Manual or motorized load break switches for DC applications 2000 A, up to 1500 VDC





SIRCO MAN DC / DC ESS 4 x 2000 A

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Function

SIRCO MAN DC / DC ES are manually operated multipolar load break switches, while SIRCO MOT DC / DC ESS are motorized. Both switches make and break under load conditions and provide safety isolation for any low voltage circuit dedicated to DC applications up to 1500 VDC.

Advantages

High performance switching

SIRCO MOT DC and SIRCO MOT DC ESS motorized load break switches incorporate patented technology, providing a breaking capacity at 1500 VDC with just 2 poles, significantly limiting power dissipation.

Application tested design

Designed and tested for several DC applications, with proven performance in the harshest of environments. The arc extinguishing system provides safe disconnection, rapid arc extinguishing and current interruption.

- Tested against high short circuit systems with and without fuse protection to ensure complete system protection above 210 kA.
- Proven against severe environmental factors including: "Annex Q level C according to IEC" salt spray tested, high temperature and altitude, humidity cycle tested.

Reduced total cost of ownership

Developed with user cost savings in mind, the product features improvements which ensure a lower total cost of ownership.

- Flexible wiring configurations allow for simple in and out wiring, and by not using series bridging bars, cost savings can be achieved.
- Compact solution with reduced footprint and weight improves sustainability with reduced packaging, transportation and installation costs.

The solution for

- > Photovoltaic inverters and recombiner boxes (PV)
- Energy Storage System (ESS)
- > Rail Infrastructure
- Marine Distribution and microgrids
- > Data center





Strong points

- > High performance switching
- > Application tested design
- > Reduced total cost of ownership

Conformity to standards

> UL 98B

> IEC 60947-3



> GB/T 14048.3

General characteristics

- Up to 1500 VDC.
- Patented switching technology up to 1500 VDC in 2 poles.
- Remotely operated product (motor control) -SIRCO MOT only.
- 2 stable positions (I, 0).
- High short-circuit option available.



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References

1500 VDC MANUAL

Rating (A) / Frame size	No. of poles No. of circuits	Switch body	Bridging bars for series or parallel pole connection ⁽¹⁾
2000 A / B7ds (UL)	-	27DC 4200	1909 0001

1500 VDC MOTORIZED

Rating (A) / Frame size	No. of poles No. of circuits	Switch body	Bridging bars for series or parallel pole connection ⁽¹⁾
2000 A / B7ds (UL)	-	19DC 4200	1909 0001

1500 VDC ESS MANUAL

Rating (A) / Frame size	No. of poles No. of circuits	Switch body	Bridging bars for series or parallel pole connection ⁽¹⁾
2000 A / B7ds (UL)	-	27ES 4200	1909 0001

1500 VDC ESS MOTORIZED

Rating (A) / Frame size	No. of poles No. of circuits	Switch body	Bridging bars for series or parallel pole connection ⁽¹⁾
2000 A / B7ds (UL)	-	19ES 4200	1909 0001

Accessories

Bridging bars

Use

The bridging bars will easily connect the poles in parallel, allowing the following configurations:

- Bottom/Bottom

- Top/Top

Connection diagrams:

see "Pole parallel connections".

Rating (A) /Frame size	Number of poles of the device in parallel	Pack	Reference
2000 (UL) / B7ds (1)	2	1 piece	reference upon request

(1) UL B7ds requires 4 pcs

Auxiliary contact

Use
Pre-break and signalisation 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 6.35 mm fast-on terminal.

Electrical characteristics

30 000 operations.

Characteristic	s	Operating current I _e (A)			
Rating (A)	Nominal current (A)	250 VAC 400 VAC 24 VDC 48 VDC AC-13 AC-13 AC-13 AC-13			
2000	16	12	8	14	6



xes_065_a_1_cat

References

NO/NC changeover contact			
Frame size	Rating (A)	Contact(s)	Reference
B7ds	2000	2 nd	1999 1032



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Accessories (continued)

2 position padlocking (I - 0)

Use

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

Frame size	Rating (A)	Reference
B7ds	2000	9599 0004



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Key handle interlocking system (motorized version only)

Use

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

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

Factory fitted.

Frame size	Rating (A)	Reference
B7ds	2000	9599 1004



Door protective surround (motorized version only)

Use

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

Frame size	Rating (A)	Reference
B7ds	2000	1529 0080



Characteristics according to UL 98B and IEC 60947-3

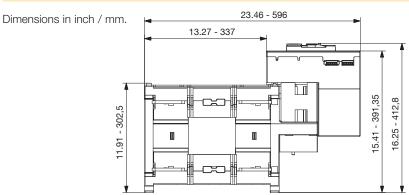
2000 A at 1500 VDC (B7ds UL)

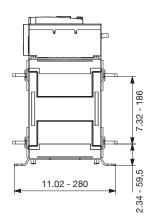
Thermal current ith at 104°F*	2000			
Rated voltage	Utilization category	Ambient temperature (°F)	(A)	
1500 VDC	UL 98B	104	2000	
* for higher ambient temperature values, consult us				
Short circuit capacity				
Prospective short-circuit current (kA)	UL 98B	-	10	
Short circuit capacity (ESS range)				
Rated conditional short-circuit current $\rm I_{\rm q}$ (kA)	IEC 60947-3, GB/T 14048.3	-	210	

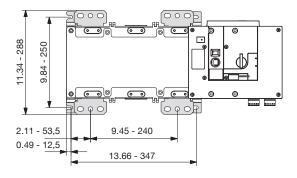
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Dimensions

2000 A / B7ds / 1500 VDC

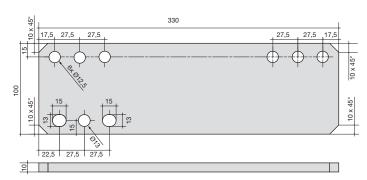






2000 A (1500 V) - UL

Dimensions in inch / mm.



2 + 2 Pole (4 Pole) connections

