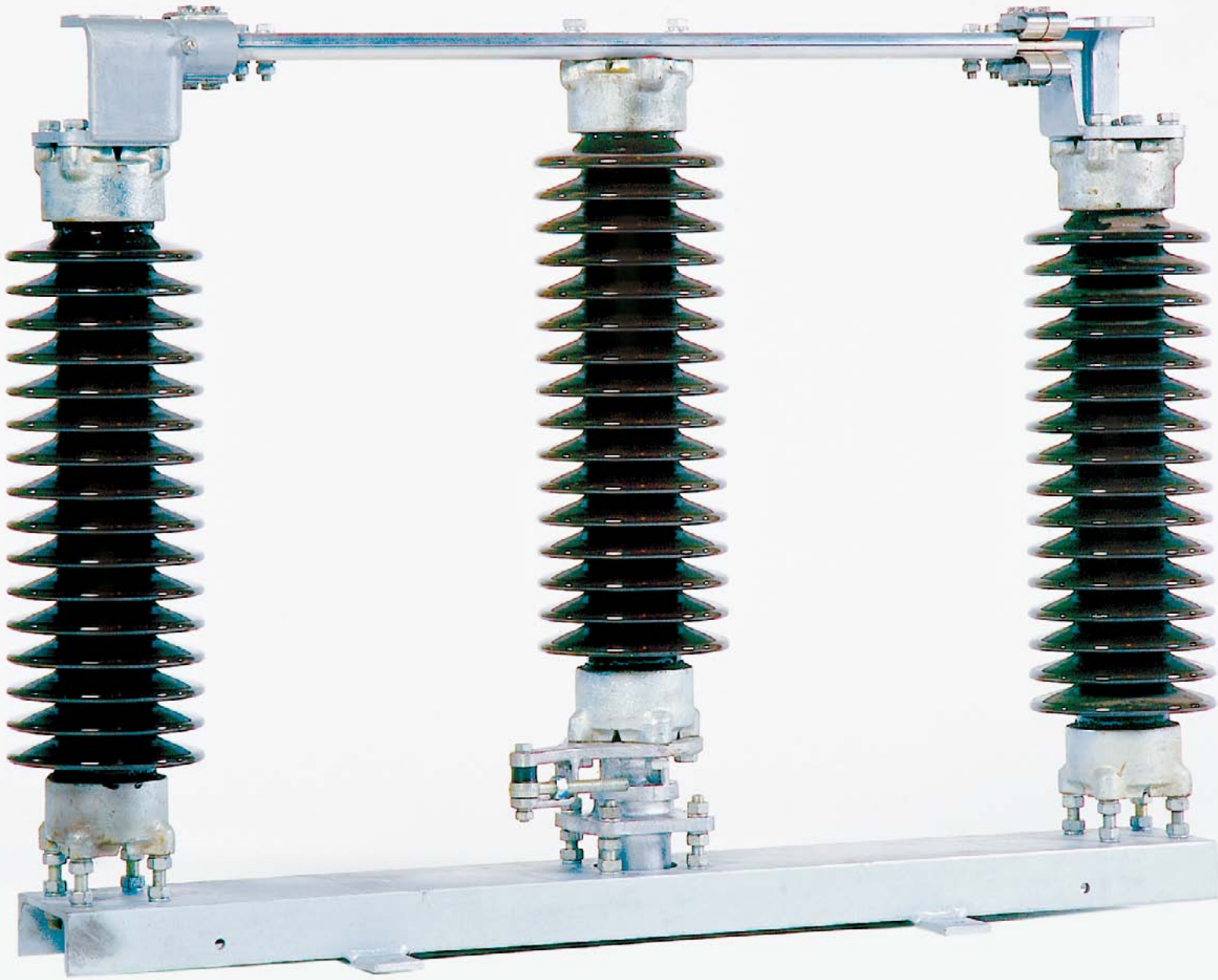


# ACTOM OUTDOOR AIS DISCONNECTORS



Double Side Break (DSB) Disconnector  
22-145kV, 800-2500 A, 20-40kA-3s.

HIGH VOLTAGE EQUIPMENT  
A division of ACTOM (Pty) Ltd



# ACTOM

# DOUBLE SIDE BREAK (DSB) DISCONNECTOR

## 22-145KV, 800-2500 A, 20-40KA-3S



Voltage range up to 132kV current rating up to 2500 amps with relevant fault

### HISTORY

- Our range of Double Break Disconnectors are designed to ensure the highest performance.
- With reliability resulting from over 30 years experience.
- Over 35,000 disconnecting switches have been installed in South Africa, Countries in Africa and some abroad.
- We guarantee our product for long term, easy installation, low maintenance applications.

