designs, manufactures, tests and delivers its disconnect switches in accordance with the latest IEEE/ANSI and IEC standards, as well as GB Chinese national standards.

## GROUND SWITCHES

The S3C can be fitted with one or two ground switches that are mechanically or key interlocked with the disconnect switch blades.

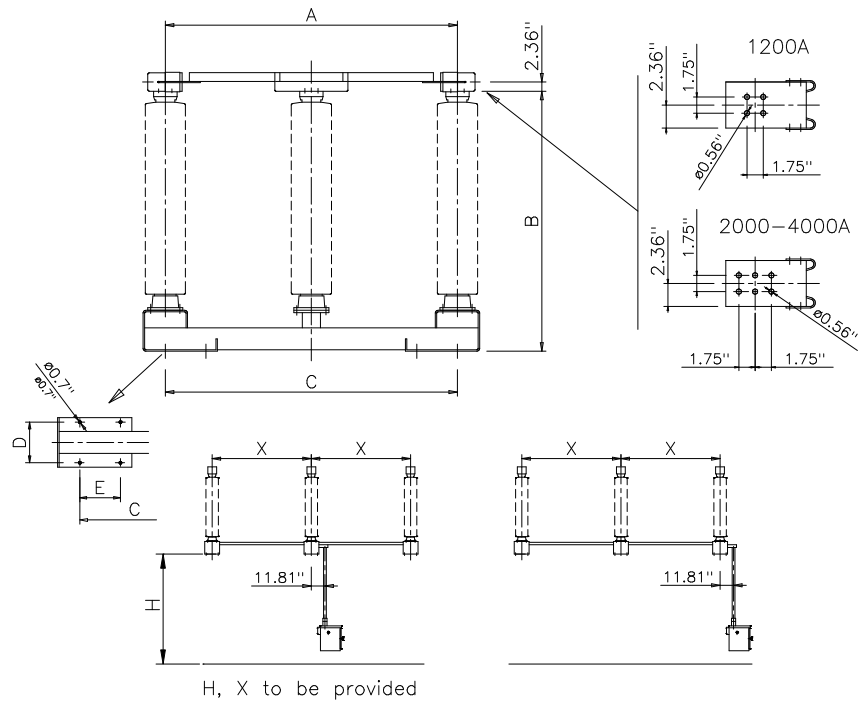
## OPTIONAL DEVICES

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 magnetizing currents).

## INSTALLATION & MAINTENANCE

The S3C does not require any special tools to be adjusted and is recognized worldwide as an easy to install and adjust disconnect switch.

The S3C is virtually maintenance-free thanks to its lifetime greased or self-lubricating parts and corrosion-free materials.



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

## TECHNICAL DATA (ANSI)\*

Rated voltage kV	Rated current A / Short time current kA	BIL kV	A inches	B inches	C inches	D inches
72.5	3150 / 50	350	3' 3¼"	3' 7¼"	3' 3¼"	8¾"
123	3150 / 50	550	4' 11"	4' 9¾"	4' 11"	8¾"
145	3150 / 50	650	5' 10¾"	5' 7¾"	5' 10¾"	10¾"
170	3150 / 50	750	6' 6¾"	6' 3¾"	6' 6¾"	10¾"
245	3150 / 50	1050	9' 2¼"	8' 10"	9' 2¼"	1' 1½"

\* IEC ratings also available

For more information please contact  
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### Worldwide Contact Center

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