

# SIRCO VM

# Load break switches with visible breaking

from 63 to 250 A





## **Function**

SIRCO VM are manually operated modular multipolar load break switches. They assure on-load making and breaking and provide safety isolation for any LV circuit.

## Advantages

### Reliability and performance

The double breaking per pole, achieved through its sliding bar contact system, is a proven design that offers very high durability and short-circuit withstand. The quick opening and rapid closure of the SIRCO's contacts, combined with specifically designed arcing chambers, provides the SIRCO AC with improved breaking performance.

## Improved safety

Thanks to the double visible breaking, the operator can visually check the status of the device during preventive checks before working on the installation.

#### Extensive range

The SIRCO VM range is very extensive; from 63 A to 250 A, 3 and 4 poles, with many accessories.

#### General characteristics

- · Positive break indication
- · Visible double break per phase
- DIN-rail mounting, panel or modular panel with 45 mm front cut out
- Device and IP20 accessories.
- Severe load duty categories (AC-22 and AC-23).

## Reinforced protection in connection enclosures

SIRCO VM units with visible breaking are particularly suitable for connection enclosures. They allow the operator to safely isolate the top network system from the reserved bottom system. The visible breaking enables additional visual checks before intervening.

200 A Enclosure: SIRCO VM2 200 A 4-pole, ref. 25TJ4020.



## The solution for

- > Distribution cabinet
- Subscriber enclosures

### **Strong points**

- > Reliability
- > Increased safety with visible breaking
- > Wide range

### Compliance with standards

- > IEC 60947-3, EN 60947-3
- > VDE 0660-107 (1992)

### Certifications.

- > GOST (Russia)
- > BBJ (Poland)
- > Lloyd's Register of Shipping
- > CEBEC (Belgium)
- > LOVAG/ASEFA
- > KEMA
- > CCA
- > PSA E03.15.605.G
- > RENAULT EB03.15.613



## References

## Front operation(1)

Switch body <sup>(2)</sup>	N° of poles <sup>(3)</sup>	Switch body for front operation	Direct operation handle	External operation handle	Shaft for external operation	Auxiliary contact	Terminal shrouds <sup>(5)</sup>	Cage terminals with cover	
VM1	3 P	2500 <b>3006</b>		Type S1			built in	hadh in	
63 A	4 P	2500 <b>4006</b>							
VM1	3 P	2500 <b>3008</b>							
80 A	4 P	2500 <b>4008</b>	Black						
VM1	3 P	2500 <b>3010</b>	2599 <b>5012</b> <sup>(2)</sup>	2599 <b>5012</b> <sup>(2)</sup>	Black IP55			built-in	built-in
100 A	4 P	2500 <b>4010</b>		1411 <b>2111</b> <sup>(2)</sup>	200 mm	1st contact NO/			
VM1	3 P	2500 <b>3011</b>			BIACK IP65	1402 <b>0820</b> <sup>(2)</sup>	NC Type A		
125 A	4 P	2500 <b>4011</b>		Red/Yellow 140		320 mm			
VM2	3 P	2500 <b>3016</b>			1402 <b>0832</b>	2599 <b>0001</b> <sup>(4)</sup>			
160 A	4 P	2500 <b>4016</b>						3 P	
VM2	3 P	3 P 2500 <b>3020</b> Black 1414 <b>2111</b>	1414 <b>2111</b>			0504 4000	2593 <b>3020</b>		
200 A	4 P	2500 <b>4020</b>	2599 <b>5022</b> <sup>(2)</sup>				2594 <b>4020</b>	4 P	
VM2	3 P	2500 <b>3025</b>						2593 <b>4020</b>	
250 A	4 P	2500 <b>4025</b>							
VM2 200 A	4 P	25TJ <b>4020</b>	Included	-	-	-	Included	Included	

<sup>(1)</sup> Side operation: please ask us.

## Accessories

## Direct operation handle

Rating (A)	Handle colour(1)	Reference		
VM1 63 VM1 125	Black	2599 <b>5012</b>		
VM2 160 VM2 250	Black	2599 <b>5022</b>		

<sup>(1)</sup> Red handle: please ask us.



## External operation handle

The door's interlocked external operation handle includes a padlockable handle and plate, and must be used with an extension shaft.

External front operation		
Rating (A)	Handle colour	Reference
63 250	Black	1411 <b>2111</b> (1)

(1) Standard.



SIRCO VM0



<sup>(2)</sup> Standard.

<sup>(3) 6</sup> or 8-pole modules: please ask us.

