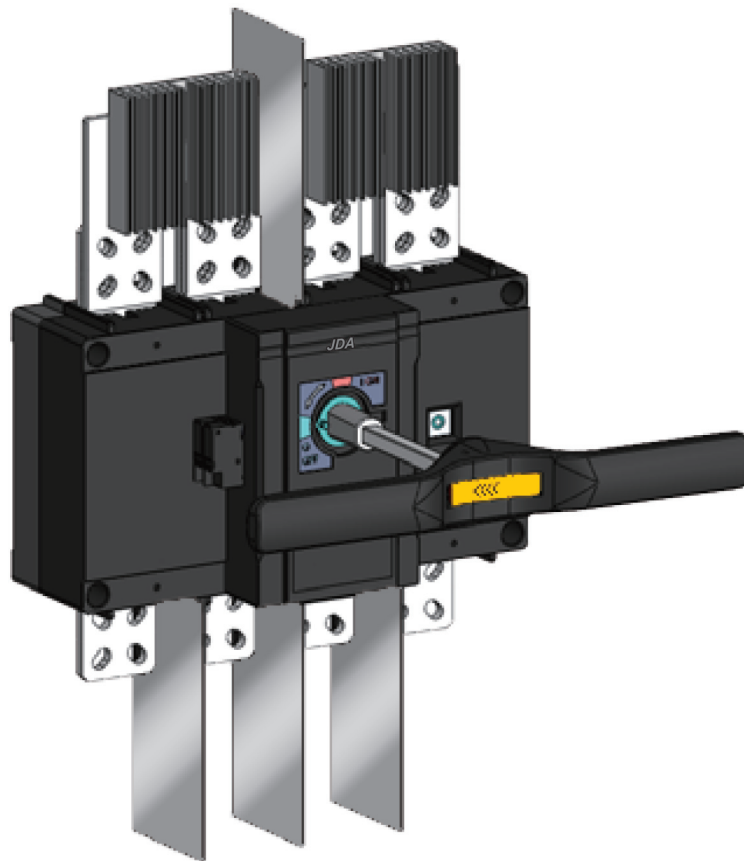


# Switch-disconnectors

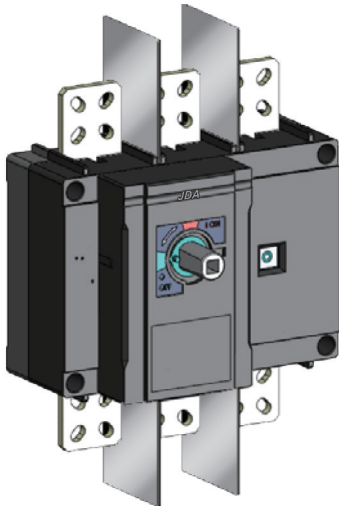
## 1000, 1250A



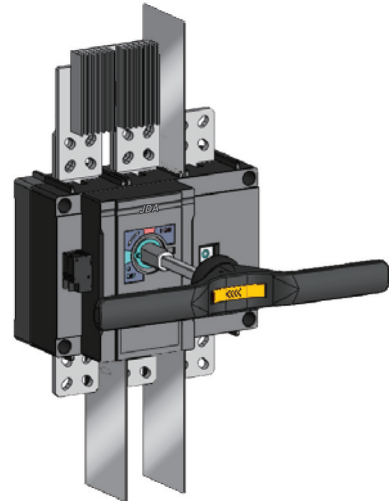
**1. Application**

DS3 series switch-disconnectors is used in the power system with rated voltage up to DC1000V or AC690V (50/60Hz), rated current up to 1250A. It can be used for infrequent close and open, it provides isolation and breaking off circuit, it also provides safety isolation for any low voltage circuit of photovoltaic applications.