### BASIC DESIGN

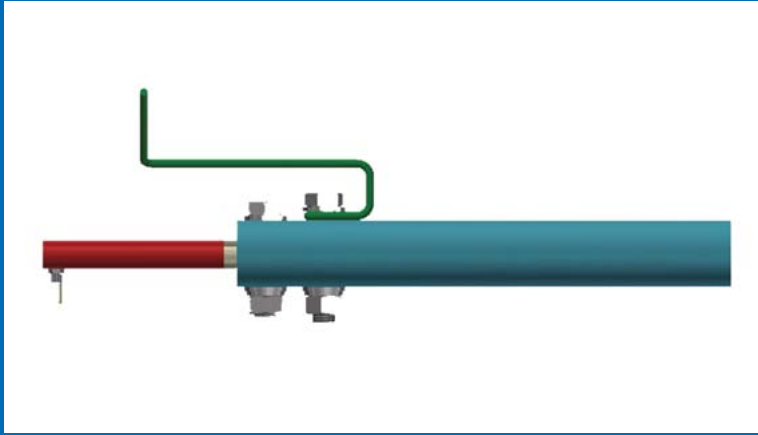
- The DSB Disconnecter is installed for sectionalising and isolating various circuits and equipment in substation systems.
- The double side break operation is electrically superior to the single side break in so far as phase spacing is concerned, because two breaks in the series per phase are achieved.
- This produces a neutral potential switch blade and permits minimum phase centre mounting.

- The Double break Disconnecter and manual operating mechanism drives are fully universal and therefore suitable for horizontal, vertical or inverted mounting.

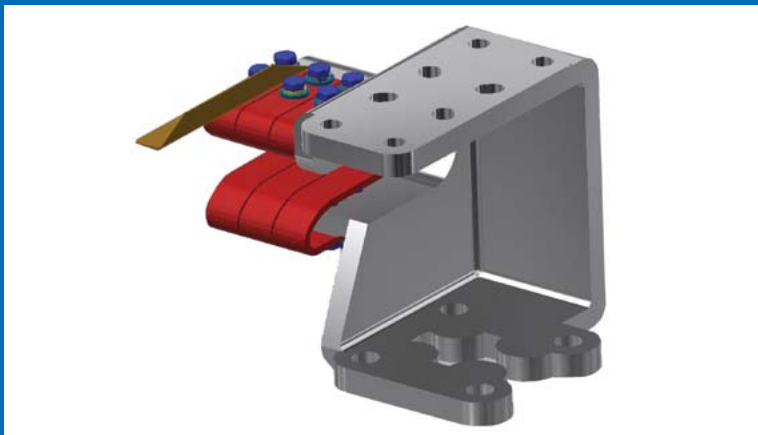
### FEATURES

- Reverse loop contact fingers made from silver plated HDHC copper.
- Each contact finger is backed by a stainless steel insulated compression spring to give positive contact pressure and multipoint contact
- A wiping clean action is produced by the opening closing operations.
- Interchangeable moving contacts of HC extruded copper section, the profile designed for high density .
- Aluminium main blade to suit current rating is directly bolted to the rotating centre post.
- We supply Terminal pads of aluminium alloy according to IEC depending on the current rating. 1600 Amp 4 x 14mm slotted holes with pitch 44 - 50mm. 2500 Amp 6 x14mm slotted holes with pitch 44 – 50mm. 3150 Amp 8 x 14mm slotted holes with pitch 44 - 50mm.

