

Motorised Change Over Load Break Switch MLBS..CO (1-0-2)

Description

MLBS CO is 4 pole motorised changeover switch with positive break indication in range 63 to 125A. It enables the on load transfer of two three-phase supplies via remote volt-free contacts, from either an external automatic controller, using pulse logic, or a switch. It is intended for use in low voltage power systems where interruption of the load supply is acceptable during transfer. MLBS CO switches have been designed, qualified and tested according to the criteria defined by standard IEC 60947-3 and IEC 60947-6-1. It can be utilised with a direct front or external operation handle.

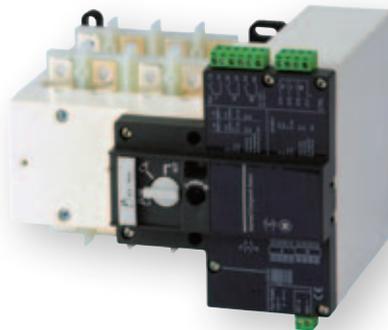
Advantages

MLBS CO uses stable position technology, ensuring constant pressure on the contacts and preventing premature faults. In addition, they do not require a power supply to maintain position, thus protecting their loads from voltage fluctuations. The control and motorisation section can be replaced simply by removing 4 screws, with no work required on the installation cabling. Their design and compact size, enables integration within most 200 mm deep enclosures. Maintenance can be carried out easily under load, with manual operation still available. The MLBS CO is available in two supply versions, each with a broad range (+/-30%):

- 230 VAC single power supply
- 12 VDC power supply

Applications

- Generator manufacturers
- Heating
- Air conditioning
- Ventilation
- Telecommunications



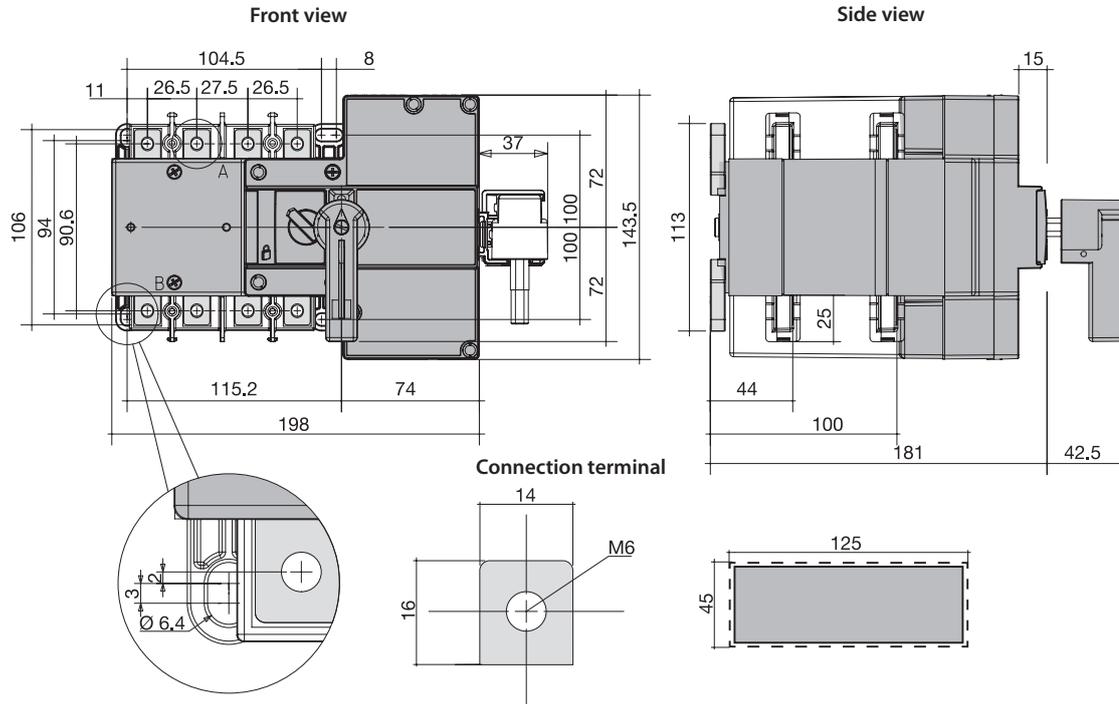
Motorised Change Over Load Break Switch MLBS..CO (1-0-2)