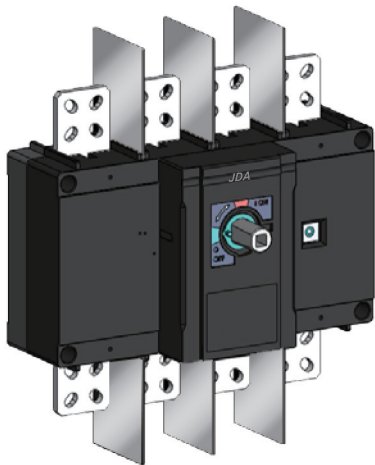
**2. Product Pictures**



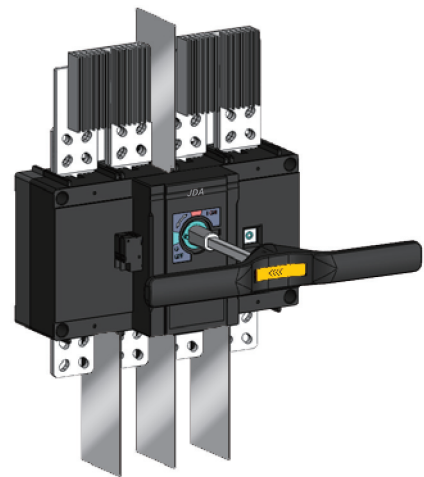
Three poles



Three poles with accessories



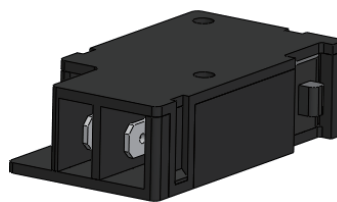
Four poles



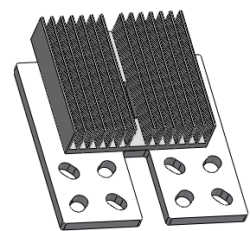
Four poles with accessories



Handle



Auxiliary contact



Bridging links

### 3. Model and implication

#### 3.1 DS3-1000/1250 product model implication

DS  $\frac{3}{2}$  -  $\frac{\square}{3}$  /  $\frac{\square}{4}$   $\frac{\square}{5}$

No.	Code	specification
1	Product code	DS Switch-disconnectors
2	Design code	3
3	Rated current (A)	1000、1250
4	Number of Poles	3: Three poles 4: Four poles
5	Current type	Empty: General product Z: DC photovoltaic product

#### 3.2 Handle model implication

HD  $\frac{1}{2}$  -  $\frac{\square}{3}$  /  $\frac{\text{DS3-1250}}{4}$

No.	Code	specification
1	Function code	Handle
2	Design code	1
3	Shaft code	Empty : Without shaft 200 : 200mm 400 : 400mm
4	Applicable switch model	DS3-1250 : Apply to DS3-1000、1250

#### 3.3 Auxiliary contact model implication

A  $\frac{1}{2}$  -  $\frac{\square}{3}$   $\frac{\square}{4}$  /  $\frac{\text{DS3-800}}{5}$

No.	Code	specification
1	Function code	Auxiliary contact
2	Design code	1
3	Contacts number	11 : 1NO+1NC
4	Auxiliary switch mounting number	A:1 pcs each product B:2 pcs each product
5	Applicable switch model	DS3-800 : Apply to DS3-500、630、800、1000、1250

#### 3.4 Bridging links model implication

BL  $\frac{1}{2}$  /  $\frac{\text{DS3-1250}}{3}$

No.	Code	specification
1	Function code	Bridging links
2	Design code	1
3	Applicable switch model	DS3-1250 : Apply to DS3-1000、1250

#### 4. Main technical parameters

TUV and CE certification parameters are as follow diagram :

Specification	of operation	Parameter		
Rated Current In	A	1000	1250	
Thermal current I <sub>th</sub>	A	1052		
Number of Poles	Pole	3, 4		
Rated Insulation voltage U <sub>i</sub>	V	1000		
Rated impulse withstand voltage U <sub>imp</sub>	kV	12		
Rated operational current I <sub>e</sub> (A)	AC22B	380/400/415V	1000	1250
		660/690V	800	800
	AC23B	380/400/415V	800	1000
		660/690V	500	500
	DC22B	750V	1000/3	1250/3
		1000V	1000/4	1250/4
Rated short-time withstand current I <sub>cw</sub>	kA 1s	AC : 35 kA DC : 10 kA		
Rated short-circuit making capability I <sub>cm</sub>	kA	AC : 50 kA DC : 17 kA		
Mechanical endurance	Cycles	5000		
Electrical endurance	Cycles	100		
Operation torque	N.m	40		
Tightening torque	N.m	10		
Connection capability	mm <sup>2</sup> (Width×Thickness)	60	80×5*(2)	
Installation method		M8 screw		
Weight( Kg)	3 Poles	11		
	2 Poles	14		

