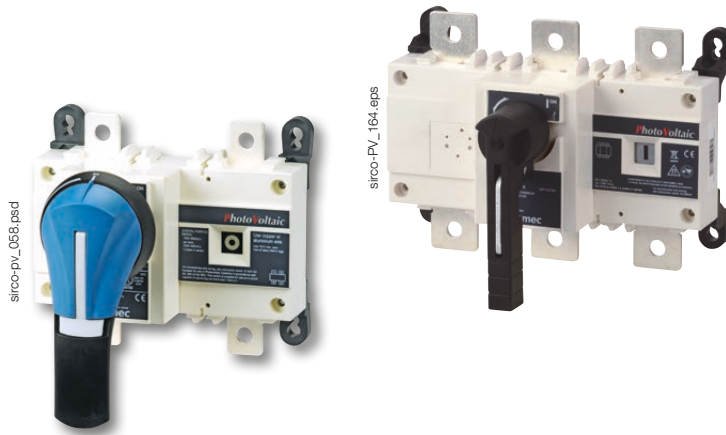


# SIRCO PV IEC 60947-3

Load break switches for photovoltaic applications  
from 100 to 3200 A, up to 1500 VDC



## The solution for

- > Combiner box
- > Recombiner box
- > Inverter



## Strong points

- > Patented switching technology up to 500 VDC/pole
- > Positive indication
- > Up to 1500 VDC according to IEC 60947-3

## Conformity to standards

- > IEC 60947-3
- > IEC 60364-7-712
- > UL 98B<sup>(1)</sup>



## Approvals and certifications<sup>(1)</sup>



<sup>(1)</sup> Product reference on request.

## Function

SIRCO PV are manually operated load break switches. Making and breaking capacity under load conditions up to 1500 VDC. These extremely durable switches have been tested and approved for use in the most demanding applications. They have been designed and tested for all types of applications: grounded, floating or bipolar.

## Advantages

### Optimise your investment

- Thanks to a reduced number of bridging bars, you can limit your costs and save mounting time.
- A 2 poles SIRCO PV will reduce heating and can be integrated in a smaller enclosure.

### High quality materials

SIRCO PV is an extremely robust device in a glass fibre reinforced polyester frame. This material provides:

- high mechanical strength,
- stability to temperature variations (RTI of 130°C),
- high dielectric strength (high CTI / tested as per standard ASTM D 2303).

### Take advantage of an innovative design

The SIRCO PV can be directly connected to up to four independent PV panel strings. The global solution cost is therefore reduced in comparison with the use of four distinct switches.

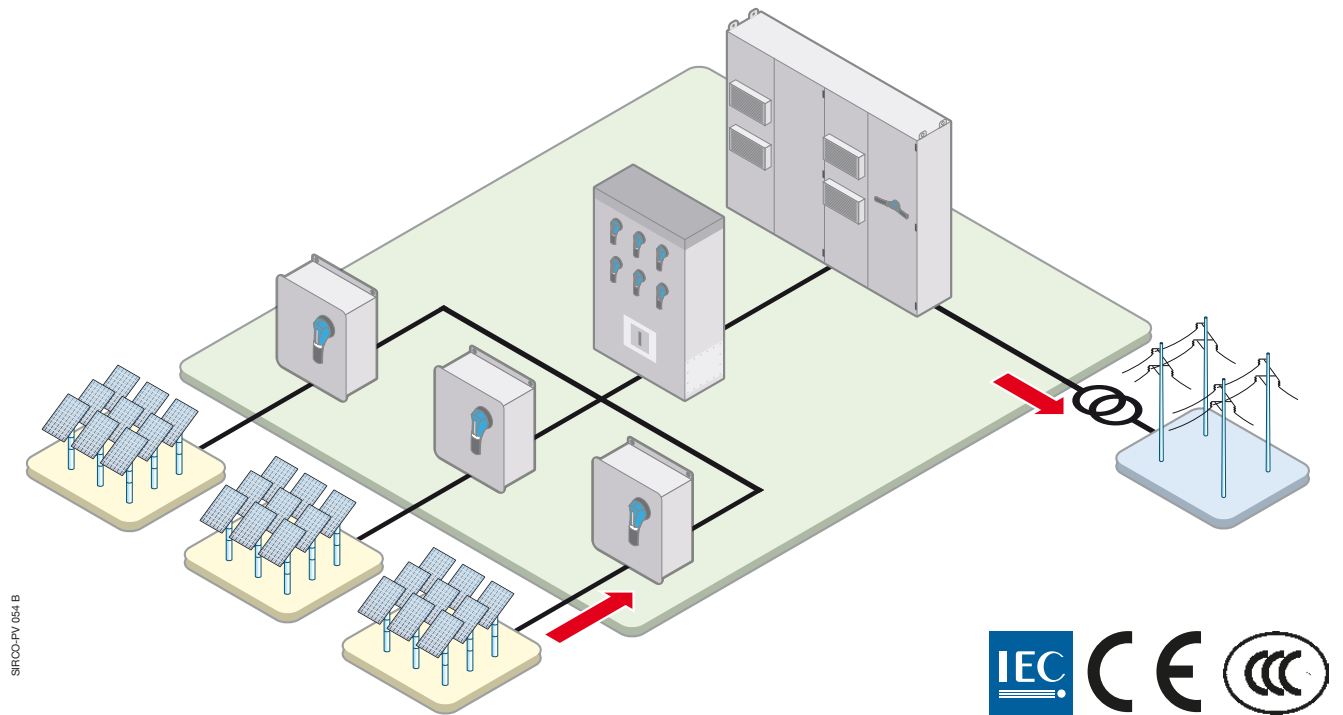
### Reliability and performance

Our range of SIRCO PV load break switches is compliant to standards UL98B and IEC 60947-3.

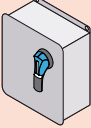
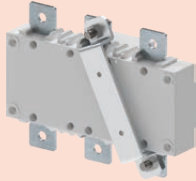
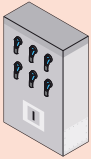
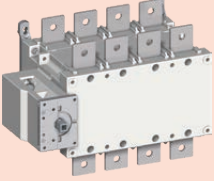
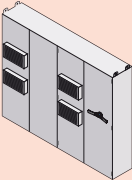
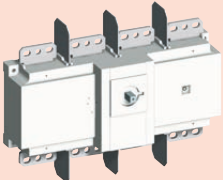
SIRCO PV have been tested to critical currents and at a 10 kA short-circuit during 50 ms without specific protection.

### Typical PV architecture

The SIRCO PV range provides safe disconnection and isolation at all levels within your PV installation.



### The SOCOMEC solutions

LEVEL OF INSTALLATION	SOCOMEK SOLUTIONS	
<b>Combiner box</b> 		SIRCO PV One circuit up to 400 A at 1500 VDC
<b>Recombiner box</b> 		SIRCO PV 4 circuits up to 500 A at 1000 VDC <sup>(1)</sup> 2 circuits up to 500 A at 1500 VDC
<b>Inverter</b> 		SIRCO PV One circuit up to 3200 A at 1000 VDC up to 2000 A at 1500 VDC

(1) Please consult us.

# SIRCO PV IEC 60947-3

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## References

### 1000 VDC - Back mounting

Rating (A)	Frame size	Number of poles	Switch body	Direct handle	External handle	Shaft for external handle	Quantity to be ordered to connect 2 poles in series
<b>1 PV circuit</b>							
100 A	B4	2 P	26PV 2010	J1 type Black 1112 1111 Red 1113 1111	S2 type <sup>(1)</sup> Black IP55 1421 2111 Black IP65 1423 2111 Red/Yellow IP65 1424 2111	200 mm 1400 1020 320 mm 1400 1032 400 mm 1400 1040	-
160 A	B4	2 P	26PV 2016				-
250 A	B4	2 P	26PV 2025				-
315 A	B4	2 P	26PV 2031				-
400 A	B4	4 P	26PV 4040				2 x 2609 0025
500 A	B4	4 P	26PV 4050				-
630 A	B5	4 P	26PV 4063				2 x 2709 0027
800 A	B5	4 P	26PV 4080				-
1250 A	B6	4 P	26PV 4120				S4 type <sup>(1)</sup> Black IP65 1443 3111 Red/Yellow IP65 1444 3111
2000 A	B7	4 P	26PV 4200	J4 type Black 1142 1111 Red 1143 1111	V1 type Black IP65 2799 7145	320 mm 2799 3018 450 mm 2799 3019	2 x 2609 1200
3200 A	B8	4 P	26PV4320	-	-	-	2 x 2609 1200
<b>2 PV circuits</b>							
100 A	B4 <sub>DS</sub>	4 P	26PV 5010	J2 type Black 1122 1111 Red 1123 1111	S2 type <sup>(1)</sup> Black IP55 1421 2111 Black IP65 1423 2111 Red/Yellow IP65 1424 2111	200 mm 1400 1020 320 mm 1400 1032 400 mm 1400 1040	-
160 A	B4 <sub>DS</sub>	4 P	26PV 5016				-
250 A	B4 <sub>DS</sub>	4 P	26PV 5025				-
315 A	B4 <sub>DS</sub>	4 P	26PV 5031				-
630 A	B5 <sub>DS</sub>	8 P	26PV 8063	J4 type Black 1142 1111 Red 1143 1111	S4 type <sup>(1)</sup> Black IP65 1443 3111 Red/Yellow IP65 1444 3111	200 mm 1401 1520 320 mm 1401 1532 400 mm 1401 1520	2 x 2709 0027
800 A	B6 <sub>DS</sub>	8 P	26PV 8080	-	V1 type Black IP65 2799 7145	320 mm 4199 3018	1 x 2609 1100
1250 A	B6 <sub>DS</sub>	8 P	26PV 8120	-	-	-	1 x 2609 1200
2000 A	B7 <sub>DS</sub>	8 P	26PV 8200	-	-	-	1 x 2609 1200

(1) Defeatable handle.

