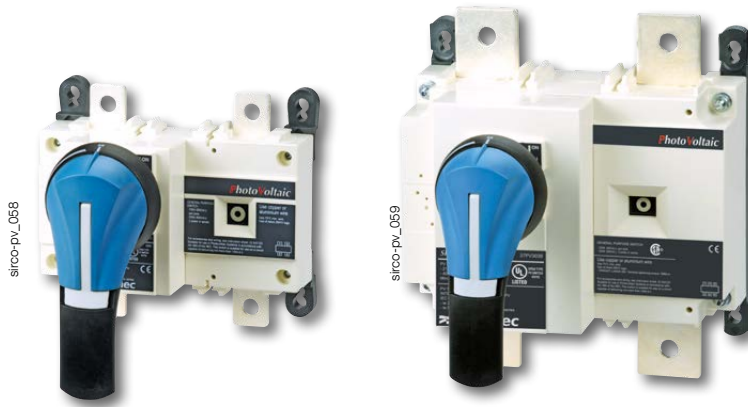


SIRCO PV UL 98B

Load break switches for photovoltaic applications
from 100 to 2000 A, up to 1000 VDC



Function

SIRCO PV UL 98B are manually operated multipolar load break switches. They make and break under load conditions and provide safety isolation for any PV circuit up to 1000 VDC (as per UL 98B standard). They comply with NEC Art. 690 (US National Electrical Code) concerning photovoltaic installations. They are compliant for use within solar inverters and enclosures governed by standard UL1741.

SIRCO PV are extremely durable switches

Advantages

Performance

A glass fibre reinforced polyester break chamber with an arc extinguishing system provides a patented safety disconnection system offering rapid extinguishing of the electric arc up to 1000 VDC and current interruption up to 2000 A.

that have been tested and approved for use in the most demanding environments. They have been designed and tested for all types of applications: connected to earth, floating or bipolar.

Back-to-back double load break switch

The system of back-to-back double switches enables:

- on load operation of two switches with a single handle,
- compact solution when connecting two separate photovoltaic circuits compared with the use of two separate switches,
- easy connection,
- voltages above 1000 VDC are broken by the use of two poles in series.

The solution for

- > Combiner box
- > Recombiner box
- > Inverter



Strong points

- > Patented switching technology
- > Positive break indication
- > Up to 1000 VDC as per characteristics by UL 98B
- > Suitable for use in accordance with NEC Art. 690

Conformity to standards

- > UL 98B Guide WHVA, file E346418
- > CSA C22.2#4, Class 4651-02, file 112964
- > NEC Art 690 Issue 2011
- > IEC 60947-3



Approvals and certifications⁽¹⁾



⁽¹⁾ Product reference on request.

References

1000 VDC - Back plate mounting

Rating (A)	Frame size	No. of poles	Switch body	External handle	Shaft for external handle
1 PV circuit					
100 A	B4	2 P	27PV 2009	S2 type Black 1, 3R, 12 142F 2111 ⁽¹⁾	200 mm 7.9 inches 1400 1020
200 A	B4		27PV 2019	Red/Yellow 1, 3R, 12 142G 2111 ⁽¹⁾	320 mm 12.6 inches 1400 1032
250 A	B4		27PV 2024	Black 4, 4X 142D 2111 ⁽¹⁾ Red/Yellow 4, 4X 142E 2111 ⁽¹⁾	400 mm 15.7 inches 1400 1040 ⁽²⁾
600 A	B6	4 P	27PV 4060	S3 type Black 4, 4X 143D 3111 ⁽¹⁾ Red/Yellow 4, 4X 143E 3111 ⁽¹⁾	200 mm 7.9 inches 1401 1520 320 mm 12.6 inches 1401 1532
800 A	B7		27DC 4081	S4 type Black 4, 4X 144D 3111 ⁽¹⁾	400 mm 15.7 inches 1401 1540 ⁽²⁾
1200 A	B7		27DC 4121	Red/Yellow 4, 4X 144E 3111 ⁽¹⁾	
2000 A	B7 _{DS}	8 P	27DC 4201	V1 type Black 3R, 12 2799 7145	320 mm 12.6 inches 4199 3018
2 PV circuits					
100 A	B4 _{DS}	4 P	27PV 5009	S2 type Black 1, 3R, 12 142F 2111 ⁽¹⁾ Red/Yellow 1, 3R, 12 142G 2111 ⁽¹⁾	200 mm 7.9 inches 1400 1020 320 mm 12.6 inches 1400 1032
250 A	B4 _{DS}		27PV 5024	Black 4, 4X 142D 2111 ⁽¹⁾ Red/Yellow 4, 4X 142E 2111 ⁽¹⁾	400 mm 15.7 inches 1400 1040 ⁽²⁾
600 A	B6 _{DS}	8 P	27PV 8060	V1 type Black 3R, 12 2799 7145	320 mm 12.6 inches 4199 3018
800 A	B7 _{DS}		27DC 8081		
1000 A	B7 _{DS}		27DC 8101		

(1) Defeatable handle.

(2) Shaft guide reference 1429 0000 is required for shaft length over 15.7 inches (400mm).

SIRCO PV UL 98B

Load break switches for photovoltaic applications
from 100 to 2000 A - up to 1000 VDC

Accessories

External operation

Use

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.

Door interlocked external operation handles include an escutcheon, are padlockable and must be utilized with an extension shaft.

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 (authorized persons only). The interlocking function is restored when the door is re-closed.

Frame size	Handle type	Handle colour	Nema degree of protection	Reference
B4 B4 _{DS}	S2	Black	1, 3R, 12	142F 2111
		Red/Yellow		142G 2111
		Black		142D 2111
		Red/Yellow		142E 2111
B6	S3	Black	4, 4X	143D 3111
		Red/Yellow		143E 3111
		Black		144D 3111
B7	S4	Black		144E 3111
		Red/Yellow		144E 3111
B6 _{DS} ... B7 _{DS}	V1	Black		1, 3R, 12



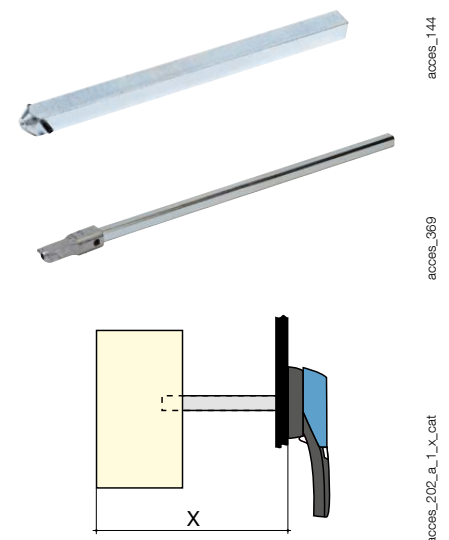
Shaft for external handle

Use

Standard lengths:
- 7.9 in / 200 mm,
- 12.6 in / 320 mm,
- 15.7 in / 400 mm.

Other lengths: please consult us.
19.69 in / 500 mm available.

