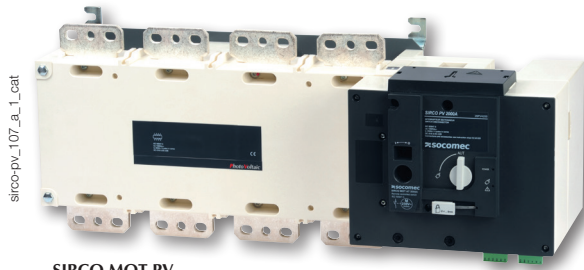


# SIRCO MOT PV

Disconnect switches for photovoltaic applications  
remotely operated range 2000 A, up to 1000 VDC

Photovoltaic range



SIRCO MOT PV  
4 x 2000 A

## The solution for

- > Solar Inverter
- > Energy Storage Inverter
- > Battery Energy Storage Systems



## Strong points

- > High breaking capacity, load break 1000 VDC / 2000 A
- > Remotely operated product
- > Manual emergency operation

## Conformity to standards

- > UL 98B, Guide WHVA, File E346418
- > IEC 60947-3



## Function

**SIRCO PV** are remotely operated multipolar load break switches. They make and break under load conditions and provide safety isolation for any low voltage circuit dedicated to photovoltaic applications up to 1000 VDC.

## Advantages

### High breaking performance

A glass fiber 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.

### Remotely operated product

SIRCO MOT PV are intended for use in photovoltaic installations and solar inverters. They can be remotely controlled via volt-free contacts, from either an external automatic controller or a switch.

### Manual emergency operation

In addition to its motorized operation, the SIRCO MOT PV also includes a manual operation facility, enabling the switch position to be changed directly on the device if required.

### General characteristics

- Up to 1000 VDC / 2000 A.
- Patented switching technology.
- Remotely operated product (motor control).
- Positive break indication.
- 2 stable positions (I, 0).

## References

### 1000 VDC - Back plate mounting

Rating (A) / Frame size	Circuit type	No. of poles	Switch body	Bridging bars for connecting poles in series	Inter phase barrier	Terminal screens
2000 A / B7	Single PV circuit	4 P	19PV 4320	2 P 2609 1200 <sup>(1)</sup>	included	1509 4200 <sup>(2)</sup>

Common accessories - more available on next pages.  
(1) Connection in series of 2 or 4 poles of the device.  
(2) 2 sets required to fully shroud both line and load terminals.

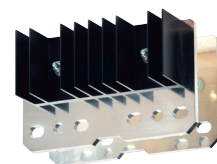
## Accessories

### Bridging bars for connecting poles in series

#### Use

The bridging bars will make easy the connection of poles in series, allowing the following configurations:  
- Bottom/Bottom  
- Top/Top

- Top/Bottom  
- Bottom/Top  
Connection diagrams:  
see "Pole series connections"



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Rating (A) / Frame size	Number of poles of the device in series	Pack	Reference
2000 / B7	2 P	1 piece	2609 1200

## Accessories (continued)

### Auxiliary contact

#### Use

Pre-break and signalization of position I:  
1 to 2 NO/NC auxiliary contacts  
(1 as standard).  
Low level auxiliary contacts: please consult us.

#### Connection to the control circuit

By 0.25 in / 6.35 mm fast-on terminal.

#### Electrical characteristics

30,000 operations.



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#### Characteristics

Rating (A)	Nominal current (A)	Operating current I <sub>e</sub> (A)			
		250 VAC AC-13	400 VAC AC-13	24 VDC AC-13	48 VDC AC-13
2000	16	12	8	14	6

#### References

#### NO/NC changeover contact

Rating (A) / Frame size	Contact(s)	Reference
2000 / B7	2 <sup>nd</sup>	1999 1032



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### Terminal screens

#### Use

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

Rating (A) / Frame size	No. of poles	Position	Reference
2000 / B7	4 P	top or bottom	1509 4200



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### 2 position padlocking (I - 0)

#### Use

Enables padlocking in position I (product can be padlocked in position 0 as standard).  
Factory fitted.