### 1500 VDC - Back mounting

Rating (A)	Frame size	Number of poles	Switch body	Direct handle	External handle	Shaft for external handle	Quantity to be ordered to connect 2 poles in series
<b>1 PV circuit</b>							
160 A	B4T	3 P	26PV 3015	J1 type Black 1112 1111 Red 1113 1111	S2 type <sup>(1)</sup> Black IP55 1421 2111 Black IP65 1423 2111 Red/Yellow IP65 1424 2111	200 mm 1400 1020 320 mm 1400 1032 400 mm 1400 1040	Standard bridging bar 1 x 2609 0026
250 A	B4T	3 P	26PV 3024				-
315 A	B4T	3 P	26PV 3030				Back bridging bar 1 x 2609 0041
400 A	B4T	3 P	26PV 3039				-
800 A	B6 <sub>DS</sub>	8 P	26PV 8080	J4 type Black 1142 1111 Red 1143 1111	V1 type Black IP65 2799 7145	320 mm 4199 3018	1 x 2609 1100
1250 A	B6 <sub>DS</sub>	8 P	26PV 8120	-	-	-	1 x 2609 1200
2000 A	B7 <sub>DS</sub>	8 P	26PV 8200	-	-	-	1 x 2609 1200

(1) Defeatable handle.

## Accessories

### Direct operation handle

Frame size	Handle type	Handle colour	Reference
B4 ... B5	B2	Black	2699 <b>5052</b>
		Red	2699 <b>5053</b>
	J1	Black	1112 <b>1111</b>
		Red	1113 <b>1111</b>
B6 ... B7	J4	Black	1142 <b>1111</b>
		Red	1143 <b>1111</b>
B4 <sub>DS</sub> ... B5 <sub>DS</sub>	B2	Black	2699 <b>5052</b>
		Red	2699 <b>5053</b>
	J4	Black	1142 <b>1111</b>
		Red	1143 <b>1111</b>
	J2	Black	1122 <b>1111</b>
		Red	1123 <b>1111</b>
B6 <sub>DS</sub> ...B7 <sub>DS</sub>	J4	Black	1142 <b>1111</b>
		Red	1143 <b>1111</b>
B8	J4	Black	1142 <b>1111</b>
		Red	1143 <b>1111</b>



### Door interlocked external operation handle

#### Use

Door interlocked external operation handles include an escutcheon, are padlockable and must be utilised with an extension shaft. In a combiner box, located close to the solar cell strings, or located close to the inverter, we recommend to use a door interlocked external handle for its safety features.

#### Example

The locking function of the enclosure in the "ON" position will force the operator to safely disconnect and isolate the solar cell strings prior to any intervention. Opening the door when the switch is on "ON" position is possible by defeating the locking function using a tool (authorised persons only). The interlocking function is restored when the door is re-closed.

Frame size	Handle type	Handle colour	Degree of protection	Reference
B4 ... B5	S2	Black	IP55	1421 <b>2111</b>
	S2	Black	IP65	1423 <b>2111</b>
	S2	Red/ Yellow	IP65	1424 <b>2111</b>
B6 ... B7	S4	Black	IP65	1443 <b>3111</b>
	S4	Red/ Yellow	IP65	1444 <b>3111</b>
B8	V1	Black	IP65	2799 <b>7145</b>
	S2	Black	IP55	1421 <b>2111</b>
B4 <sub>DS</sub>	S2	Black	IP65	1423 <b>2111</b>
	S2	Red/ Yellow	IP65	1424 <b>2111</b>
B5 <sub>DS</sub>	S4	Black	IP65	1443 <b>3111</b>
	S4	Red/ Yellow	IP65	1444 <b>3111</b>
B6 <sub>DS</sub> ... B7 <sub>DS</sub>	V1	Black	IP65	2799 <b>7145</b>
B8				



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## Accessories (continued)

### Shaft for external handle

#### Use

Standard lengths:

- 200 mm,
- 320 mm,
- 400 mm.

Other lengths: Please consult us.

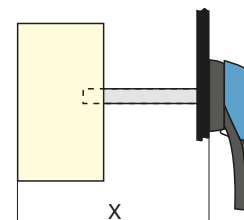
Frame size	Handle type	Dimensions X (mm)	Length (mm)	Reference
B4	S2	150 ... 295	200	1400 1020
B4	S2	150 ... 415	320	1400 1032
B4	S2	150 ... 495	400	1400 1040
B5	S2	203 ... 328	200	1400 1020
B5	S2	203 ... 448	320	1400 1032
B5	S2	203 ... 525	400	1400 1040
B6	S4	220 ... 343	200	1401 1520
B6	S4	220 ... 463	320	1401 1532
B6	S4	220 ... 543	400	1401 1540
B7	S4	305 ... 366	200	1401 1520
B7	S4	305 ... 485	320	1401 1532
B7	S4	305 ... 564	400	1401 1540
B8	V1	415 ... 690	320	2799 3018
B8	V1	415 ... 820	450	2799 3019
B4 <sub>DS</sub>	S2	210...310	200	1400 1020
B4 <sub>DS</sub>	S2	210...430	320	1400 1032
B4 <sub>DS</sub>	S2	210...510	400	1400 1040
B5 <sub>DS</sub>	S4	280...390	200	1401 1520
B5 <sub>DS</sub>	S4	280...510	320	1401 1532
B5 <sub>DS</sub>	S4	280...590	400	1401 1540
B6 <sub>DS</sub>	V1	425...577	320	4199 3018
B6 <sub>DS</sub>	V1	425...697	400	4199 3019
B7 <sub>DS</sub>	V1	425...697	320	4199 3018
B7 <sub>DS</sub>	V1	425...777	400	4199 3019



access\_144.eps



access\_369.eps



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### Shaft guide for external operation

#### Use

To guide the shaft extension into the external handle.

This accessory enables the handle to engage the extension shaft with a misalignment of up to 15 mm.

Required for a shaft length over 320 mm.

Description	Reference
Shaft guide	1429 0000



access\_200\_a\_2\_cat

### S-type handle adapter

#### Use

Enables S-type handles to be fitted in place of existing older style Socomec handles.

Adapter can also be utilised as a spacer to increase the distance between the panel door and the handle lever.

#### Dimensions

Adds 12 mm to the depth of the handle.

Handle colour	External IP <sup>(1)</sup>	To be ordered in multiples of	Reference
Black	IP65	1	1493 0000

(1) IP: protection degree according to IEC 60529 standard.



access\_167

## Auxiliary contact

### Use

- Pre-break and signalling of positions 0 and I:  
- 1 to 2 NO/NC auxiliary contacts,  
- 1 to 4 NO + NC auxiliary contacts,  
- 1 to 2 low level NO/NC auxiliary contacts.

### Characteristics

NO/NC AC: IP2 with front operation.

### Connection to the control circuit

By 6.35 mm fast-on terminal.

### Electrical characteristics

30 000 operations.

### NO/NC changeover auxiliary contacts

Frame size	Position AC	Type	Reference
B4 ... B8	1 contact	NO/NC	2699 0031
B4 ... B8	2 contacts	NO/NC	2699 0032
B4 <sub>DS</sub> ... B7 <sub>DS</sub>	1 contact	NO/NC	2699 0061
B4 <sub>DS</sub> ... B7 <sub>DS</sub>	2 contacts	NO/NC	2699 0062

### Low level NO/NC auxiliary contacts

Frame size	Position AC	Type	Reference
B4 ... B7	1 contact	NO/NC	2699 0301
B4 ... B7	2 contacts	NO/NC	2699 0302



## Terminal screen

### Use

Top and bottom protection against direct contact with terminals or connection parts.

Frame size	No. of poles	Position	Pack	Reference
B4	2 P	Top or bottom	1 unit	2698 3020
B4T	3 P	Top or bottom	1 unit	2698 4020
B4	4 P	Top or bottom	1 unit	2698 4020
B5	3 P	Top or bottom	1 unit	2698 3050
B5	4 P	Top or bottom	1 unit	2698 4050
B6	4 P	Top or bottom	1 unit	2698 4080
B7	4 P	Top or bottom	1 unit	2698 4120
B8	4 P	Top or bottom	1 unit	2698 4200
B4 <sub>DS</sub>	2 P	Top or bottom	1 unit	1509 3025
B5 <sub>DS</sub>	6 P	Top and bottom	2 units	1509 3063
B5 <sub>DS</sub>	8 P	Top and bottom	2 units	1509 4063
B6 <sub>DS</sub>	8 P	Top and bottom	2 units	1509 4080



## Inter-phase barrier

### Use

Safe isolation between the terminals.