Frame size	Handle type	Dimension (inches)	Dimension X (mm)	Length (inches)	Length (mm)	Reference
B4	S2	6 ... 11.6	150 ... 295	7.9	200	1400 1020
		6 ... 16.3	150 ... 415	12.6	320	1400 1032
		6 ... 19.4	150 ... 495	15.7	400	1400 1040
B6	S3	8.70 ... 13.50	220 ... 343	7.9	200	1401 1520
		8.70 ... 18.23	220 ... 463	12.6	320	1401 1532
		8.70 ... 21.38	220 ... 543	15.7	400	1401 1540
B7	S4	12 ... 14.4	305 ... 366	7.9	200	1401 1520
		12 ... 19.1	305 ... 485	12.6	320	1401 1532
		12 ... 22.2	305 ... 564	15.7	400	1401 1540
B4 _{DS}	S2	12 ... 14.3	305 ... 363	7.9	200	1400 1020
		12 ... 19	305 ... 483	12.6	320	1400 1032
		12 ... 22.10	305 ... 561	15.7	400	1400 1040
B6 _{DS}	V1	20 ... 28.1	508 ... 714	12.6	320	4199 3018
		20 ... 31.3	508 ... 795	15.7	400	4199 3019
B7 _{DS}	V1	20 ... 28.1	508 ... 714	12.6	320	4199 3018
		20 ... 39.4	508 ... 795	15.7	400	4199 3019



S-type handle adapter

Use

For handles S2, S3 and S4.

Dimensions

Increases the distance between the handle grip and the door by 12 mm, for better handling.

Colour	Nema degree of protection	To be ordered in multiples of	Reference
Black	1, 3R, 12	10	1493 0000



access_187

Auxiliary contact

Use

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

Electrical characteristics

A300.

NO/NC contact

Frame size	Position AC	Type	Reference
B4 ... B7	1 contact	NO/NC	2799 0021
	2 contacts		2799 0022
B4 _{DS} ... B7 _{DS}	1 contact		4159 0021

Low level NO/NC auxiliary contacts

Frame size	Position AC	Type	Reference
B4 ... B7	1 contact	NO/NC	2799 0121
	2 contacts		2799 0122
B4 _{DS} ... B7 _{DS}	1 contact		4159 0022



access_076

Terminal screen

Use

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

Frame size	No. of poles	Position	Pack	Reference
B4	2 P	Top	1 unit	2798 3021
		Bottom	1 unit	2798 8021
B6	4 P	Top or bottom	1 unit	2798 4061
B4 _{DS}	2 P	Top or bottom	1 unit	4158 3021
B5 _{DS}	6 P	Top or bottom	1 unit	4158 3041
B6 _{DS}	8 P	Top or bottom	1 unit	4158 4041
B6 _{DS}	8 P	Top and bottom	2 units	2798 8061
B7 _{DS}	8 P	Top or bottom	1 unit	2798 4121



access_079

SIRCO PV UL 98B

Load break switches for photovoltaic applications
from 100 to 2000 A - up to 1000 VDC

Accessories (continued)

Bridging bars for connecting poles in series

Use

The bridging bars will make easy the connection of the poles in series, allowing the following configurations⁽¹⁾.

⁽¹⁾ Other connections: refer to mounting instructions.

1000 VDC

Switch Reference	Frame size	Rating (A)	Quantity of bridging bar kits to be order per switch		Fig. of one bridging bar kit	Bridging bar kit Reference
			Not connected to earth	Connected to earth		
1 PV circuit						
27PV 2009	B4	100	N/A	1	1	2709 1020
27PV 2019	B4	200	N/A	1	1	2709 1020
27PV 2024	B4	250	N/A	1	1	2709 1020
27PV 4060	B6	600	2	3	2	2709 0062
27PV 4081	B7	800	2	3	3	2709 0081
27PV 4121	B7	1200	2	3	4	2709 0121
27PV 4201	B7 _{DS}	2000	6	6 ⁽¹⁾	4	2709 0121
2 PV circuits						
27PV 5009	B4 _{DS}	100	N/A	2	1	2709 1020
27PV 5024	B4 _{DS}	250	N/A	2	1	2709 1020
27PV 8060	B6 _{DS}	600	4	6	2	2709 0062
27PV 8081	B7 _{DS}	800	4	6	4	2709 0121
27PV 8101	B7 _{DS}	1000	4	6	4	2709 0121

⁽¹⁾ Please order paralleling kit to connect back and front switches, see paralleling connection kit.

access_391_b_1_x_cat

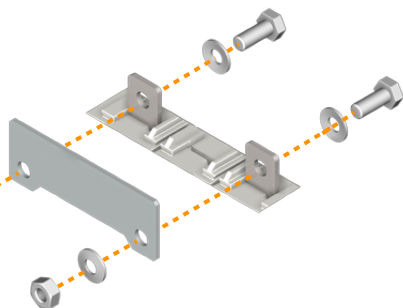


Fig. 1

access_363_a_1_x_cat

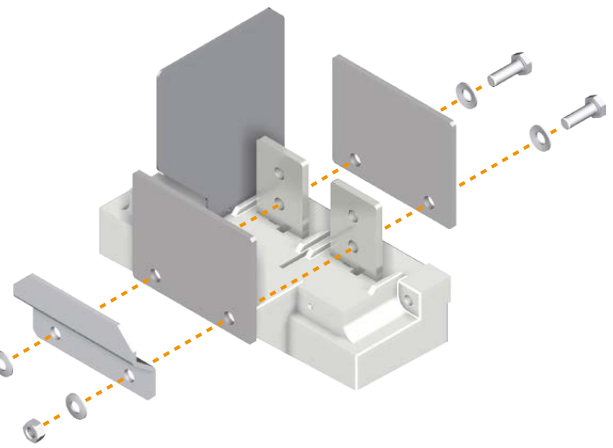


Fig. 2

access_449_a_1_x_cat

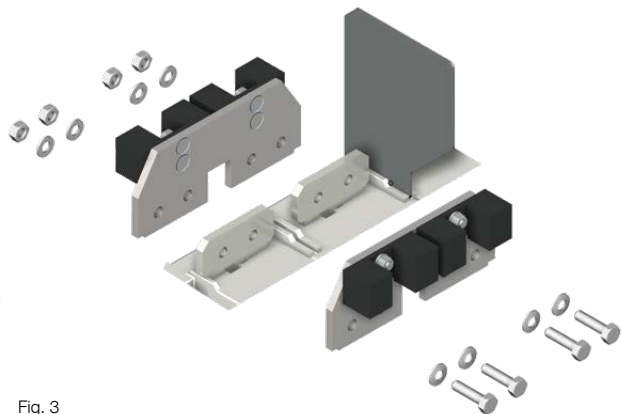


Fig. 3

access_450_a_1_x_cat

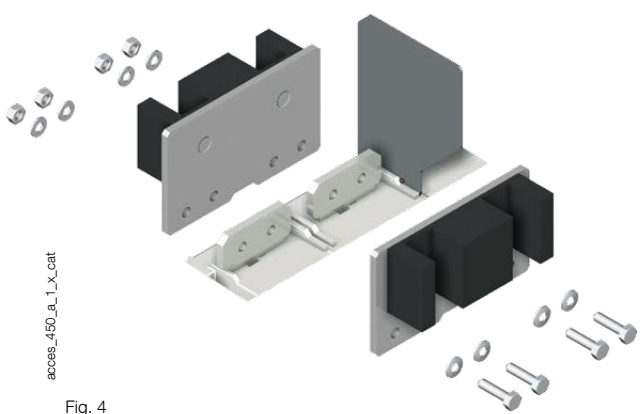


Fig. 4

Cage terminals

Use

Connection of bare copper cables onto the terminals (without lugs).