Rating (A) / Frame size	Reference
2000 / B7	9599 0004



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### Key handle interlocking system

#### Use

Motorized and manual operations can be locked in position 0 using a RONIS EL11AP lock.  
Factory fitted.

As standard, locking in position 0.  
Optional padlocking in 2 positions: Locking in position 0 and I.

Rating (A) / Frame size	Reference
2000 / B7	9599 1004



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# SIRCO MOT PV

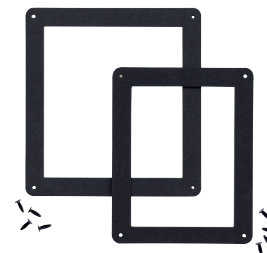
Disconnect switches for photovoltaic applications  
remotely operated range 2000 A, up to 1000 VDC

## Accessories (continued)

### Door protective surround

#### Use

When direct access to the SIRCO MOT front face (mode selection, manual operation, display...) is required, the door surround can be utilized to provide a clean and safe finish to the panel's cut-out.



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Rating (A) /Frame size	Reference
2000 / B7	1529 0080

## Characteristics as per standards UL 98B and IEC 60947-3

### 2000 A / B7

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	4 P	4 P	B7
Short-circuit capacity at 1000 VDC (any circuit breaker)		Prospective short-circuit current (kA rms DC)			
		10 <sup>(1)</sup>			
Connection terminals		Use copper bar min. cross section			
		2 x 80 x 8			
		Maximum bars width Cu			
		3.94 in (100 mm)			
Mechanical characteristics		Durability (number of operating cycles)			
		6 000			
		Operating effort min./max. (lbs.in/Nm)			
		354/398 lb.in (40/45 Nm)			

Thermal current I <sub>th</sub> at 40°C		2000 A
Rated insulation voltage U <sub>i</sub> (V)		1200
Rated impulse withstand voltage U <sub>imp</sub> (kV)		12
Frame size		B7

#### Rated operational currents I<sub>e</sub> (A)

Rated voltage	Utilization category	Number of poles of the device	Number of pole(s) in series per polarity	Ambient temperature (°F / °C)	(A)
1000 VDC	DC-21 B	4 P	2 P + and 2 P -	104 / 40	2000
1000 VDC	DC-21 B	4 P	2 P + and 2 P -	122 / 50	1800
1000 VDC	DC-21 B	4 P	2 P + and 2 P -	140 / 60	1600
1000 VDC	DC-21 B	4 P	2 P + and 2 P -	149 / 65	1520

#### Switching time

I - 0	1.60
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#### Power supply

Power supply, 230 VAC min. / max. (VAC)	166/332
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#### Control supply power demand

Power supply 230 VAC inrush / nominal (VA)	460/230
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#### Connection

Rigid Cu cable cross-section (mm <sup>2</sup> )	-
Maximum Cu busbar width (mm)	100
Tightening torque min/max (Nm)	40/45