#### Installation

- Comply with standards: IEC 60947-3-2005 ; EN 60947-3 ;
- Frequency: 50/60Hz
- Approvals: TUV 、 CE ◦

#### 5. Working conditions

- 1 ) Ambient temperature: -25 ~ +70°C, otherwise the customer should consult for manufacturer.
- 2 ) Altitude: ≤2000m, otherwise the customer should consult for manufacturer.

3 ) Relative humidity : The relative humidity of the air does not exceed 50% at the maximum temperature of +40°C. The higher relative humidity may be permitted at lower temperature, e.g. 90% at +20°C · occasional condensation caused by the temperature change should be taken special measures.

4 ) Service place should be without explosive media, gas and dust which are corrosive and conductive, the product should be mounted free from rain and snow.

5 ) Pollution degree: 3.

6 ) Installation type: III and IV

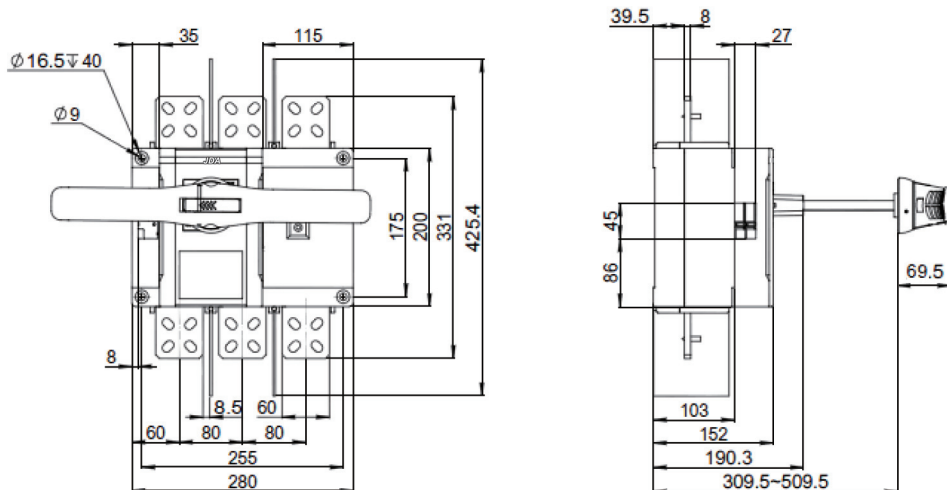
7 ) Protection degree: IP20

8 ) Environmental protection requirements comply with RoHS directive.