Optional fan out kit for ratings of 800 to 1200 A for connecting several cables to the switch.

Frame size	Rating max (A)	Number and size of cables	Max. number of connections per terminal	Type of cable	Quantity	Reference
B4 - B4 _{DS}	100 ... 250	1 conductor (#6-300MCM)	1	Cu / Al	2 lugs	3954 2020
		2 conductors (#4-2/0)	1	Cu / Al	2 lugs	3954 2025
B6 - B6 _{DS}	600	2 conductors (#2-600MCM)	1	Cu / Al	2 lugs	3954 2060
B7	800 ... 1200	2 conductors (#2-600MCM)	2	Cu / Al	2 lugs	3954 2060
		2 conductors (#2-600MCM)	3 ⁽¹⁾	Cu / Al	3 lugs	3954 3060
B7 _{DS}	2000	2 conductors (#2-600MCM)	2 ⁽²⁾	Cu / Al	2 lugs	3954 2060
		2 conductors (#2-600MCM)	3 ⁽³⁾	Cu / Al	3 lugs	3954 3060



UL 032

(1) Order a fan out kit reference 2709 1203 for connecting 3 connectors per terminal (6 in total for the switch).

(2) 2 connectors per terminal with the connection kit 2729 1200.

(3) 3 connectors per terminal with the connection kits 2729 1201 and 2709 1202.

Copper bar connection kits

Use

To allow connection between the two power terminals from a same pole for 2000 A ratings (Fig. 1, Fig. 2 and Fig. 3).

For 600 A, please consult us.

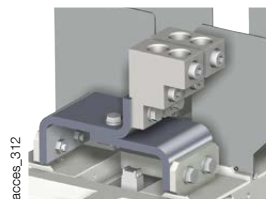
Top or bottom flat connection

Frame size	Rating (A)	Figure	Quantity to order per pole	Number of terminals	Reference
B7 _{DS}	800 ... 1000	1	1	2	2729 1200
		2	1	3	2729 1202
	2000	1	1	2	2729 1200
		2	1	3	2729 1202

Top or bottom edgewise connection

Frame size	Rating (A)	Figure	Quantity to order per pole	Number of terminals	Reference
B7 _{DS}	800 ... 2000	3	1	3	2729 1201

Fig. 1

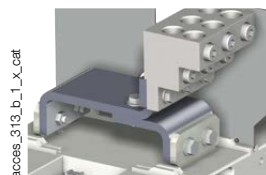


access_312

Fig. 3



Fig. 2



access_313_b_1_x_cat

access_314

SIRCO PV UL 98B

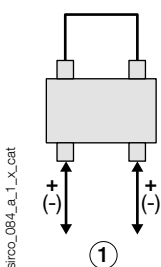
Load break switches for photovoltaic applications
from 100 to 2000 A - up to 1000 VDC

Pole connections in series

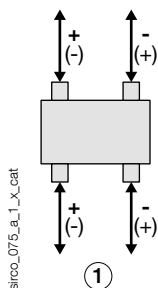
1 PV circuit - 1000 VDC

B4 - 2 P

Connected to earth

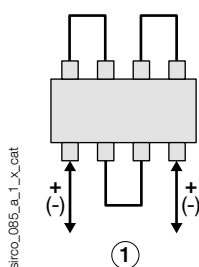


Not connected to earth

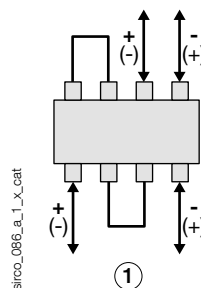


B6-B7 - 4 P

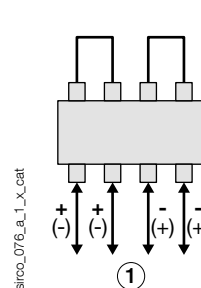
Connected to earth



Not connected to earth

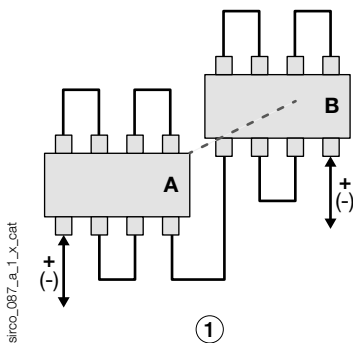


Not connected to earth

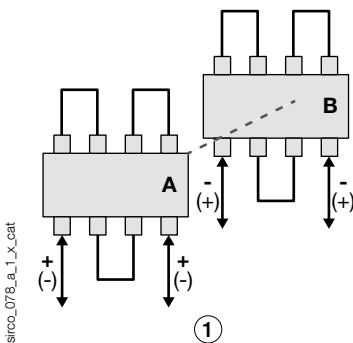


B7_{DS} - 8 P

Connected to earth



Not connected to earth

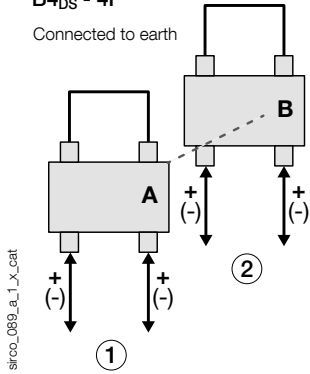


A. Front switch.
B. Rear switch.
1. Circuit 1.

2 PV circuit - 1000 VDC

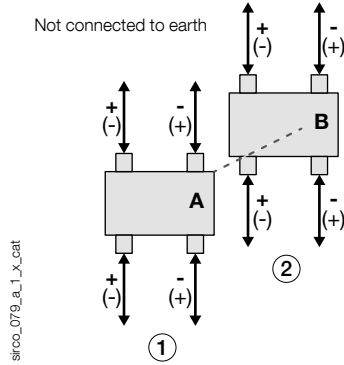
B4_{DS} - 4P

Connected to earth



sirco_089_a_1_x_cat

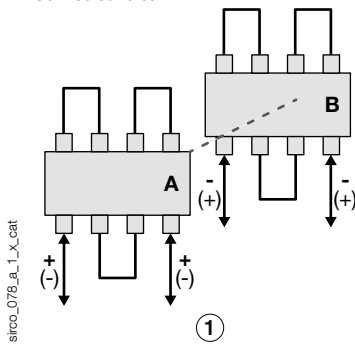
Not connected to earth



sirco_079_a_1_x_cat

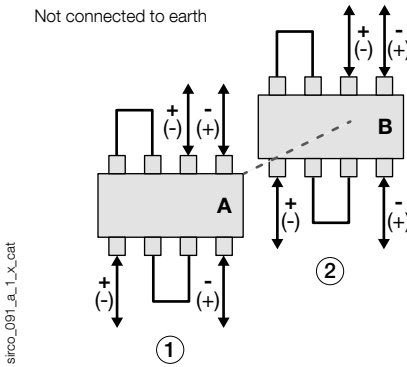
B7_{DS} - 8P

Connected to earth

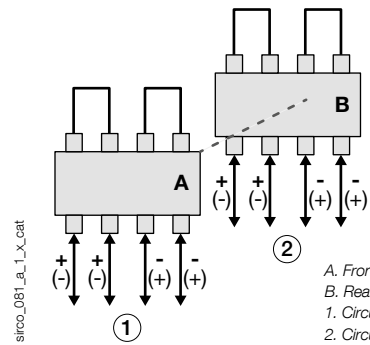


sirco_078_a_1_x_cat

Not connected to earth



sirco_091_a_1_x_cat



sirco_081_a_1_x_cat

A. Front switch.
 B. Rear switch.
 1. Circuit 1.
 2. Circuit 2.

SIRCO PV UL 98B

Load break switches for photovoltaic applications

from 100 to 2000 A - up to 1000 VDC

Characteristics

Compliance to UL 98B and IEC 60947-3 standards

SIRCO PV UL 98B switches comply with both UL 98B and IEC 60947-3 standards. As acceptance test criteria are different depending on one or the other standard, the same product can be referred to with two different ratings, identified in the characteristic table as follows:

- "Rating" for characteristics as per standard UL 98B.
- "Rated current" for characteristics as per standard IEC 60947-3.

UL 98B										
Rating (A)		100 A					200 A			
Number of circuits	Rated voltage	(A)	Number of pole(s) in series per polarity	Number of pole(s) of the device	Frame size	(A)	Number of pole(s) in series per polarity	Number of pole(s) of the device	Frame size	
1 circuit	1000 VDC	100	2 P	2 P	B4	200	2 P	2 P	B4	
2 circuits	600 VDC	100	1 P	2 P	B4	130	1 P	2 P	B4	
2 circuits	1000 VDC	100	2 P	4 P	B4 _{DS}	200	2 P	4 P	B4 _{DS}	
4 circuits	600 VDC	100	1 P	4 P	B4 _{DS}	130	1 P	4 P	B4 _{DS}	
Short-circuit capacity at 1000 VDC (any circuit breaker)										
Prospective short-circuit current (kA rms DC)		10 ⁽¹⁾					10 ⁽¹⁾			
Connection terminals										
Min. connection wire range/ AWG		#6					#6			
Max. connection wire range/ AWG		300MCM					300MCM			
Mechanical characteristics										
Durability (number of operating cycles)		10 000					10 000			
Operating effort (lbs.in/Nm)		88.5/10					88.5/10			
Auxiliary contact										
Electrical characteristics		A300					A300			
IEC 60947-3										
Rated current I _n		160 A					250 A			
Thermal current at 40°C (A)		160					250			
Thermal current at 50°C (A)		160					250			
Thermal current at 60°C (A)		160					250			
Rated insulation voltage U _i (V)		1500					1500			
Rated impulse withstand voltage U _{imp} (kV)		12					12			
Number of circuits	Rated voltage	Utilisation category	(A)	Number of pole(s) in series per polarity	Number of pole(s) of the device	Frame size	(A)	Number of pole(s) in series per polarity	Number of pole(s) of the device	Frame size
1 circuit	1000 VDC	DC-21 B	160	2 P	2 P	B4	250	2 P	2 P	B4
1 circuit	1500 VDC	DC-21 B	160	4 P	4 P	B4 _{DS}	250	4 P	4 P	B4 _{DS}
2 circuits	1000 VDC	DC-21 B	160	2 P	4 P	B4 _{DS}	250	2 P	4 P	B4 _{DS}
4 circuits	600 VDC	DC-21 B	125	1 P	4 P	B4 _{DS}	160	1 P	4 P	B4 _{DS}

(1) Without fuse during 50 ms.

as per standards UL 98B and IEC 60947-3

UL 98B										
Rating		250 A				600 A				
Number of circuits	Rated voltage	(A)	Number of pole(s) in series per polarity	Number of pole(s) of the device	Frame size	(A)	Number of pole(s) in series per polarity	Number of pole(s) of the device	Frame size	
1 circuit	1000 VDC	250	2 P	2 P	B4	600	4 P	4 P	B6	
2 circuits	600 VDC	130	1 P	2 P	B4	-	-	-	-	
2 circuits	1000 VDC	250	2 P	4 P	B4 _{DS}	600	4 P	8 P	B6 _{DS}	
4 circuits	600 VDC	130	1 P	4 P	B4 _{DS}	-	-	-	-	
Short-circuit capacity at 1000 VDC (any circuit breaker)										
Prospective short-circuit current (kA rms DC)		10 ⁽¹⁾				10 ⁽¹⁾				
Connection terminals										
Min. connection wire range/ AWG		#6				2x#2				
Max. connection wire range/ AWG		300MCM				2 x 600MCM				
Mechanical characteristics										
Durability (number of operating cycles)		10 000				6 000				
Operating effort (lbs.in/Nm)		88.5/10				327.5/37				
Auxiliary contact										
Electrical characteristics		A300				A300				
IEC 60947-3										
Rated current I_n		315 A				800 A				
Thermal current at 40°C (A)		315				800				
Thermal current at 50°C (A)		315				800				
Thermal current at 60°C (A)		315				800				
Rated insulation voltage U _i (V)		1500				1200				
Rated impulse withstand voltage U _{imp} (kV)		12				12				
Number of circuits	Rated voltage	Utilisation category	(A)	Number of pole(s) in series per polarity	Number of pole(s) of the device	Frame size	(A)	Number of pole(s) in series per polarity	Number of pole(s) of the device	Frame size
1 circuit	1000 VDC	DC-21 B	315	2 P	2 P	B4	800	4 P	4 P	B6
1 circuit	1500 VDC	DC-21 B	315	4 P	4 P	B4 _{DS}	800	8 P	8 P	B6 _{DS}
2 circuits	1000 VDC	DC-21 B	315	2 P	4 P	B4 _{DS}	800	4 P	8 P	B6 _{DS}
4 circuits	600 VDC	DC-21 B	160	1 P	4 P	B4 _{DS}	-	-	-	-

(1) Without fuse during 50 ms.

SIRCO PV UL 98B

Load break switches for photovoltaic applications

from 100 to 2000 A - up to 1000 VDC

Characteristics (continued)