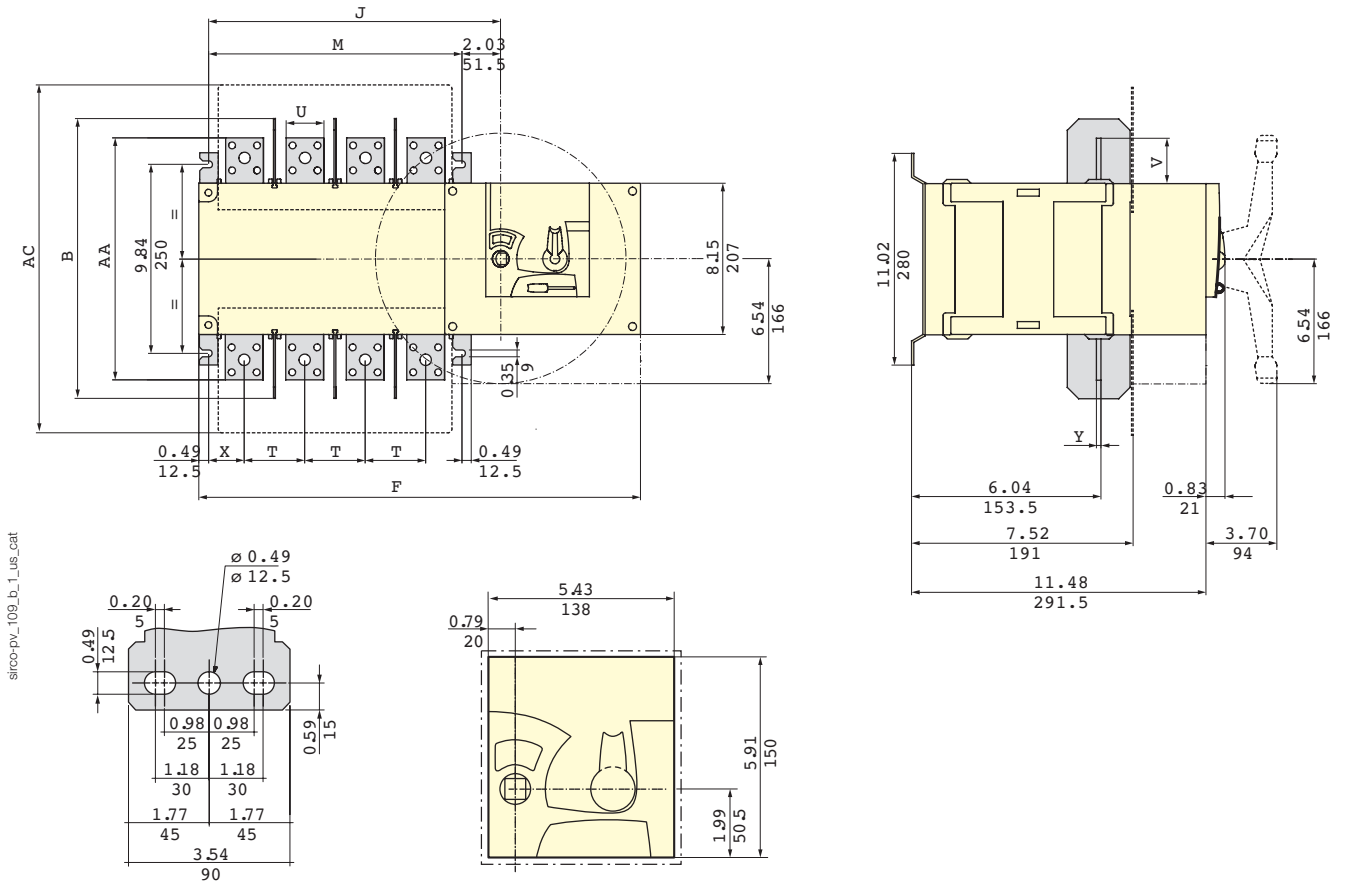
#### Mechanical characteristics

Durability (number of operating cycles) <sup>(1)</sup>	3000
Weight of a 4 pole device (kg)	42

(1) Improved endurance: Please consult us.

## Dimensions (in/mm)

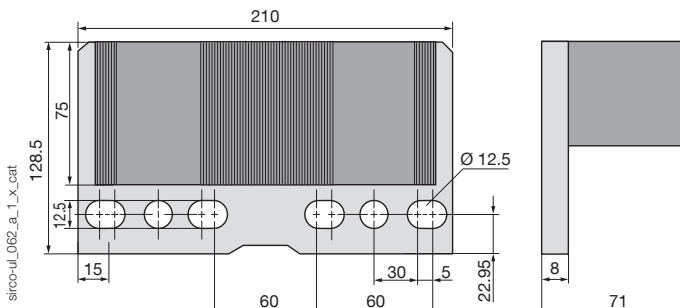
### 2000 A / B7



Rating (A) / Frame size	Overall dimensions B	Terminal shrouds AC	Switch body		Switch mounting M 4p.	Connection					
			F 4p.	J 4p.		T	U	V	X	Y	AA
2000 / B7	380	531	716	518.5	467	120	90	44	53	8	288

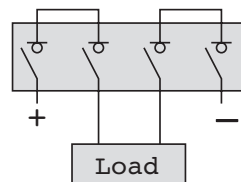
## Bridging bar

### 2000 A / B7



## Pole series connections<sup>(1)</sup>

### 4 poles - bottom / bottom



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