Characteristics according to IEC 60947-3, IEC 60947-6-1					
Type			MLBS 63 CO	MLBS 100 CO	MLBS 125 CO
Current	(I _n)	(A)	63A	100A	125A
Rated insulation voltage (power circuit)	(U _r)	(V)	800	800	800
Rated insulation voltage (operation circuit)	(U _i)	(V)	300	300	300
Rated impulse withstand voltage (power circuit)	(U _{imp})	(kV)	6	6	6
Rated impulse withstand voltage (operation circuit)	(U _{imp})	(kV)	4	4	4
Thermal current 40°C	(I _{th})	(A)	63	100	125
Rated operational currents (I _e) according to IEC 60947-3	AC-20A/B	415V (A)			125
	AC-21A/B	415V (A)	63	100	100/125
	AC-22A/B	415V (A)			100
	AC-23A/B	415V (A)	-/63	-/63	-/63
Rated operational currents (I _e) according to IEC 60947-6-1	AC-31B	415V (A)	63	100	125
	AC-32B	415V (A)	63	80	80
Short-circuit capacity I _{cw}	1 s.	(kA)	2,5	2,5	2,5
	0,25 s.	(kA)	4,5	4,5	4,5
Fuse protected short-circuit withstand (kA rms prospective)					
Associated fuse rating		(A)	63	100	125
Prospective short-circuit current		(kA)	50	25	15
Circuit breaker protected short-circuit withstand with any circuit breaker that ensures tripping in less than 0.3s ⁽¹⁾					
Rated short-time withstand current I _{cw}	0,3 s.	(kA)	3,5	3,5	3,5
Connection					
Maximum Cu cable cross-section	mm ²		50	50	50
Tightening torque min/max	Nm		1,2/3	1,2/3	1,2/3
Switching time (Standard setting)					
1-0 or 2-0	(ms)		500	500	500
1-2 or 2-1	(ms)		1000	1000	1000
Duration of "electrical blackout" 1-2 minimum	(ms)		500	500	500
Power supply					
Power supply 12 V DC min/max	(V)		9/15	9/15	9/15
Power supply 230 V AC min/max	(V)		160/310	160/310	160/310
Control supply power demand					
Power supply 12 V DC inrush/nominal	(VA)		200/40	200/40	200/40
Power supply 230 V AC inrush/nominal	(VA)		200/40	200/40	200/40
Durability (number of operating cycles)	cycles		10 000	10 000	10 000
Power dissipation	W/pole		1,7	4,5	6

⁽¹⁾ Value for coordination with any circuit breaker that ensures tripping in less than 0.3s.

Dimensions

MLBS 63 4P CO - MLBS 125 4P CO



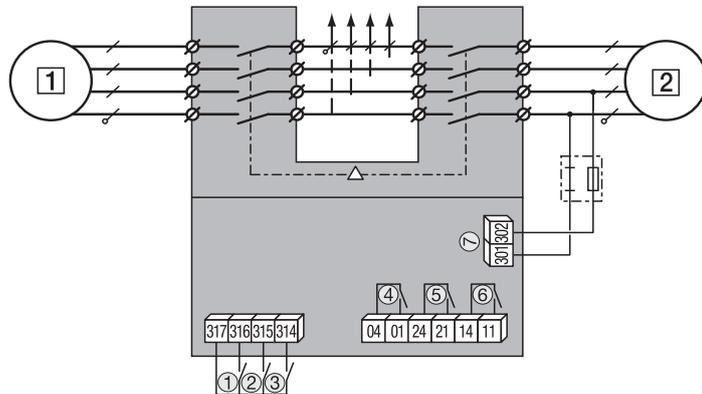
Power supply MLBS 63 - MLBS125 4P CO 230VAC

1 - preferred source

2 - alternate source

- 1 - position 0 control
- 2 - position I control
- 3 - position II control
- 4 - auxiliary contact, closed when the switch is in position 0
- 5 - auxiliary contact, closed when the switch is in position II
- 6 - auxiliary contact, closed when the switch is in position I
- 7 - power supply kit: 230 V AC (160 - 310 V AC)

MLBS 63...125 4P CO 230VAC



MLBS 63...125 4P CO 12VDC

1 - preferred source

2 - alternate source

- 1 - position 0 control
- 2 - position I control
- 3 - position II control
- 4 - auxiliary contact, closed when the switch is in position 0
- 5 - auxiliary contact, closed when the switch is in position II
- 6 - auxiliary contact, closed when the switch is in position I
- 7 - power supply 12 V DC (9 - 15 V DC)