as per standards UL 98B and IEC 60947-3

UL 98B										
Rating		800 A					1200 A			
Number of circuits	Rated voltage	(A)	Number of pole(s) in series per polarity	Number of pole(s) of the device	Frame size	(A)	Number of pole(s) in series per polarity	Number of pole(s) of the device	Frame size	
1 circuit	1000 VDC	800	4 P	4 P	B7	1200	4 P	4 P	B7	
2 circuits	600 VDC	800	3 P	6 P	B7 _{DS}	1200	3 P	6 P	B7 _{DS}	
2 circuits	1000 VDC	800	4 P	8 P	B7 _{DS}	1200	4 P	8 P	B7 _{DS}	
Short-circuit capacity at 1000 VDC (any circuit breaker)										
Prospective short-circuit current (kA rms DC)		10 ⁽¹⁾					10 ⁽¹⁾			
Connection terminals										
Min. connection wire range/ AWG		4x#2					4x#2			
Max. connection wire range/ AWG		6x 600MCM ⁽²⁾					6x 600MCM ⁽²⁾			
Mechanical characteristics										
Durability (number of operating cycles)		3 500					3 500			
Operating effort (lbs.in/Nm)		495.7/56					663.9/75			
Auxiliary contact										
Electrical characteristics		A300					A300			
IEC 60947-3										
Rated current I _n		1000 A					1400 A			
Thermal current at 40°C (A)		1000					1400			
Thermal current at 50°C (A)		1000					1400			
Thermal current at 60°C (A)		1000					1400			
Rated insulation voltage U _i (V)		1200					1200			
Rated impulse withstand voltage U _{imp} (kV)		12					12			
Number of circuits	Rated voltage	Utilisation category	(A)	Number of pole(s) in series per polarity	Number of pole(s) of the device	Frame size	(A)	Number of pole(s) in series per polarity	Number of pole(s) of the device	Frame size
1 circuit	1000 VDC	DC-21 B	1000	4 P	4 P	B7	1400	4 P	4 P	B7 _{DS}
1 circuit	1500 VDC	DC-21 B	1000	8 P	8 P	B7 _{DS}	1000	8 P	8 P	B7 _{DS}
2 circuits	1000 VDC	DC-21 B	1000	4 P	8 P	B7 _{DS}	1000	4 P	8 P	B7 _{DS}

(1) Without fuse during 50 ms.

(2) Maximum 6 x 600MCM with fan out kit 2729 1203.

(3) 1200 VDC for B7.

as per standards UL 98B and IEC 60947-3

UL 98B						
Rating		2000 A				
Number of circuits	Rated voltage	(A)	Number of pole(s) in series per polarity	Number of pole(s) of the device	Frame size	
1 circuit	1000 VDC	2000	8 P	8 P	B7 _{DS}	
Short-circuit capacity at 1000 VDC (any circuit breaker)						
Prospective short-circuit current (kA rms DC)		10 ⁽¹⁾				
Connection terminals						
Min. connection wire range/ AWG		4x#2				
Max. connection wire range/ AWG		6x 600MCM ⁽²⁾				
Mechanical characteristics						
Durability (number of operating cycles)		3 500				
Operating effort (lbs.in/Nm)		663.9/75				
Auxiliary contact						
Electrical characteristics		A300				
IEC 60947-3						
Rated current I_n		2200 A				
Thermal current at 40°C (A)		2200				
Thermal current at 50°C (A)		1850				
Thermal current at 60°C (A)		1600				
Rated insulation voltage U _i (V)		1200				
Rated impulse withstand voltage U _{imp} (kV)		12				
Number of circuits	Rated voltage	Utilisation category	(A)	Number of pole(s) in series per polarity	Number of pole(s) of the device	Frame size
1 circuit	1000 VDC	DC-21 B	2200	8 P	8 P	B7 _{DS}

(1) Without fuse during 50 ms.

(2) Maximum 6 x 600MCM with fan out kit 2729 1203.

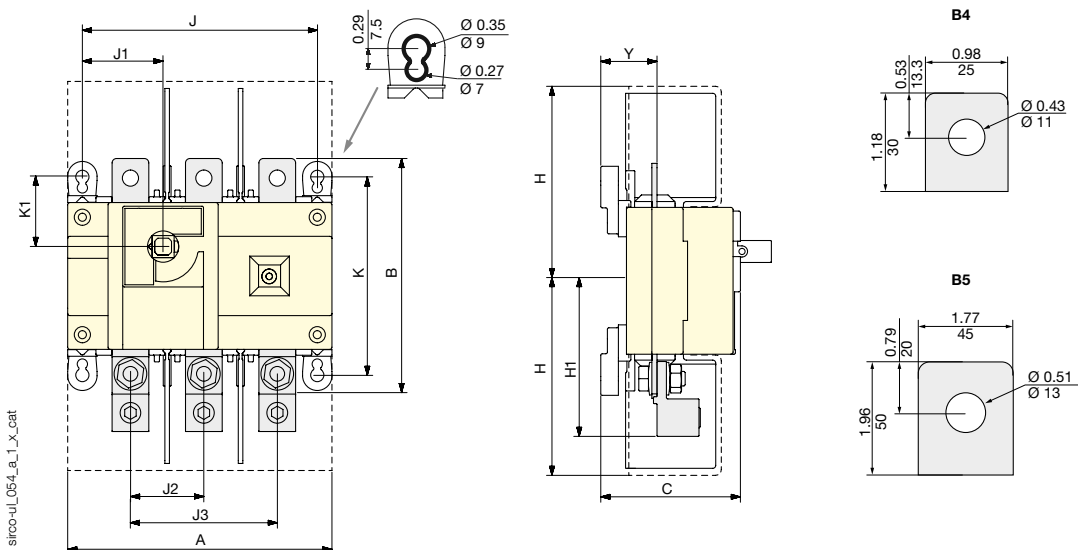
SIRCO PV UL 98B

Load break switches for photovoltaic applications

from 100 to 2000 A - up to 1000 VDC

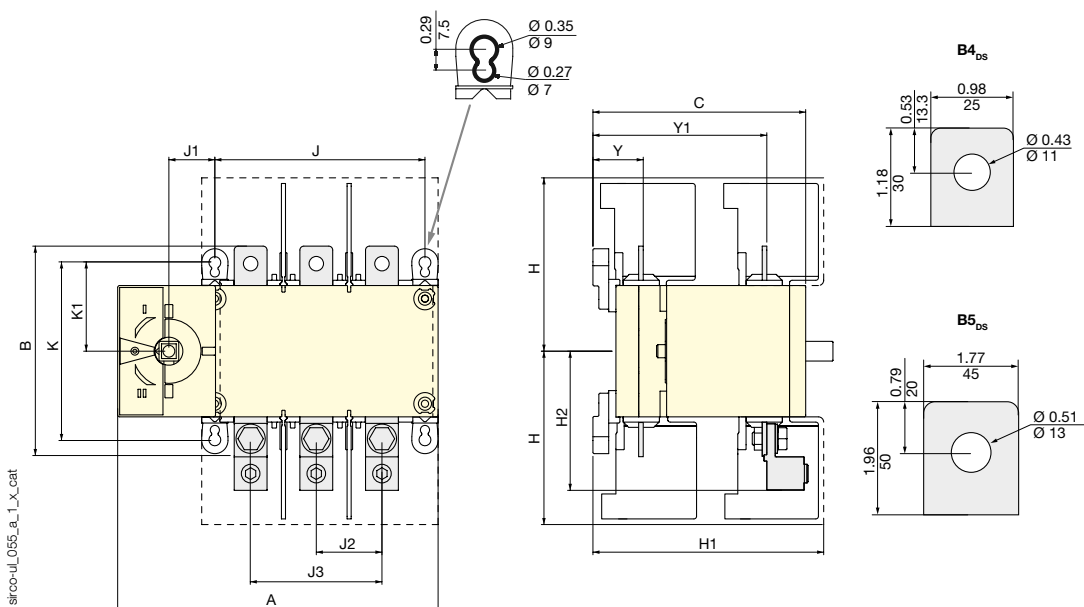
Dimensions (in/mm)