Frame size	No. of poles	Reference
B4	2 P	2998 0023
B4T	3 P	2998 0023
B4	4 P	2998 0024
B5	4 P	2998 0014
B6...B8	3 P	Included
B6...B8	4 P	Included

The inter-phase barriers are not mandatory but we recommend to separate the polarities + and -.

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## Accessories (continued)

### Bridging bars for connecting poles in series

#### Use

The bridging bars permit easy connection of the poles in series, allowing the following configurations<sup>(1)</sup>.

<sup>(1)</sup> Other connections: refer to mounting instructions.

1000 VDC - 1 independent PV circuit										
Switch body Reference	Rating (A)	Frame size	Fig.	Quantity of bridging bars kits to order per switch - ungrounded	Fig.	Reference				
26PV 4040	400	B4		4		2609 0025				
26PV 4050	500									
26PV 4063	630	B5		4			2709 0027			
26PV 4080	800									
26PV 4120	1250	B6		2				2609 1100		
26PV 4200	2000	B7		2						
26PV 4320	3200	B8		2					2609 1200	
26PV 8063	630	B5 <sub>DS</sub>		8						
26PV 8080	800	B6 <sub>DS</sub>		4						2609 1100
26PV 8120	1250									
26PV 8200	2000	B7 <sub>DS</sub>		4						2609 1200

Bridging bars for connecting poles in series (continued)

**Use**

The bridging bars permit easy connection of the poles in series, allowing the following configurations<sup>(1)</sup>.

(1) Other connections: refer to mounting instructions.

Switch body Reference	Rating (A)	Frame size	Quantity to be ordered to connect 2 poles in series	Fig.	Quantity of bridging bars kits to order per switch - ungrounded	Fig.	Reference
26PV 3015	160	B4T	1		1		2609 0026
							2609 0041
26PV 3024	250	B4T	1		1		2609 0026
							2609 0041
26PV 3030	315	B4T	1		1		2609 0026
							2609 0041
26PV 3039	400	B4T	1		1		2609 0026
							2609 0041



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## Accessories (continued)


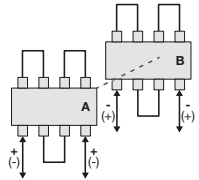


### Bridging bars for connecting poles in series (continued)

#### Use

The bridging bars permit easy connection of the poles in series, allowing the following configurations<sup>(1)</sup>.

<sup>(1)</sup> Other connections: refer to mounting instructions.

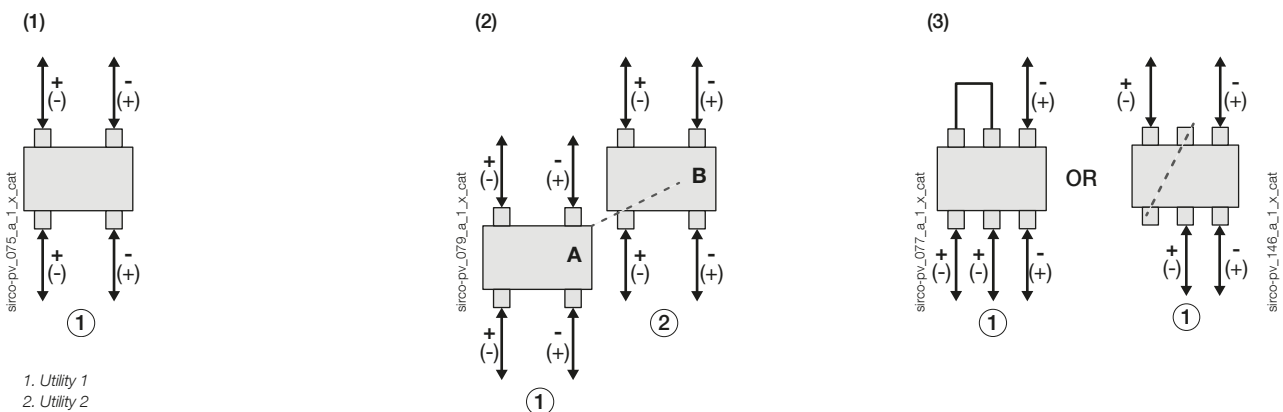
#### 1500 VDC - 1 independent PV circuit

Switch body Reference	Rating (A)	Frame size	Quantity to be ordered to connect 2 poles in series	Fig.	Quantity of bridging bars kits to order per switch - ungrounded	Fig.	Reference
26PV 8080	800	B6 <sub>DS</sub>	1		4		2609 1100
26PV 8120	1250	B6 <sub>DS</sub>	1		4		2609 1100
26PV 8200	2000	B7 <sub>DS</sub>	1		4		2609 1200

## Characteristics

### Characteristics according to IEC 60947-3

Rated Current $I_n$			100 A		160 A			250 A			
Reference			26PV 2010	26PV 5010	26PV 2016	26PV 5016	26PV 3015	26PV 2025	26PV 5025	26PV 3024	
Frame size			B4	B4 <sub>DS</sub>	B4	B4 <sub>DS</sub>	B4T	B4	B4 <sub>DS</sub>	B4T	
Thermal current at 40°C (A)			100	100	160	160	160	250	250	250	
Thermal current at 45°C (A)			100	100	160	160	160	250	250	250	
Thermal current at 50°C (A)			100	100	160	160	160	250	250	250	
Thermal current at 55°C (A)			100	100	160	160	160	250	250	250	
Thermal current at 60°C (A)			100	100	160	160	160	250	250	250	
Thermal current at 65°C (A)			100	100	160	160	152	250	250	237	
Thermal current at 70°C (A)			100	100	160	160	144	250	250	225	
Rated insulation voltage $U_i$ (V)			1500	1500	1500	1500	1500	1500	1500	1500	
Rated impulse withstand voltage $U_{imp}$ (kV)			12	12	12	12	12	12	12	12	
Number of circuits	Rated voltage	Utilisation category	100 A		160 A			250 A			
			$I_e$ (A)	$I_e$ (A)	$I_e$ (A)	$I_e$ (A)	$I_e$ (A)	$I_e$ (A)	$I_e$ (A)	$I_e$ (A)	
$I_e$ (A)	1 circuit	1000 VDC	DC-21 B	100	-	160	-	-	250	-	-
	2 circuits			-	100	-	160	-	-	250	-
	1 circuit	1500 VDC	DC-21 B	-	-	-	-	-	-	-	
	2 circuits			-	-	-	-	-	-	-	
1 circuit		DC-PV1	-	-	-	-	160	-	-	250	
Number of pole(s) in series per circuit			1P+; 1P- <sup>(1)</sup>	1P+; 1P- <sup>(2)</sup>	1P+; 1P- <sup>(1)</sup>	1P+; 1P- <sup>(2)</sup>	2P+; 1P- <sup>(3)</sup>	1P+; 1P- <sup>(1)</sup>	1P+; 1P- <sup>(2)</sup>	2P+; 1P- <sup>(3)</sup>	
Number of pole(s) of the device			2 P	4 P	2 P	4 P	3 P	2 P	4 P	3 P	
<b>Short-circuit capacity (without protection)</b>											
Rated short-time withstand current 0.3 s. (kA eff)			10	10	10	10	10	10	10	10	
Rated short-time withstand current 1 s. (kA eff)			5	5	5	5	5	5	5	5	
Power dissipation per poles of the PV switch (W/P) @ 40°C			0.8	0.8	2	2	2.5	4.7	4.7	5	
Humidity according to IEC 60947-1 Annex Q (%)			95	95	95	95	95	95	95	95	
<b>Connection</b>											
Nominal Cu cable section (mm <sup>2</sup> )			35	35	70	70	70	120	120	120	
Nominal Cu busbar width (mm)			32	32	32	32	32	32	32	32	

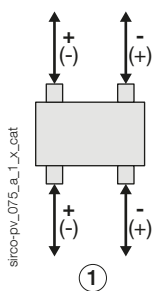


## Characteristics (continued)

### Characteristics according to IEC 60947-3

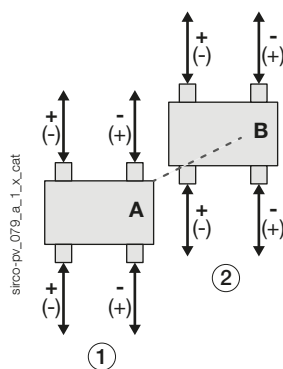
Rated Current $I_n$				315 A		
Reference				26PV 2031	26PV 5031	26PV 3030
Frame size				<b>B4</b>	<b>B4<sub>DS</sub></b>	<b>B4T</b>
Thermal current at 40°C (A)				315	315	315
Thermal current at 45°C (A)				315	315	315
Thermal current at 50°C (A)				315	315	315
Thermal current at 55°C (A)				315	315	315
Thermal current at 60°C (A)				315	315	315
Thermal current at 65°C (A)				315	315	299
Thermal current at 70°C (A)				315	315	283
Rated insulation voltage $U_i$ (V)				1500	1500	1500
Rated impulse withstand voltage $U_{imp}$ (kV)				12	12	12
Number of circuits	Rated voltage	Utilisation category	$I_e$ (A)	$I_e$ (A)	$I_e$ (A)	
$I_e$ (A)	1 circuit	1000 VDC	315	-	-	
	2 circuits		-	315	-	
	1 circuit	1500 VDC	-	-	-	
	2 circuits		-	-	-	
	1 circuit				315	
Number of pole(s) in series per circuit				1P+; 1P <sup>-(1)</sup>	1P+; 1P <sup>-(2)</sup>	2P+; 1P <sup>-(3)</sup>
Number of pole(s) of the device				2 P	4 P	3 P
<b>Short-circuit capacity (without protection)</b>						
Rated short-time withstand current 0.3 s. (kA eff)				10	10	10
Rated short-time withstand current 1 s. (kA eff)				5	5	5
Power dissipation per poles of the PV switch (W/P) @ 40°C				8	8	9.5
Humidity according to IEC 60947-1 Annexe Q (%)				95	95	95
<b>Connection</b>						
Nominal Cu cable section (mm <sup>2</sup> )				185	185	185
Nominal Cu busbar width (mm)				32	32	32