<sup>(4)</sup> For 2 aux. contacts, order reference 2599 0001 twice. (5) Top/bottom

## SIRCO VM

## Load break switches with visible breaking

from 63 to 250 A

## Accessories (continued)

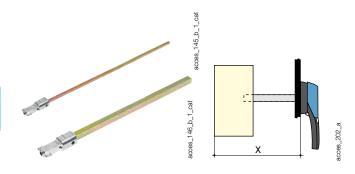
## Shaft extension for external front operation

Standard width for external operation:

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

Other widths available - please ask us.

Rating (A)	Side X (mm)	Real length (mm)	Reference
63 250	96 260	200	1402 <b>0820</b>
63 250	96 380	320	1402 <b>0832</b>



## Top/bottom terminal shrouds

### Use

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

Rating (A)	Position	Reference
160 250	top/bottom	2594 <b>4020</b>



## Cage terminals with cover

## Use

Direct connection of cables without terminal lugs, as well as top and bottom protection against direct contact with terminals or connection parts.

## Characteristics

- Size capacity from 10 to 95 mm² for rigid cables or 70 mm<sup>2</sup> for flexible cables.
- Top or bottom mounting terminations.

Rating (A)	N° of poles	Reference
160 250	3 P	2593 <b>3020</b>
160 250	4 P	2593 <b>4020</b>



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## Characteristics

## Characteristics according to IEC 60947-3

Thermal current I <sub>th</sub> (40 C)		VM1 63 A	VM1 80 A	VM1 100 A	VM1 125 A	VM2 160 A	VM2 200 A	VM2 250 A
Rated insulation voltage U <sub>i</sub> (V)		800	800	800	800	800	800	800
Rated impulse withstand voltage U <sub>imp</sub> (kV)		8	8	8	8	8	8	8
Rated operational curre	ents I <sub>e</sub> (A)							
Rated voltage	Operating category	A/B <sup>(1)</sup>						
400 VAC	AC-21 A / AC-21 B	63/63	80/80	100/100	125/125	160/160	200/200	200/250
400 VAC	AC-22 A / AC-22 B	63/63	80/80	100/100	125/125	160/160	200/200	200/200
400 VAC	AC-23 A / AC-23 B	63/63	63/63	63/63	63/63	160/160	200/200	200/200
Conditional rated short-circuit current with gG DIN		fuse						
Prospective short-circuit (k/	A rms.) <sup>(5)</sup>	100	100	100	50	50	50	50
Associated fuse rating (A) (5)		63	80	100	125	160	160	160
Short-circuit capacity								
Rated short-time withstand	current 1 s. I <sub>cw</sub> (kA rms.)	2.5	2.5	2.5	2.5	4	4	4
Short-circuit making capacity (kA peak) (5)		12	12	12	12	16	16	16
Connection								
Minimum Cu cable cross-se	ection	4	4	4	4	10	10	10
Maximum Cu rigid cable cro	oss-section (mm²)	50	50	50	50	95	95	95
Tightening torque min (Nm)		6	6	6	6	9	9	9
Maximum Cu busbar width	(mm)				-	20	20	20
Mechanical specification	ons							
Durability (number of opera	ting cycles)	20,000	20,000	20,000	20,000	10,000	10,000	10,000
Weight of a 3-pole device (k	<g)< td=""><td>0.6/0.8</td><td>0.6/0.8</td><td>0.7/0.9</td><td>0.7/0.9</td><td>0.9/1.1</td><td>0.9/1.1</td><td>0.9</td></g)<>	0.6/0.8	0.6/0.8	0.7/0.9	0.7/0.9	0.9/1.1	0.9/1.1	0.9
Weight of a 4-pole device (k	<b>(g)</b>	0.7/0.9	0.7/0.9	0.8/1	0.8/1	1/1.2	1/1.2	1

<sup>(1)</sup> Category with index A = frequent operation /

- (3) 4-pole device with 2 poles in series per polarity.
- (4) The power value is given for information only, the values vary from a manufacturer to another.

External front operation

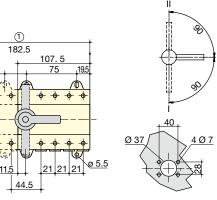
## **Dimensions**

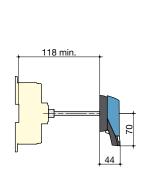
## SIRCO VM1 from 63 to 80 A

## Direct front operation - 3 and 4-pole

# 1 182.5 107.5 115.5 05 1. 12 x 17.5 mm modules.

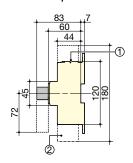
11.5



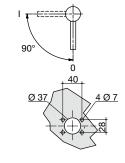


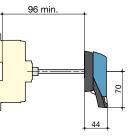
## SIRCO VM2 200 to 250 A

## Direct front operation



## External front operation





Category with index B = infrequent operation.

<sup>(2)</sup> With terminal shrouds.

<sup>(5)</sup> For a rated operational voltage  $U_{\rm e}$  = 400 VAC.