B4



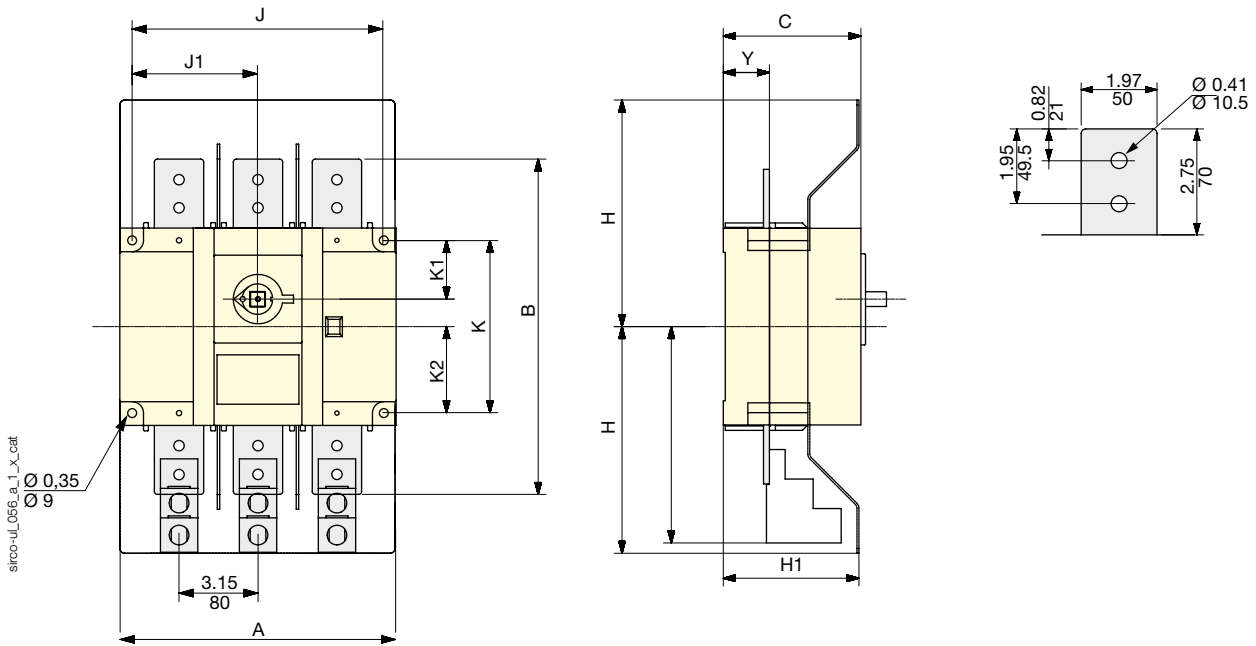
Frame size	No. of poles	Unit	A	B	C	H	H1 max.	J	J1	J2	J3	K	K1	Y
			B4	2 P	inches	7.08	6.30	3.74	5.21	4.21	6.30	2.16	-	3.94
		mm	180	160	95	132.5	107	160	55	-	100	135	48	38.5

B4_{DS}



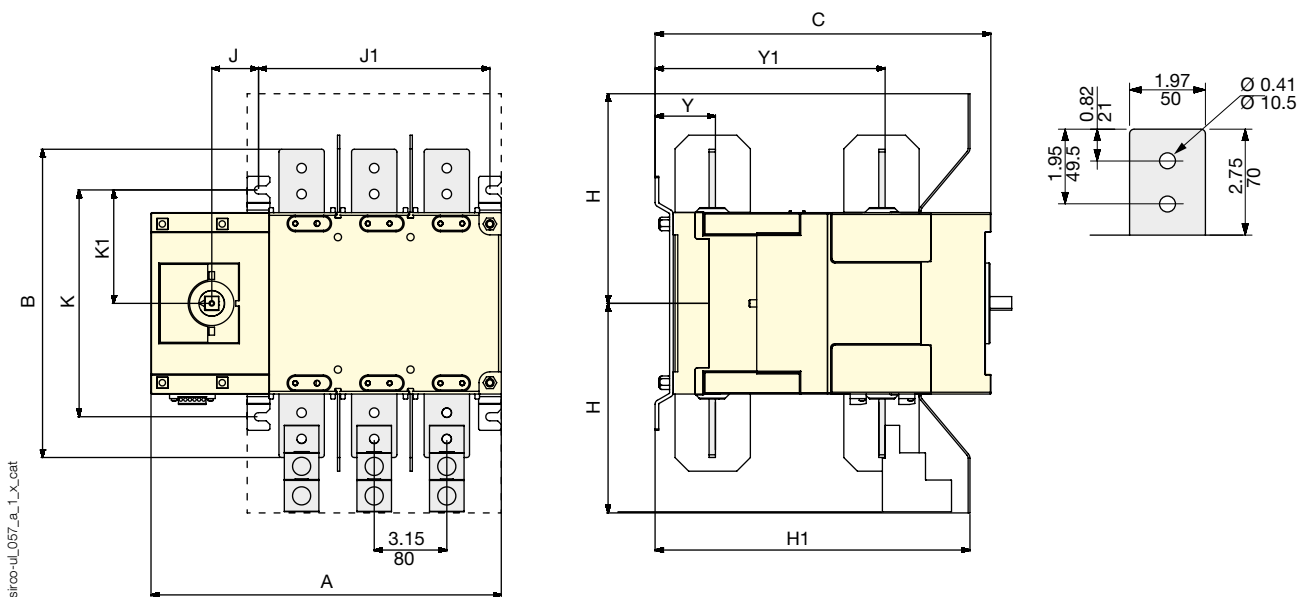
Frame size	No. of poles	Unit	A	B	C	H	H1	H1 max.	J	J1	J2	J3	K	K1	Y	Y1
			B4 _{DS}	4 P	inches	9.60	6.30	6.37	5.08	6.93	4.21	6.30	1.37	-	3.93	5.31
		mm	244	160	162	129	176	107	160	35	-	100	135	67.5	38.5	132.5

B6



Frame size	No. of poles	Unit	A	B	C	H	H1	J	J1	K	K1	K2	Y
B6	4 P	inches	24.80	13.38	5.47	10.63	5.70	13.19	6.59	6.88	2.34	1.10	1.83
		mm	630	340	139	270	145	335	167.5	175	59.5	28	46.5