(1)

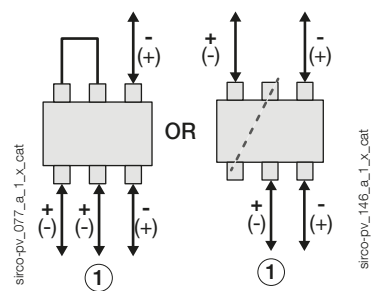


1. Utility 1  
2. Utility 2

(2)



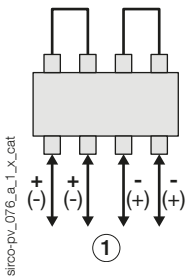
(3)



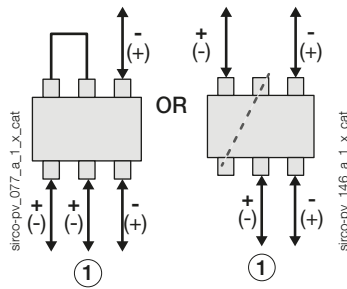
Characteristics according to IEC 60947-3

Rated Current $I_n$				400 A		500 A
Reference				26PV 4040	26PV 3039	26PV 4050
Frame size				B4	B4T	B4
Thermal current at 40°C (A)				400	400	500
Thermal current at 45°C (A)				400	400	500
Thermal current at 50°C (A)				400	400	500
Thermal current at 55°C (A)				400	400	500
Thermal current at 60°C (A)				400	400	500
Thermal current at 65°C (A)				380	380	475
Thermal current at 70°C (A)				360	360	450
Rated insulation voltage $U_i$ (V)				1500	1500	1500
Rated impulse withstand voltage $U_{imp}$ (kV)				12	12	12
Number of circuits	Rated voltage	Utilisation category	$I_e$ (A)	$I_e$ (A)	$I_e$ (A)	
$I_e$ (A)	1 circuit	1000 VDC	400	-	500	
	2 circuits		-	-	-	
	1 circuit	1500 VDC	-	-	-	
	2 circuits		-	-	-	
	1 circuit		DC-PV1	400	-	
Number of pole(s) in series per circuit			2P+; 2P- <sup>(1)</sup>	2P+; 1P- <sup>(2)</sup>	2P+; 2P- <sup>(1)</sup>	
Number of pole(s) of the device			4 P	3 P	4 P	
<b>Short-circuit capacity (without protection)</b>						
Rated short-time withstand current 0.3 s. (kA eff)			10	10	10	
Rated short-time withstand current 1 s. (kA eff)			5	5	5	
Power dissipation per poles of the PV switch (W/P) @ 40°C			20	15	30	
Humidity according to IEC 60947-1 Annexe Q (%)			95	95	95	
<b>Connection</b>						
Nominal Cu cable section (mm <sup>2</sup> )			240	240	2 x 150	
Nominal Cu busbar width (mm)			32	32	32	

(1)



(2)

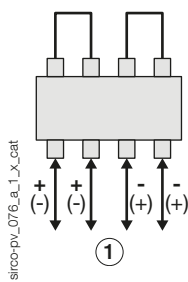


### Characteristics (continued)

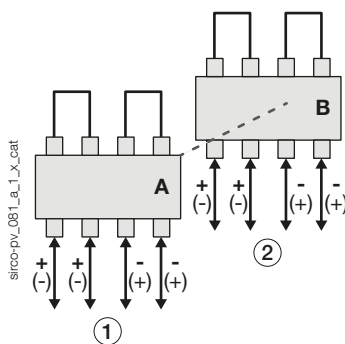
#### Characteristics according to IEC 60947-3

Rated Current $I_n$			630 A		800 A		
Reference			26PV 4063	26PV 8063	26PV 4080	26PV 8080	
Frame size			B5	B5 <sub>DS</sub>	B5	B5 <sub>DS</sub>	
Thermal current at 40°C (A)			630	630	800	800	
Thermal current at 45°C (A)			630	630	760	760	
Thermal current at 50°C (A)			630	630	720	720	
Thermal current at 55°C (A)			630	630	685	685	
Thermal current at 60°C (A)			560	560	650	650	
Thermal current at 65°C (A)			540	540	620	620	
Thermal current at 70°C (A)			510	510	590	590	
Rated insulation voltage $U_i$ (V)			1500	1500	1200	1500	
Rated impulse withstand voltage $U_{imp}$ (kV)			12	12	12	12	
Number of circuits	Rated voltage	Utilisation category	$I_e$ (A)	$I_e$ (A)	$I_e$ (A)	$I_e$ (A)	
$I_e$ (A)	1000 VDC	DC-21 B	1 circuit	630	-	800	-
			2 circuits	-	630	-	800
	1500 VDC	DC-21 B	1 circuit	-	-	-	800
			2 circuits	-	-	-	-
Number of pole(s) in series per circuit			2P+; 2P- <sup>(1)</sup>	2P+; 2P- <sup>(2)</sup>	2P+; 2P- <sup>(1)</sup>	2P+; 2P- <sup>(2)</sup>	
Number of pole(s) of the device			4 P	8 P	4 P	8 P	
<b>Short-circuit capacity (without protection)</b>							
Rated short-time withstand current 0.3 s. (kA eff)			10	10	10	10	
Rated short-time withstand current 1 s. (kA eff)			5	5	5	5	
Power dissipation per poles of the PV switch (W/P) @ 40°C			40	40	70	70	
Humidity according to IEC 60947-1 Annexe Q (%)			95	95	95	95	
<b>Connection</b>							
Nominal Cu cable section (mm <sup>2</sup> )			2 x 185	2 x 185	2 x 240	2 x 240	
Nominal Cu busbar width (mm)			40	40	50	50	

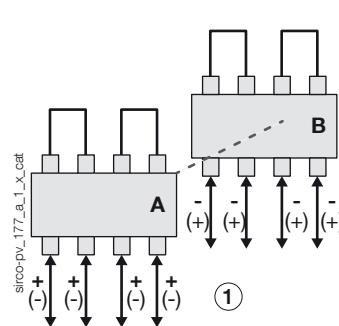
(1)



(2)



(3)

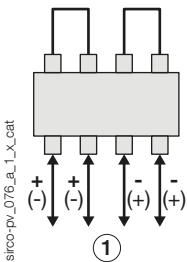


1. Utility 1  
2. Utility 2

Characteristics according to IEC 60947-3

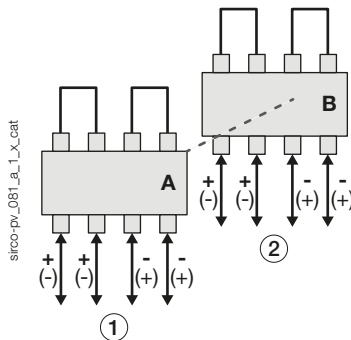
Rated Current $I_n$		1250 A			2000 A		3200 A		
Reference		26PV 4120	26PV 8120		26PV 4200	26PV 8200		26PV 4320	
Frame size		B6	B6 <sub>DS</sub>		B7	B7 <sub>DS</sub>		B8	
Thermal current at 40°C (A)		1250	1250		2000	2000		3200	
Thermal current at 45°C (A)		1250	1250		2000	2000		3200	
Thermal current at 50°C (A)		1250	1250		1850	1850		3200	
Thermal current at 55°C (A)		1180	1180		1730	1730		3040	
Thermal current at 60°C (A)		1125	1125		1600	1600		2888	
Thermal current at 65°C (A)		1050	1050		1520	1520		2743	
Thermal current at 70°C (A)		1000	1000		1440	1440		2606	
Rated insulation voltage $U_i$ (V)		-	-		1500	1500		1500	
Rated impulse withstand voltage $U_{imp}$ (kV)		12	12		12	12		12	
Number of circuits	Rated voltage	Utilisation category	$I_e$ (A)	$I_e$ (A)	$I_e$ (A)	$I_e$ (A)	$I_e$ (A)	$I_e$ (A)	
$I_e$ (A)	1 circuit	1000 VDC	DC-21 B	1250	-	-	2000	-	3200
	2 circuits			-	1250	-	-	2000	-
	1 circuit	1500 VDC	DC-21 B	-	-	1250	-	-	2000
	2 circuits			-	-	-	-	-	-
Number of pole(s) in series per circuit			2P+; 2P- <sup>(1)</sup>	2P+; 2P- <sup>(2)</sup>	4P+; 4P- <sup>(3)</sup>	2P+; 2P- <sup>(1)</sup>	2P+; 2P- <sup>(2)</sup>	4P+; 4P- <sup>(3)</sup>	4P+; 4P- <sup>(1)</sup>
Number of pole(s) of the device			4 P	8 P		4 P	8 P	4 P	
<b>Short-circuit capacity (without protection)</b>									
Rated short-time withstand current 0.3 s. (kA eff)			10	10		10	10	10	
Rated short-time withstand current 1 s. (kA eff)			5	5		5	5	5	
Power dissipation per poles of the PV switch (W/P) @ 40°C			-	63		-	125	-	
Humidity according to IEC 60947-1 Annexe Q (%)			95	95		95	95	95	
<b>Connection</b>									
Nominal Cu cable section (mm <sup>2</sup> )			2 x 240	2 x 240		-	-	-	
Nominal Cu busbar width (mm)			63	63		100	100	4 x 100 x 5	