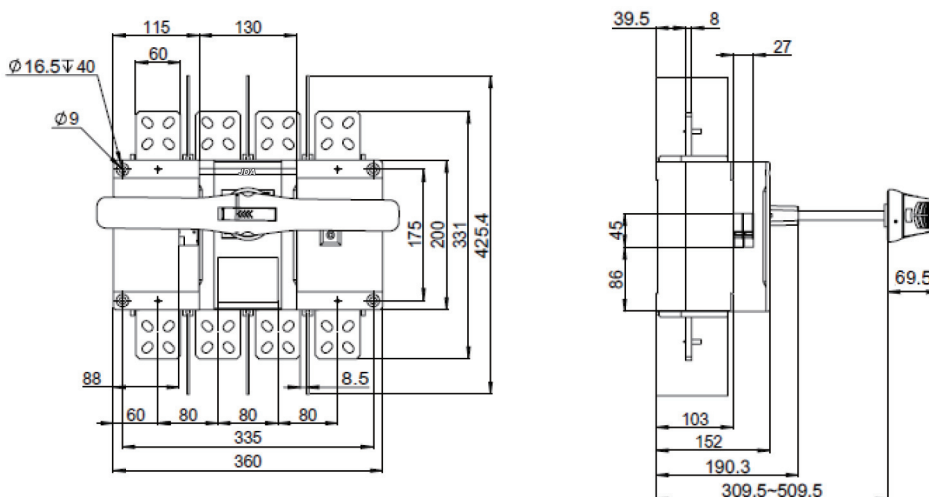
## 6. Outline and installa

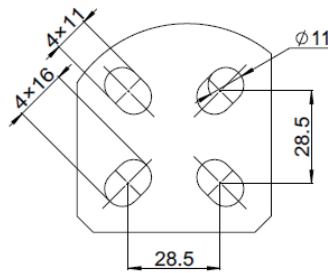
### 6.1 Screw mounting

Outline and installation dimension of three-pole product

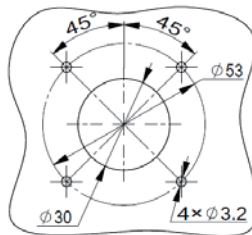


Outline and installation dimension of four-pole product





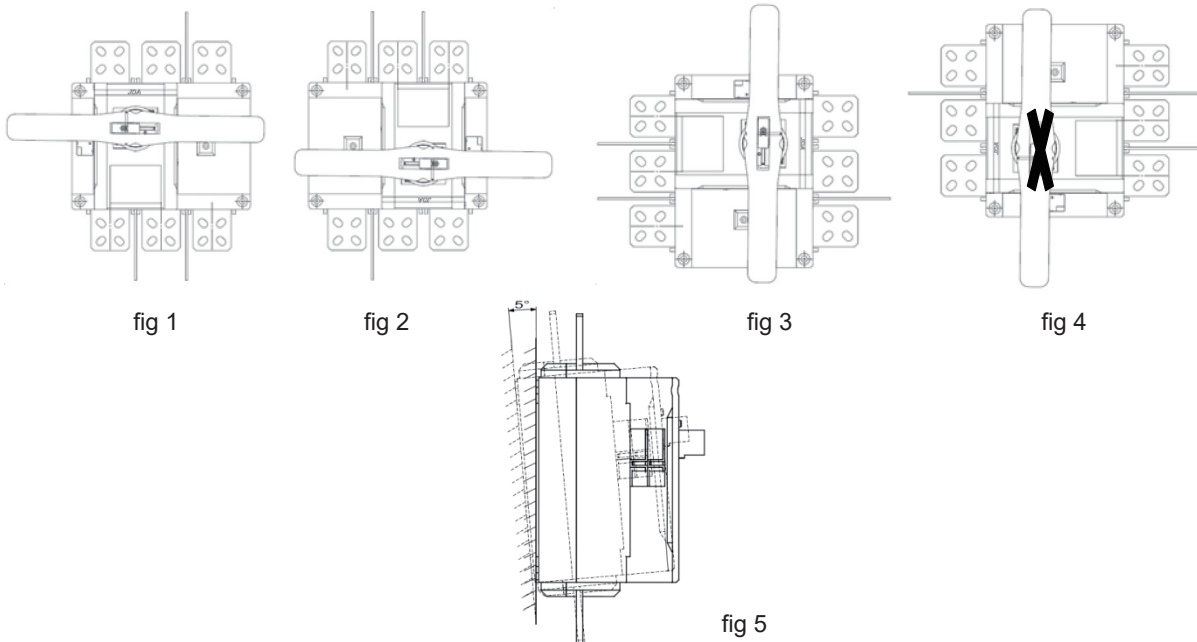
6.2 Dimension of panel drilling



**7. Installation method**

Installation method : screw for switch · panel drilling for handle ;

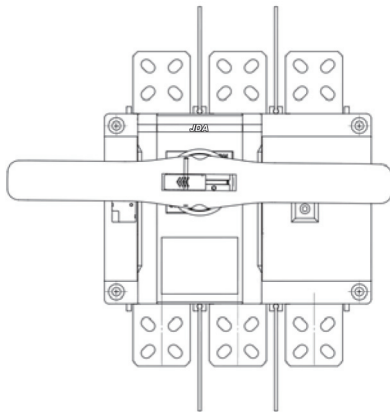
Installation position : vertical installation or horizontal installation. As the 4th follow diagram show, when vertical installation · inspection window of the contact should not be upward. As the 5th diagram show, the product should be mounted within 5° of the vertical mounting plane in case the characters of the product are affected;