B6_{DS}



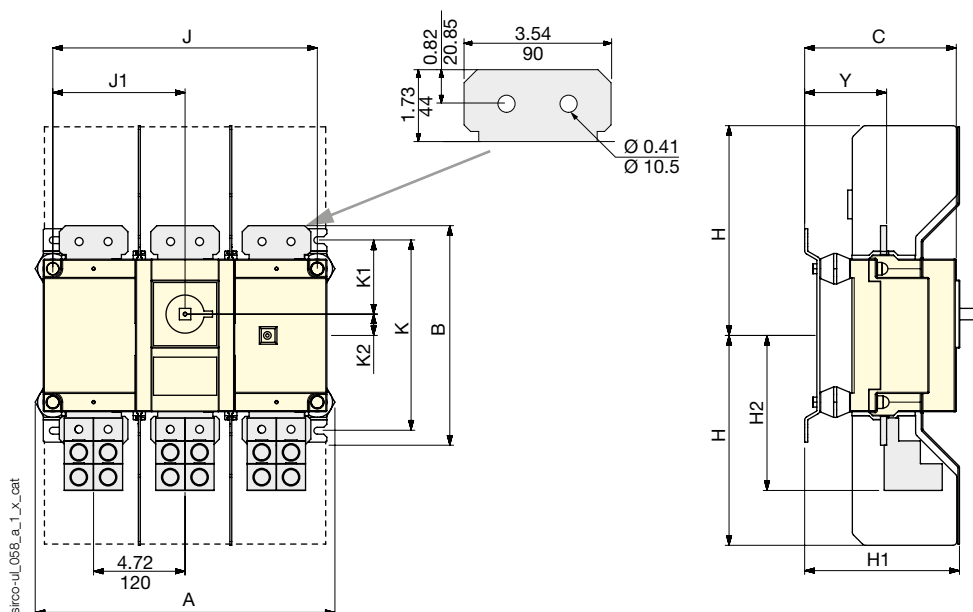
Frame size	No. of poles	Unit	A	B	C	H	H1	J	J1	K	K1	Y	Y1
B6 _{DS}	8 P	inches	18.34	13.38	14.56	10.63	13.66	13.18	2.02	9.84	4.92	2.61	9.98
		mm	466	340	370	270	347	335	51.5	250	125	66.5	253.5

SIRCO PV UL 98B

Load break switches for photovoltaic applications
from 100 to 2000 A - up to 1000 VDC

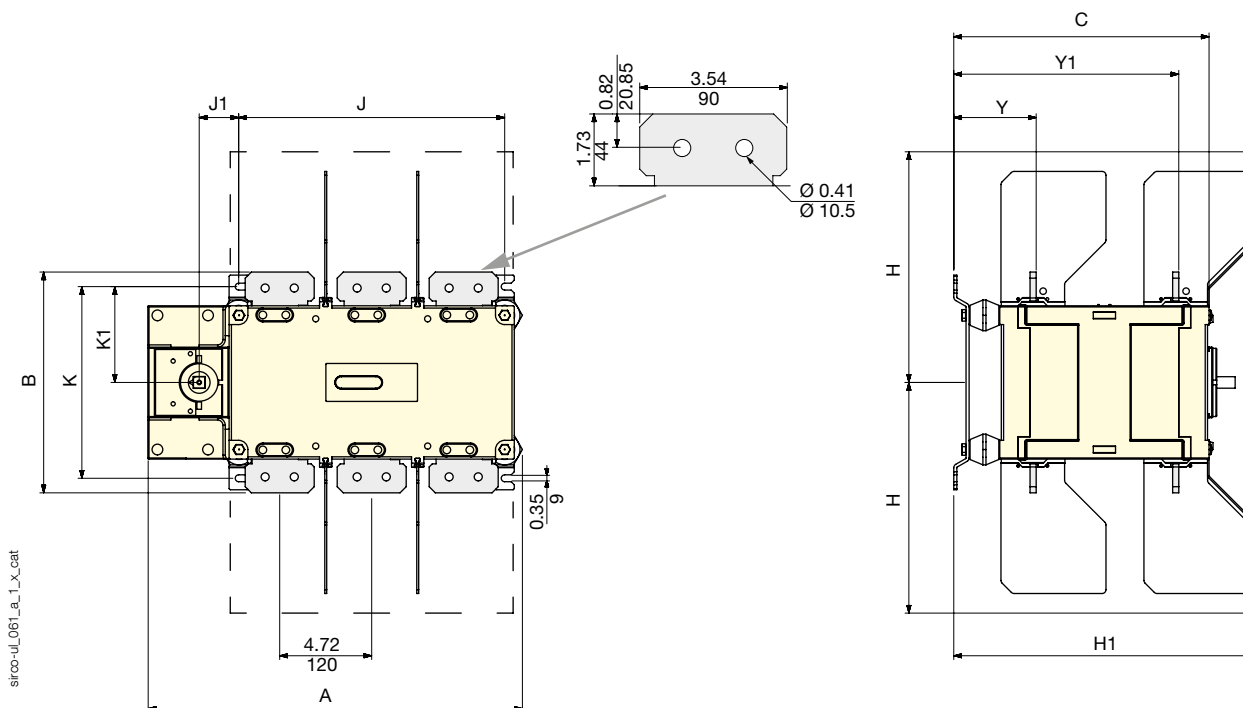
Dimensions (in/mm) (continued)

B7



Frame size	No. of poles	Unit	A	B	C	H	H1	H2	J	J1	K	K1	K2	Y
			B7	4 P	inches	20.19	11.33	7.97	11.89	8.30	8.01	18.38	9.19	9.84
		mm	513	288	200	302	211	203.5	467	233.5	250	97	28	107.5

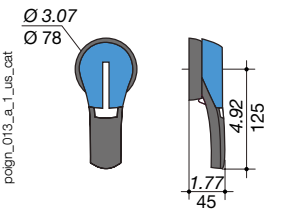
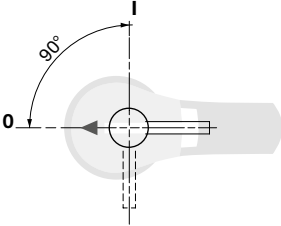
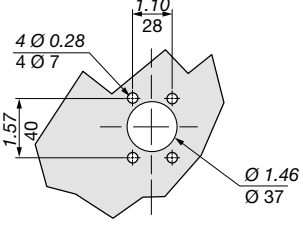
B7_{DS}



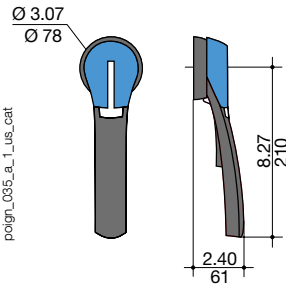
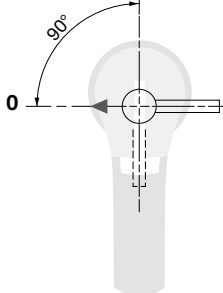
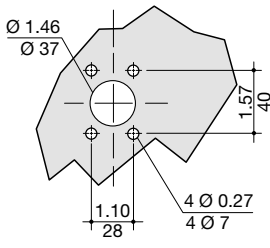
Frame size	No. of poles	Unit	A	B	C	H	H1	J	J1	K	K1	Y	Y1
			B7 _{DS}	8 P	inches	23.95	11.33	13.11	11.85	15.31	18.38	2.02	9.84
		mm	608.5	288	333	301	389	467	51.5	250	125	107.5	293.5

Dimensions for external handles (in/mm)

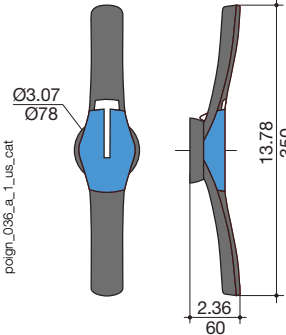
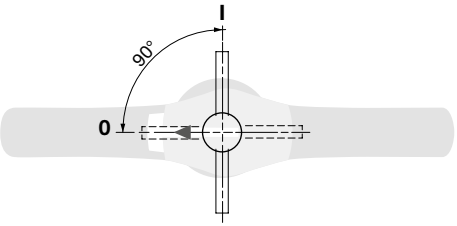
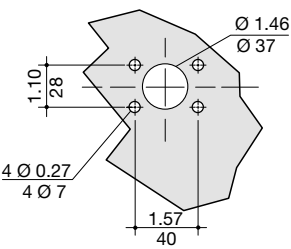
B4 - B4_{DS}