(1)

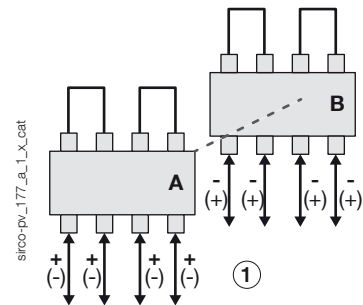


- 1. Utility 1
- 2. Utility 2

(2)



(3)



# SIRCO PV IEC 60947-3

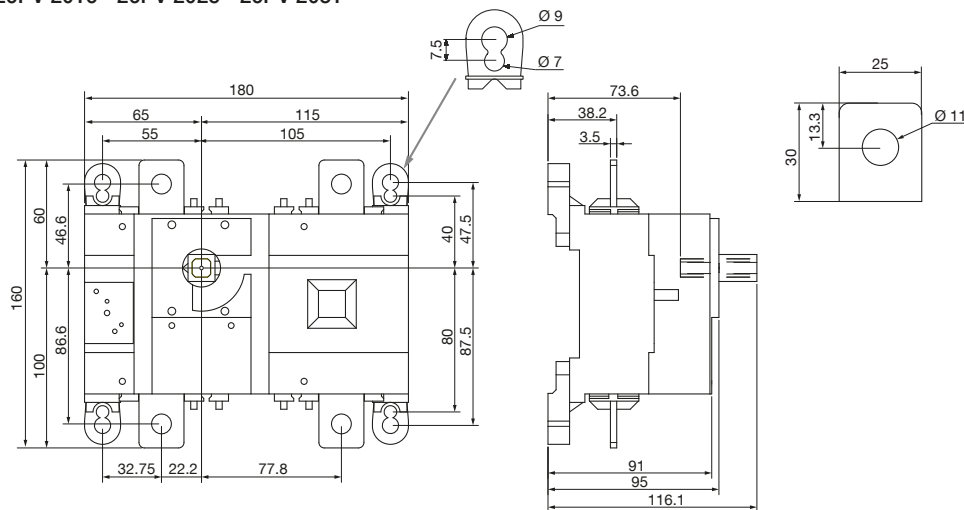
Load break switches for photovoltaic applications

from 100 to 3200 A, up to 1500 VDC

## Dimensions (mm)

100 to 315 A - B4 - 2P - 1000 VDC - 1 circuit

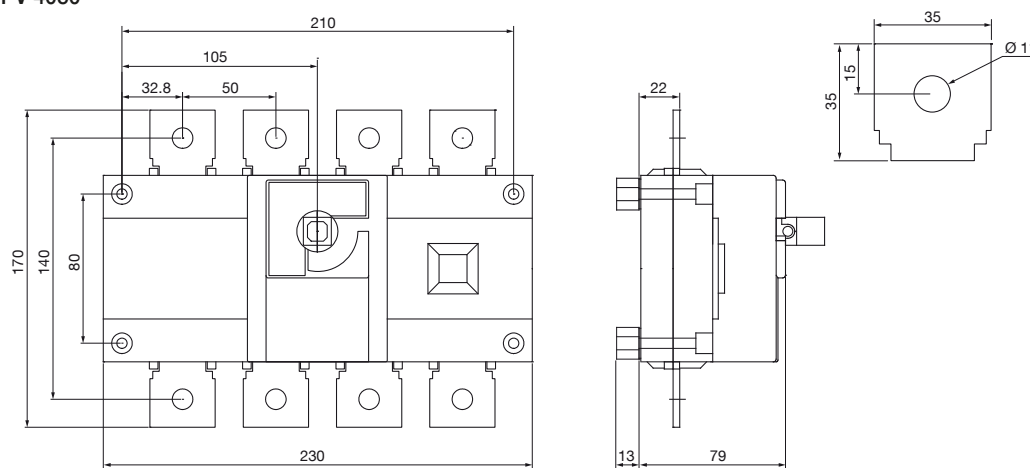
26PV 2010 - 26PV 2016 - 26PV 2025 - 26PV 2031