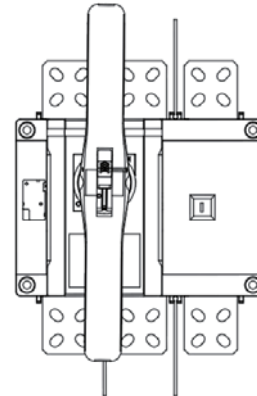
The product should be mounted within 5° of the vertical mounting plane in case the characters of the product are affected

Status position :

as follow diagram show, there are two position, switch on position "I/ON" and switch off position "O/OFF" .



Switch on



Switch off

## 8. Packaging and storage

### 8.1 Switch product packaging

No.	Model	Poles	Pcs
1	DS3-1000	3P	1pc/box
		4P	1pc/box
2	DS3-1250	3P	1pc/box
		4P	1pc/box

### 8.2 Accessories packaging ( Maximum packing capacity )

Name	Number
Handle	2 pcs /box · 4 boxes/carton
Auxiliary contact	16 pcs/box · 40 boxes/carton
Bridging links	2 pcs/box · 2 boxes/carton

### 8.3 Storage

The product should be transited and deposited free from rain and snow. The product should be stored in the warehouse where there is ventilation. The relative humidity there should not exceed 80% ( 20±5°C ) , and the ambient temperature there is between -40°C and +85°C. In addition, there should not be acidic, alkaline and corrosive gas in the air. The product should not be deposited more than 3 years in the above mentioned conditions since the producing date.

## 9. Accessory list and installation

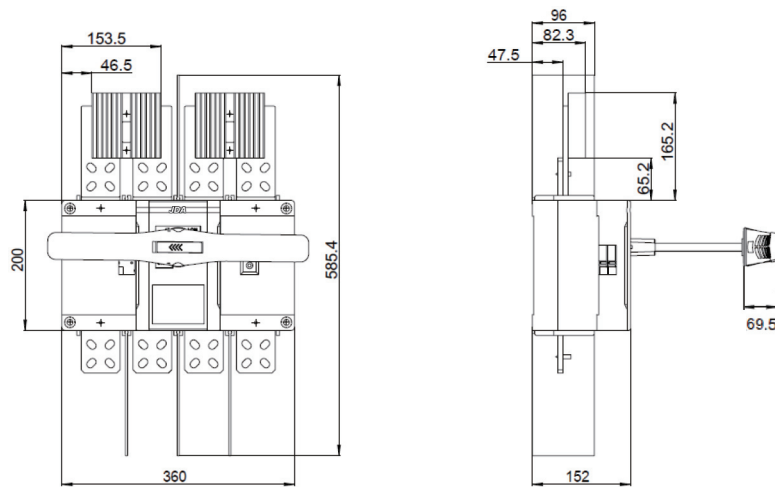
### 9.1 Accessory list

No.	Name	Accessories installation and number	Remarks
1	Handle	Fitted on the panel · connected to the switch through shaft	
2	Auxiliary contacts	Fitted on the frontal left side of switch · up to	

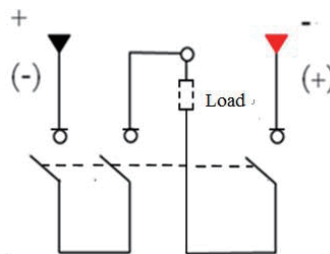
		2pcs	
3	Bridging links	Fitted on the contacts of switch · to make the connection of poles in series	

9.2 Outline and wiring method of bridging links

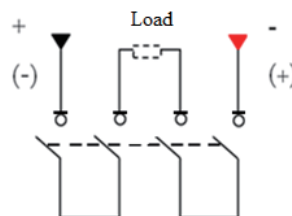
Outline dimension



Circuit diagram of 3 poles connect in series



Circuit diagram of 4 poles connect in series



**10. Notices**

- 1) Manufacturer will take no responsibility for problems caused by disassembly.
- 2) Attention to live parts when the breaker is energized and avoid touching.
- 3) Please make sure reliable connection to avoid damage of terminal caused by exceptional heat resulting from unsuitable connection.