Handle type	Front operation Direction of operation	Door drilling
<p>S2 type</p>  <p>poign_013_a_1_us_cat</p>		

B6

Handle type	Front operation Direction of operation	Door drilling
<p>S3 type</p>  <p>poign_035_a_1_us_cat</p>		

B7

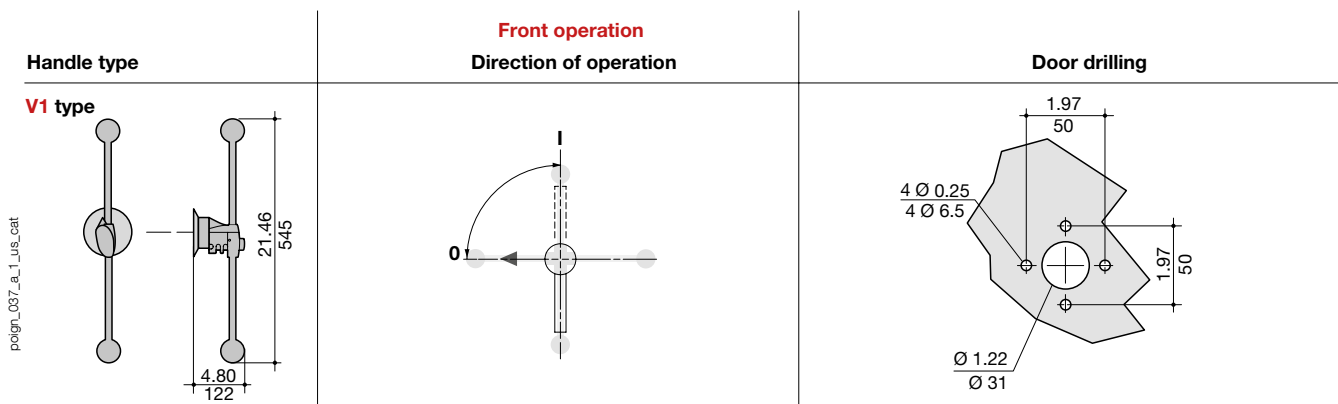
Handle type	Front operation Direction of operation	Door drilling
<p>S4 type</p>  <p>poign_038_a_1_us_cat</p>		

SIRCO PV UL 98B

Load break switches for photovoltaic applications
from 100 to 2000 A - up to 1000 VDC

Dimensions for external handles (in/mm)

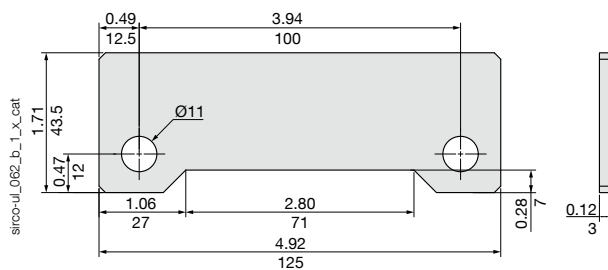
B6_{DS} - B7_{DS}



Bridging bars (in/mm)

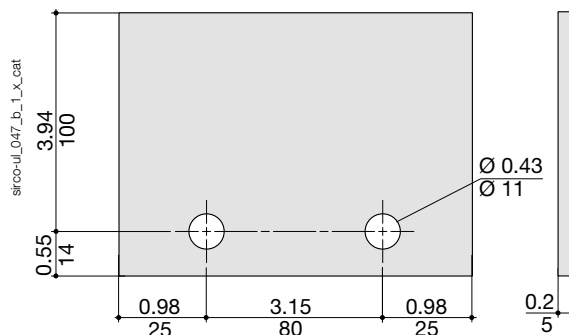
B4 - B4_{DS}

2709 1020



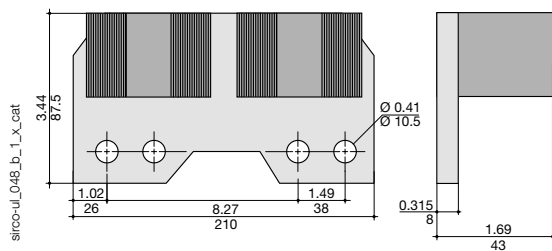
B6 - B6_{DS}

2709 0062



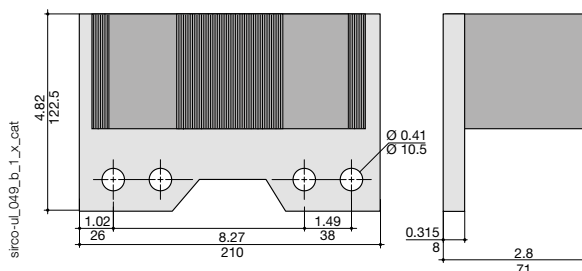
B7

2709 0081



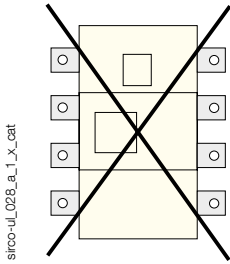
B7 - B7_{DS}

2709 0121



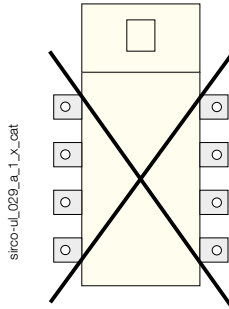
Mounting orientation

All frames



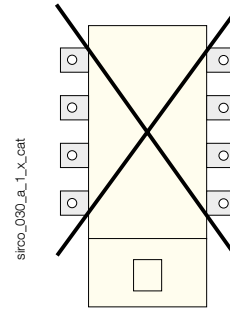
sirco-ul_028_a_1_x_cat

B4_{DS}



sirco-ul_029_a_1_x_cat

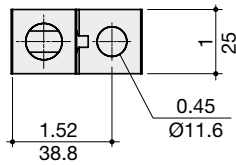
B6_{DS} - B7_{DS}



sirco_030_a_1_x_cat

Terminal lugs (in/mm)

100 to 250 A

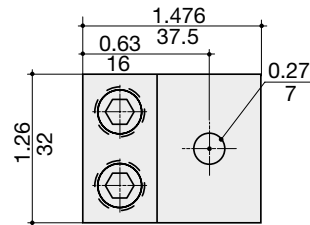


sirco_115_b_1_us_cat

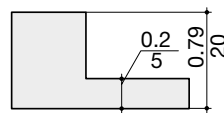


300MCM

100 to 250 A

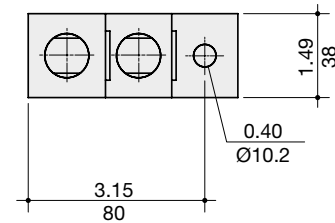


sirco-ul_038_a_1_us_cat

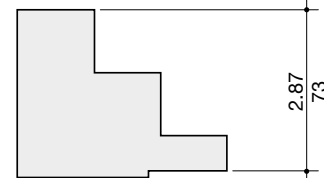


2/0

600 to 2000 A



sirco_116_b_1_us_cat



2 x 600MCM