sirco-pv\_141\_a\_1\_x\_cat.ait

400 to 500 A - B4 - 4P - 1000 VDC - 1 circuit

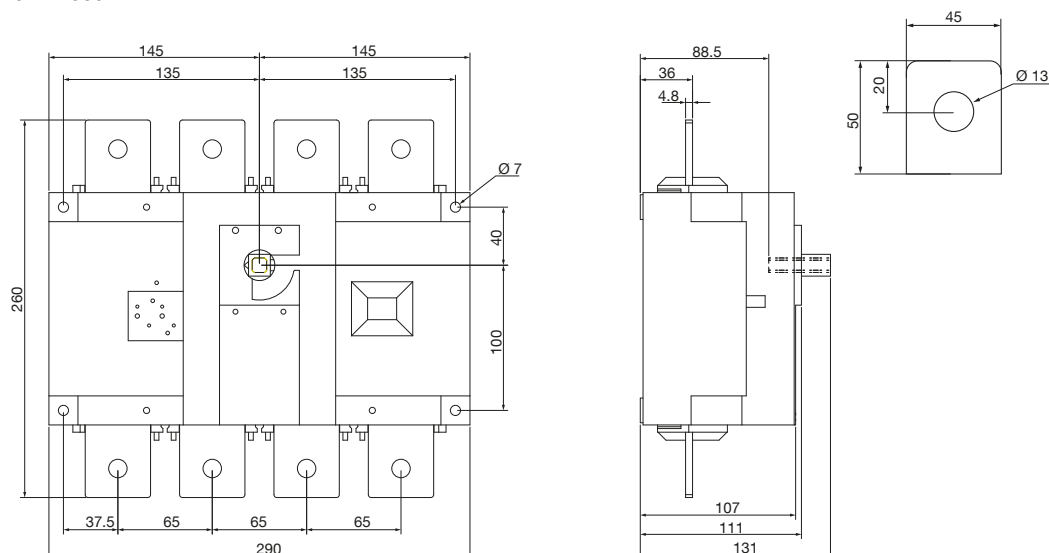
26PV 4040 - 26PV 4050



sirco-pv\_142\_a\_1\_x\_cat.ait

630 to 800 A - B5 - 4P - 1000 VDC - 1 circuit

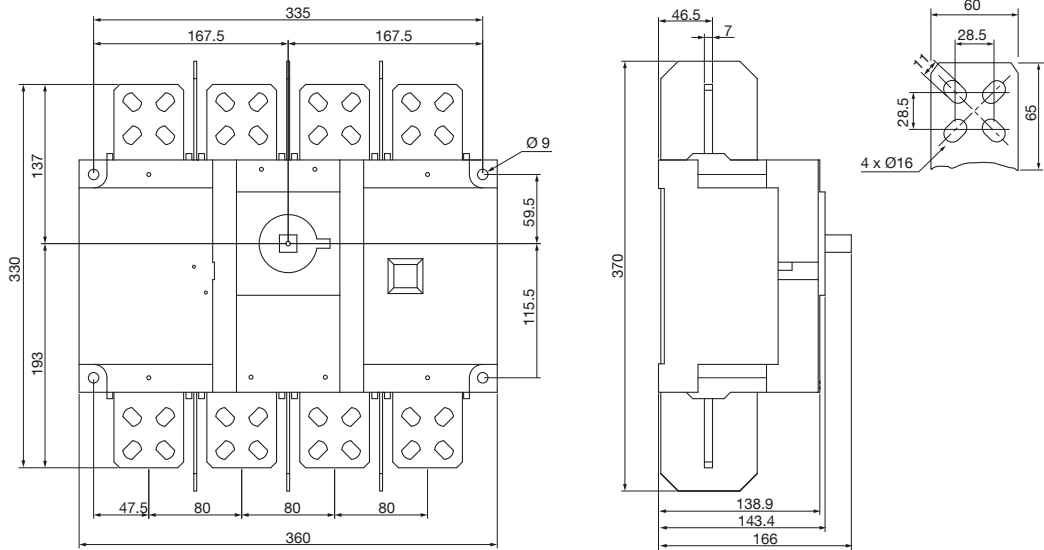
26PV 4063 - 26PV 4080



sirco-pv\_143\_a\_1\_x\_cat.ait

1250 A - B6 - 4P - 1000 VDC - 1 circuit

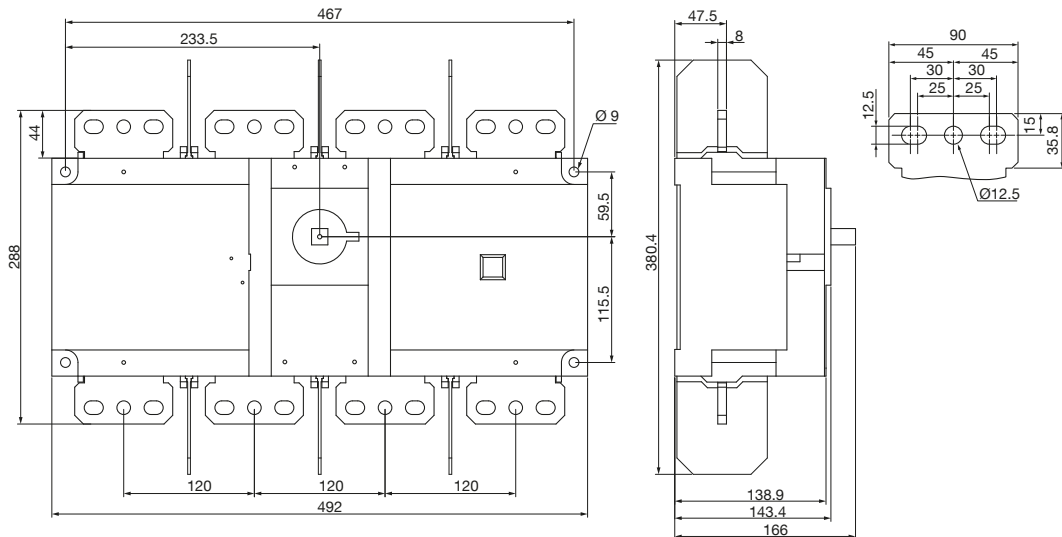
26PV 4120



sirco-pv\_144\_a\_1\_x\_cat.ai

2000 A - B7 - 4P - 1000 VDC - 1 circuit

26PV 4200



sirco-pv\_145\_a\_1\_x\_cat.ai



# SIRCO PV IEC 60947-3

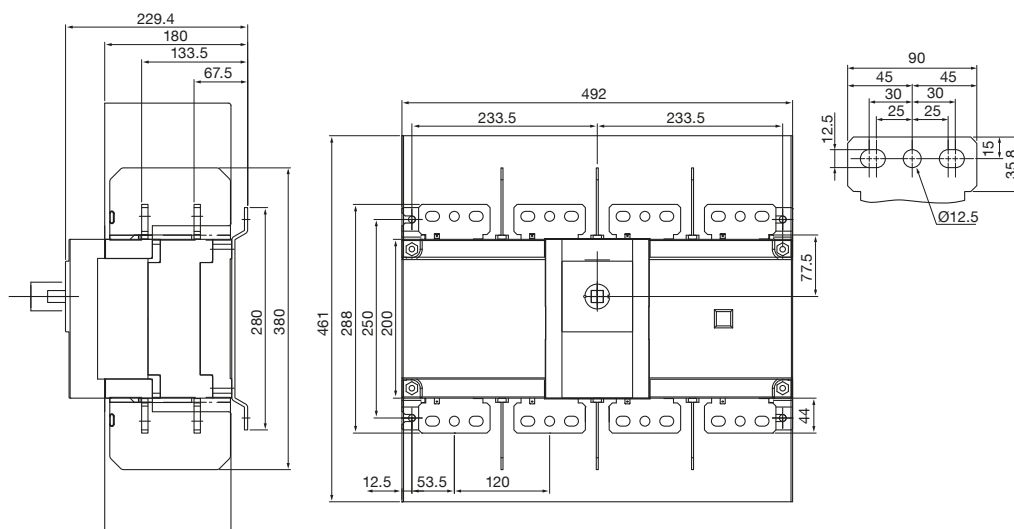
Load break switches for photovoltaic applications

from 100 to 3200 A, up to 1500 VDC

## Dimensions (mm) (continued)

3200 A - B8 - 4P - 1000 VDC - 1 circuit

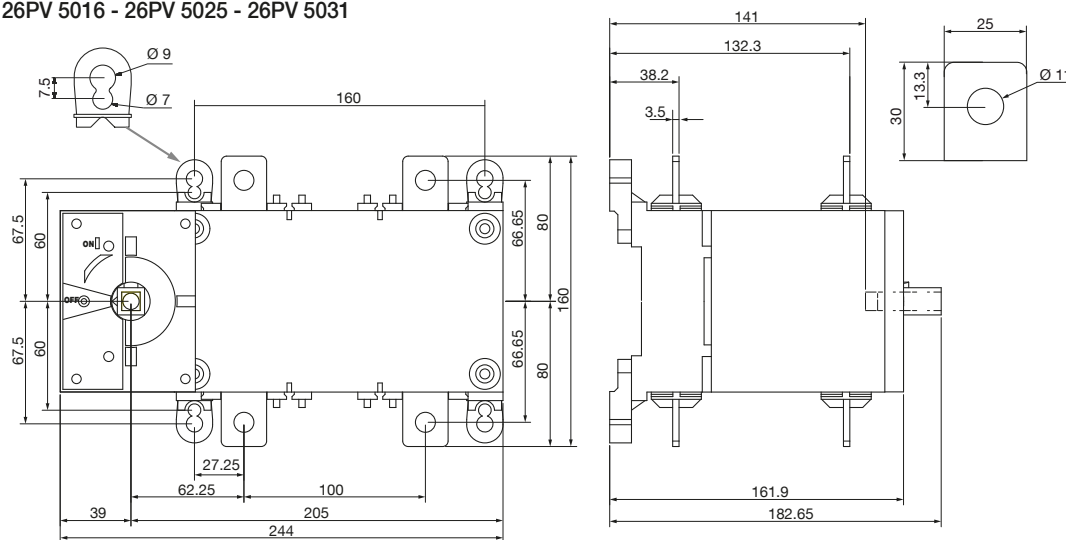
26PV 4320



sirco-pv\_147\_a\_1\_x\_cat.ai

100 to 315 A - B4<sub>DS</sub> - 4P - 1000 VDC - 2 circuits

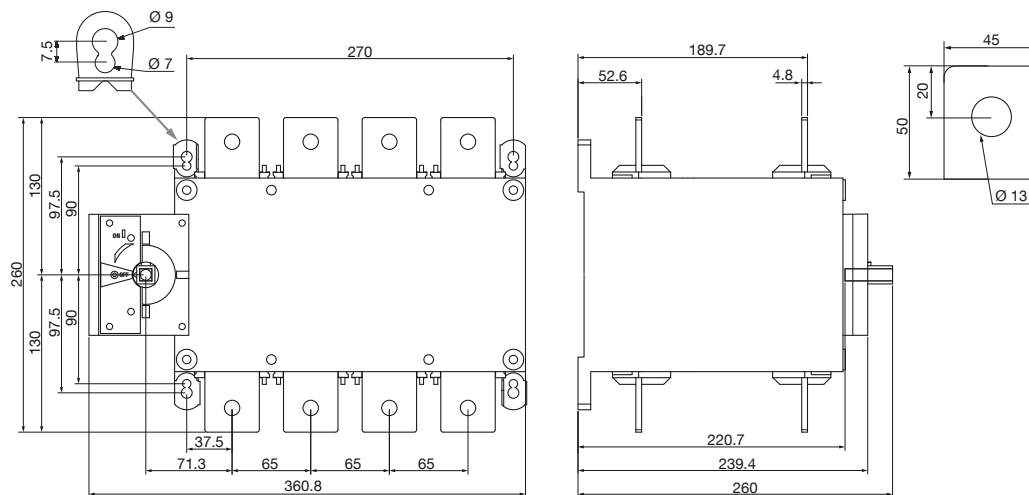
26PV 5010 - 26PV 5016 - 26PV 5025 - 26PV 5031