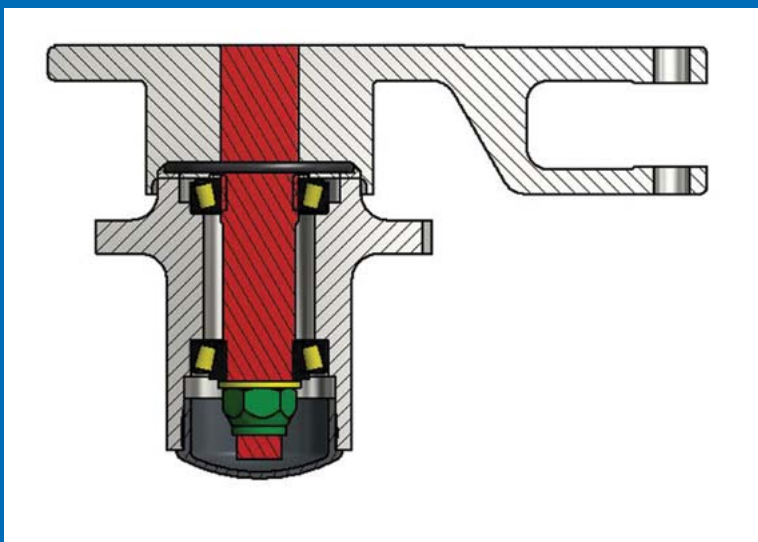
- All moving contacts are silver plated on the making area and Tin plated where in contact with the Aluminium material.
- Base section of galvanised steel section is assembled with insulator levelling and fixing bolts.
- Vertical and Adjustable phase coupling drive rods allow for wide tolerances on dimensions of mounting structure.
- Rotating centre post main bearing assembly incorporating well spaced double taper roller bearings pre-loaded to compensate for heavy high voltage insulators. The housing is packed with grease on the assembly line and sealed for life, eliminating the need for any further maintenance.



2500A Male contact assembly



2500A Female fixed contact assembly



Main Bearing Assembly

## ADDITIONAL OPTIONS

All Disconnectors are fitted standard with Arcing contacts for applications less than 10 Amps.

### In addition:

- Bus transfer switching device according to IEC 62271-102 (annex B)>1600A @100V.

- Load break heads up to 36kV with a switching capacity 630 Amps.
- For operation under severe ice conditions (up to 10mm) ice shields are available to protect the parts where needed.

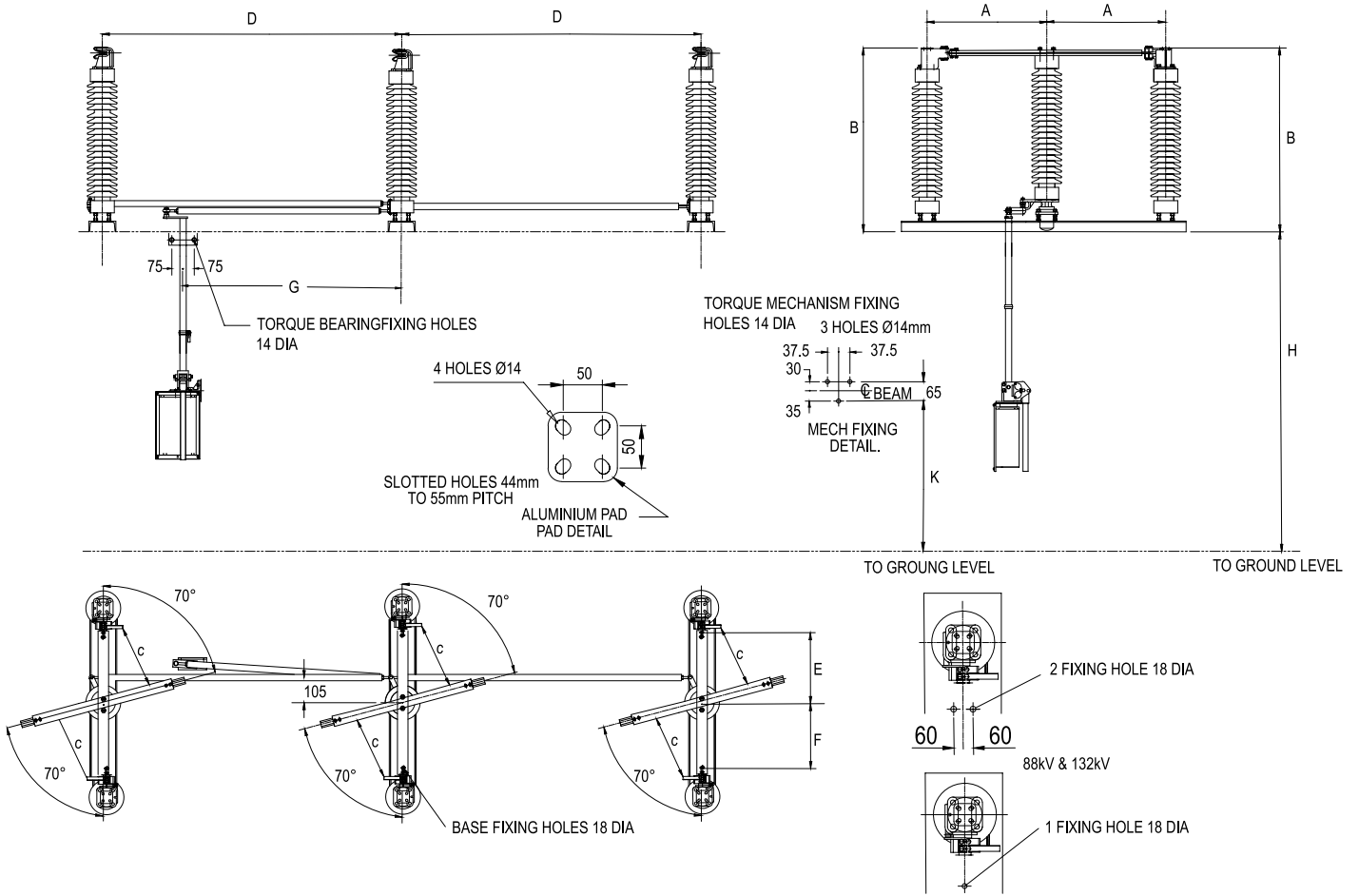
All Disconnectors can be fitted in addition with Integrated earth switches (IEC 62271-102)