sirco-pv\_148\_a\_1\_x\_cat.ai

630 A - B5<sub>DS</sub> - 8P - 1000 VDC - 2 circuits

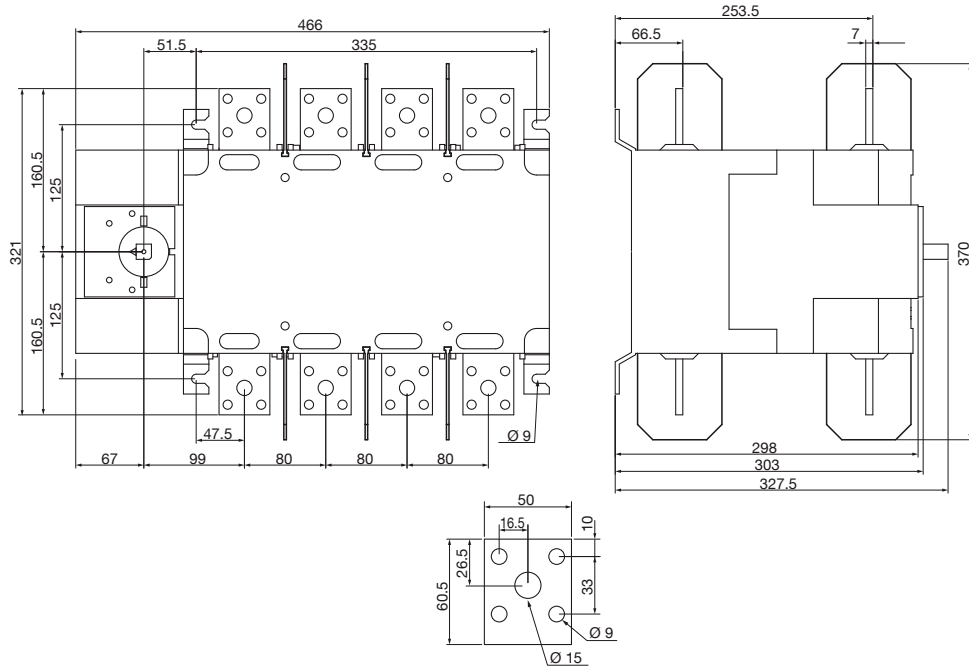
26PV 8063



sirco-pv\_150\_a\_1\_x\_cat.ai

800 A - B6<sub>DS</sub> - 8P - 1000 VDC - 2 circuits

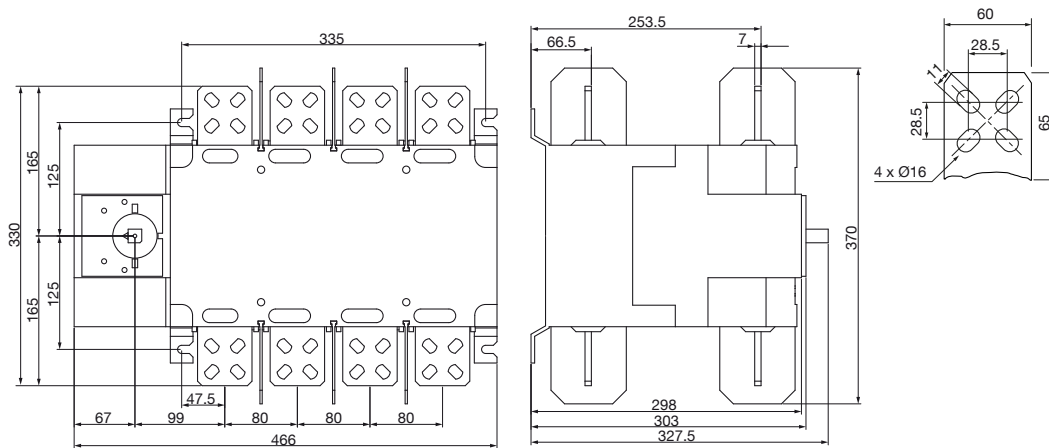
26PV 8080



sirco-pv\_151\_a\_1\_x\_catal

1250 A - B6<sub>DS</sub> - 8P - 1000 VDC - 2 circuits

26PV 8120

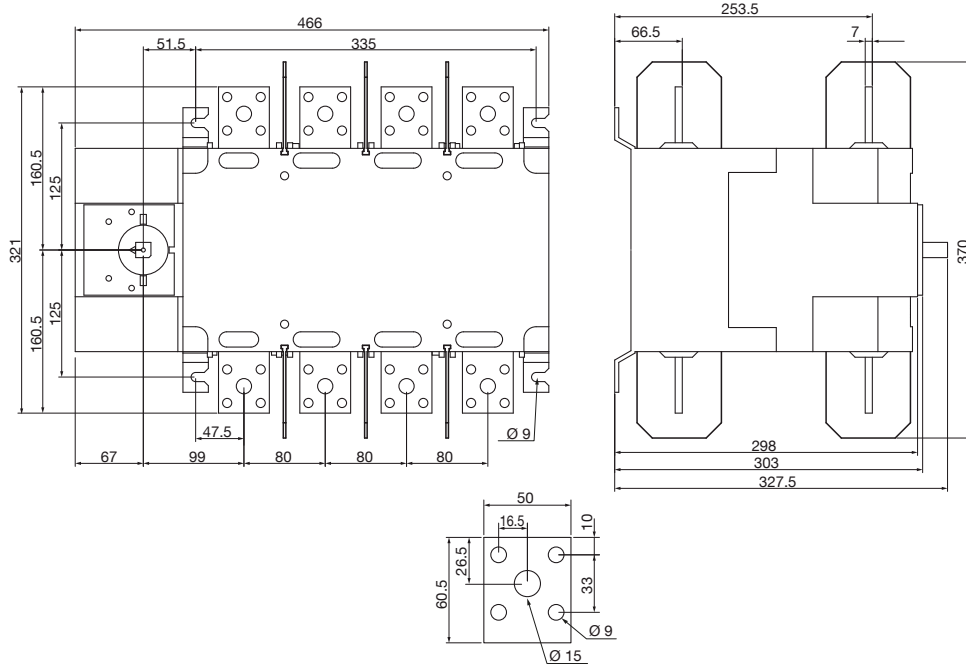


sirco-pv\_152\_a\_1\_x\_catal



800 A - B6<sub>DS</sub> - 8P - 1500 VDC - 1 circuit

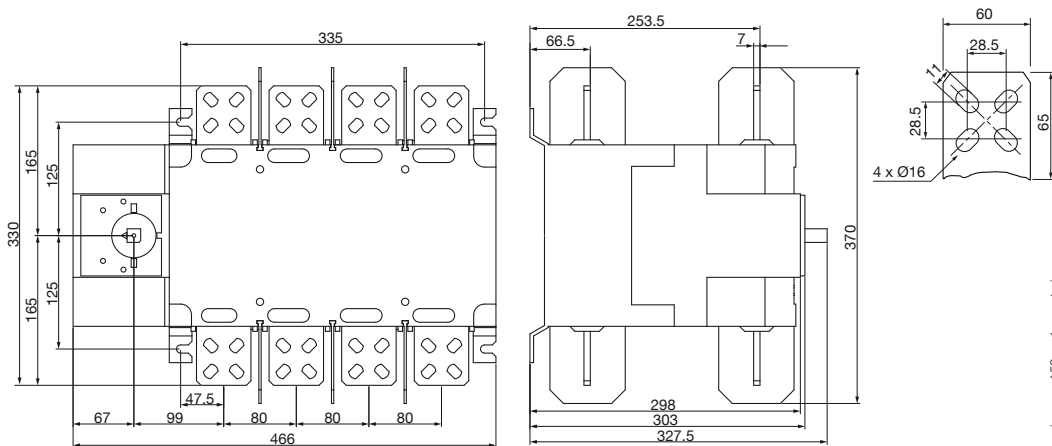
26PV 8080



sirco-pv\_151\_a\_1\_x\_catal

1250 A - B6<sub>DS</sub> - 8P - 1500 VDC - 1 circuit

26PV 8120



sirco-pv\_152\_a\_1\_x\_catal

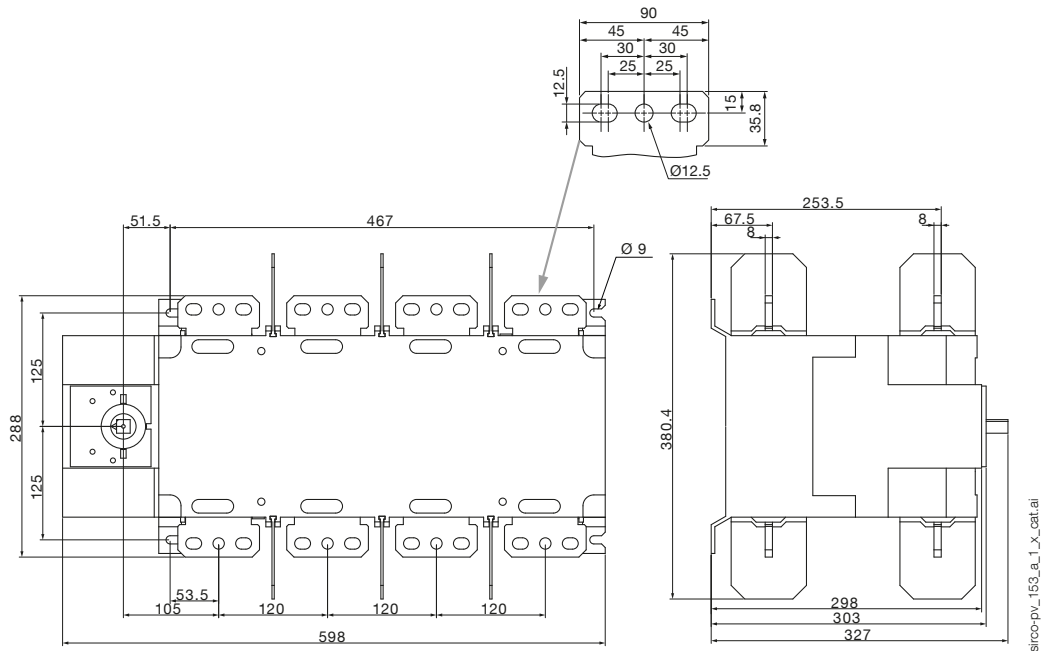
# SIRCO PV IEC 60947-3

Load break switches for photovoltaic applications  
from 100 to 3200 A, up to 1500 VDC

## Dimensions (mm) (continued)

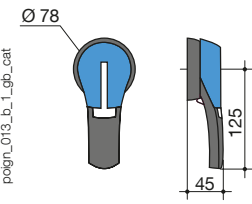
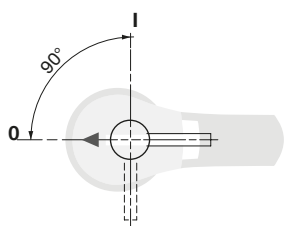
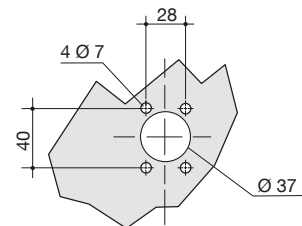
2000 A - B7<sub>DS</sub> - 8P - 1500 VDC - 1 circuit

26PV 8200

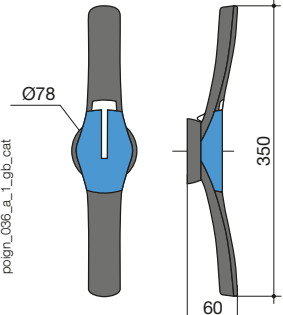
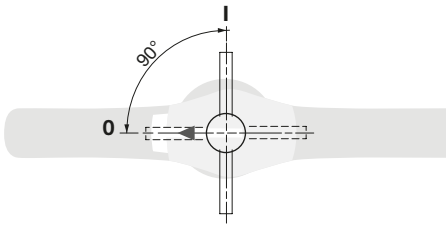
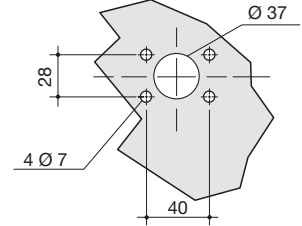


Dimensions for external handles (mm)

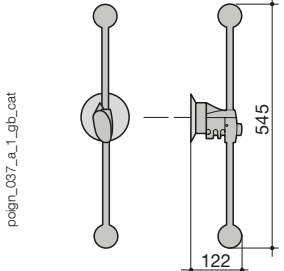
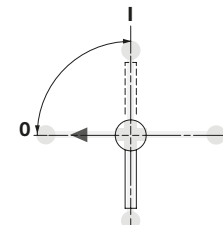
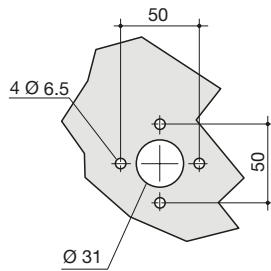
B4 - B4<sub>DS</sub> - B5

Handle type	Front operation Direction of operation	Door drilling
<p><b>S2 type</b></p>  <p>poign_013_b_1_gpb_cat</p>		

B5<sub>DS</sub> - B6 - B7

Handle type	Front operation Direction of operation	Door drilling
<p><b>S4 type</b></p>  <p>poign_036_a_1_gpb_cat</p>		

B8 - B6<sub>DS</sub> - B7<sub>DS</sub>

Handle type	Front operation Direction of operation	Door drilling
<p><b>V1 type</b></p>  <p>poign_037_a_1_gpb_cat</p>		

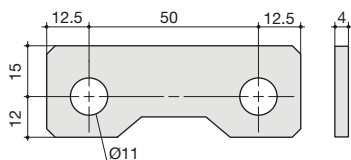
# SIRCO PV IEC 60947-3

Load break switches for photovoltaic applications  
from 100 to 3200 A, up to 1500 VDC

## Bridging bars (mm)

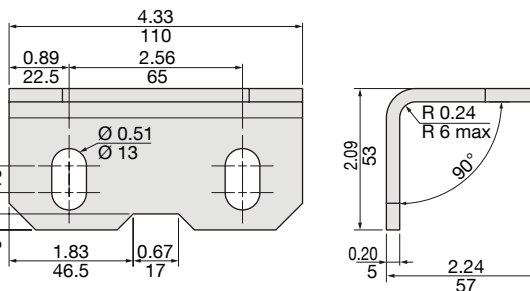
2609 0025

sirco-ul\_030\_a\_1\_x\_cat



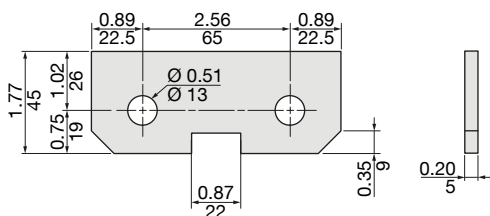
2709 0045

sirco-pv-134\_a\_1\_x\_cat



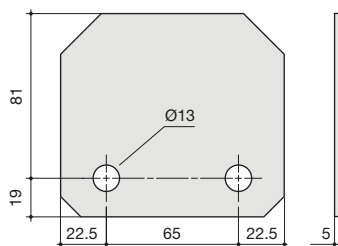
2709 0027

sirco-pv\_179\_a\_1\_x\_cat



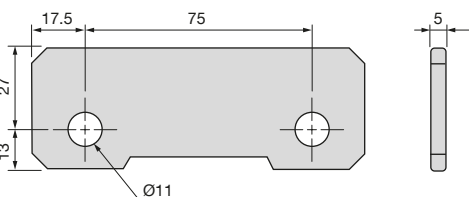
2609 0080

sirco-ul\_031\_a\_1\_x\_cat



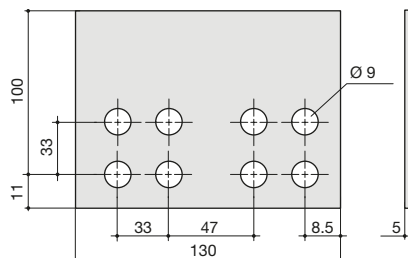
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sirco-pv\_160\_a\_1\_x\_cat



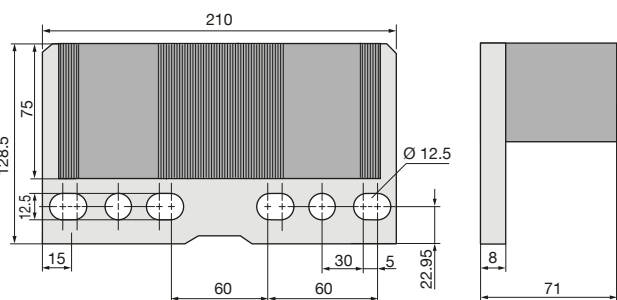
2609 1100

sirco-ul\_032\_a\_1\_x\_cat



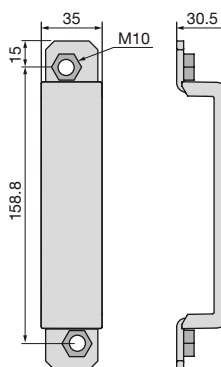
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sirco-ul\_034\_a\_1\_x\_cat



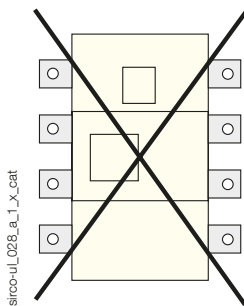
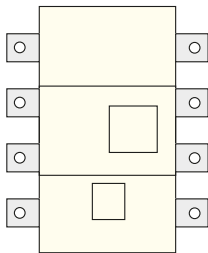
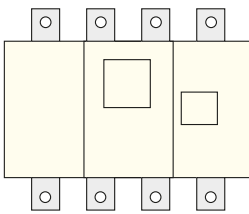
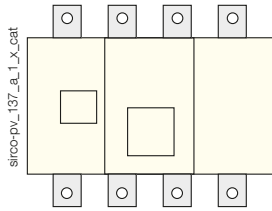
2609 0041

sirco-pv\_181\_a\_1\_x\_cat

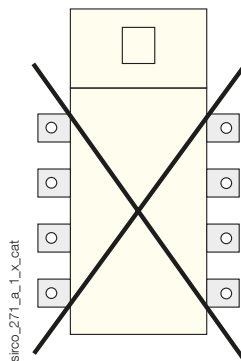
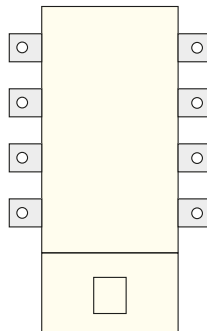
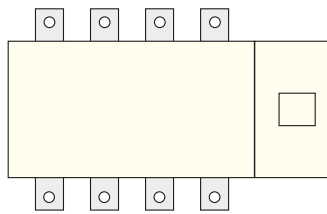
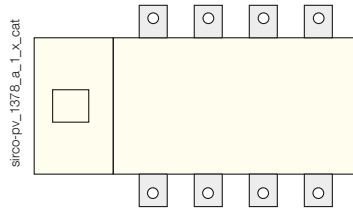


## Mounting orientation

B4 to B8



B4<sub>DS</sub> - B5<sub>DS</sub>



B6<sub>DS</sub> - B7<sub>DS</sub>