### Supported with:

- Electro Mechanical interlocks.
- Manual mechanism operation for Disconnector and Earthing switches.

Product Range		Actom DSB Range						
Rated Voltage kV	24	36	52	72.5	100	132	145	
Nominal Voltage kV	22	33	44	66	88	123	132	
Rated Current (A) Ir	800 to 2500							
Rated STC (kA/s) Tk	Up to 40/3							
Rated Peak Current (kA) Ip	Up to 100/300ms							
Basic Insulation Level BIL Up	150	200	250	325/350	380/450	550	650	
Power Frequency Withstand (kV)pk	50	70	94	140	150/185	230	275	
Breaking Capacity - Transformer Off load (A)	2	2	2	2	2	2	2	
Breaking Capacity - Line Charging (A)	2	2	2	2	2	2	2	
Creepage (mm/kV)	20 -31							
Insulation Material	Porcelain / Silicon Rubber							
Mechanical Class	M1&M2							
Frequency	50 Hz							
Optional								
Motor Mechanism	*	*	*	*	*	*	*	
Earth Switches LH, Rh, 2x E/S	*	*	*	*	*	*	*	
Mechanical Key Locks	*	*	*	*	*	*	*	
Load break Heads	*	*						
Bus Transfer Duty <1600A @ 100V	*	*	*	*	*	*	*	
Environmental								
Ambient Temperature	-20°C + 50°C							
Humidity	0 -100%							
Altitude	Up to 1000mm							
Standards								
IEC	IEC 62271-1							
	IEC 62271-102							
	IEC 62271-103							

## STANDARD DIMENSIONS



### DSB STANDARD DIMENSIONS

Nominal working Voltage	Impulse withstand voltage	A	B	C*	D*	E*	F*	G*	H*	K*
		Post Centres	Terminal Pad Height	Isolating Distance	Recommended Phase Centres	Standard base fixing centres		Minimum Dimension	Mounting Height	Operating Mechanism Height
22kV	150kV	375	630	360	800	329	329	600	As required	1100
33 kV	200kV	440	760	420	800	329	329	600	As required	1100
44kV	250kV	475	845	540	900	345	345	600	As required	1100
66kV	350kV	710	1030	780	1100	345	345	600	As required	1100
88kV	380kV	710	1140	840	2300	457	457	600	As required	1100
96kV	450kV	750	1050	840	2300	457	457	600	As required	1100
132kV	550kV	900	1592	1260	1400	533	533	600	As required	1100
145kV	650kV	1100	1800	1620	1400	850	850	600	As required	1100

\* Actual dimensions may differ depending on application design changes.

All Disconnectors and Earthing Switches are made by ACTOM High Voltage Equipment under licence to Lucy Electric, Banbury, United Kingdom.

ACTOM High Voltage Equipment  
2 Magnet Road, Knights, 1413.  
Tel : +27 (0) 11 820 5349  
Fax : +27 (0) 11 820 5100

Directions:

GPS Co—ordinates S:S: 26° 11.875'  
E:E: 28° 11.925'

Product Support

Craig Aaron

Mobile: +27 (0) 82 908 5976

Tel : +27 (0) 11 820 5167

Email: [craig.aaron@actom.co.za](mailto:craig.aaron@actom.co.za)



Sales and Marketing Manager

Daniel De Bruyn

Mobile: +27 (0) 72 252 4662

Tel: +27 (0) 11 820 5363

Email: [Daniel.De-Bruyn@actom.co.za](mailto:Daniel.De-Bruyn@actom.co.za)

