

SWITCHES

FAMILY LTCB 250 1P

Family Type	LTCB 250 (Bidirectional)
Number / Type of Poles	1 / NO
Mounting Position	Horizontal - Vertical ¹
Connection between Poles	Single pole
Control Voltage Rating Uc (DC) [V]	24 - 36 - 48 - 72 - 110 ¹
Auxiliary Contact Blocks	2 x (1 NO + 1 NC)
Block Type	SL or PBX ¹
Arc-chute Material	Plasto-Ceramic
Main Contacts Tips Material	S6
Arcing Contacts Tips Material	-
Electric Diagram	-
Layout Drawing	D56447

¹To be specified in order phase



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Description

Contactor with double interruption in air, bidirectional making and breaking capacity, single state electromagnetic control.

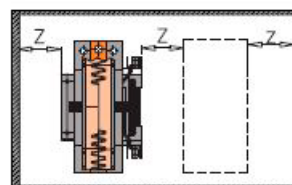
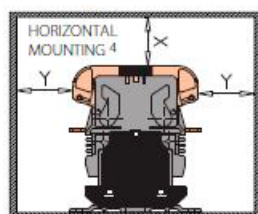
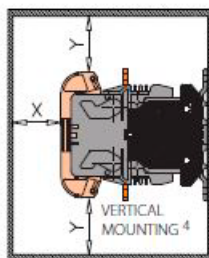
Reference Standards IEC 60077, IEC 61992 and IEC 60947.

Insulation Characteristics		
Rated Operational Voltage (AC / DC)	[V]	1800 / 900
Max Operational Voltage (AC / DC)	[V]	2000
Rated Insulation Voltage	[V]	2000
Rated Impulse Voltage	[kV]	12
Rated Power Frequency Withstand Voltage (50 Hz for 60 s)		
Between HV to LV Circuit + Earth	[V]	6000
Between Open Contacts	[V]	4700
Between Each Pole (if more than 1)	[V]	-
Between LV Circuit and Earth	[V]	1500
Minimum Clearance Distance between Open Contacts	[mm]	10
Minimum Clearance Distance between Power Circuit to Earth	[mm]	14
Minimum Creepage Distance between Power Circuit to Earth	[mm]	25
Comparative Tracking Index (CTI) (IEC 60112)	[V]	600
Electrical Characteristics		
Connection		Single pole
Conventional Free Air Thermal Current at 40 °C ²	[A]	250
Conventional Free Air Thermal Current at 75 °C ²	[A]	200
DC - Rated Operational Current		
1800 V ($\tau = 0$ ms)	[A]	10
900 V ($\tau = 15$ ms)	[A]	100
150 V ($\tau = 20$ ms; >100 op.)	[A]	350
DC - Maximum Breaking Capacity		
1800 V ($\tau = 5$ ms)	[A]	30
900 V ($\tau = 5$ ms)	[A]	150
900 V ($\tau = 1$ ms)	[A]	400
AC - Maximum Breaking Capacity (cos $\phi = 0,8$; 50 Hz)		
1800 V	[A]	100
900 V	[A]	200
Component Category / Operational Frequency Class		A2 / C3
Rated Short Time Withstand Current	[kA]	5 (for 100 ms)
Critical Current Range	[A]	-
Fault Making Capacity	[kA]	2.4
Blow Out Circuit Type		Blow out coil

² Device cabled according IEC 60947

Minimum clearances [mm] from:				
Rated Operational Voltage		X	Y	Z
1800 V	Metal Parts	120	120	50
	Plastic Parts	50	50	20

Minimum clearances [mm] from:				
Rated Operational Voltage		X	Y	Z
900 V	Metal Parts	100	100	30
	Plastic Parts	50	50	20



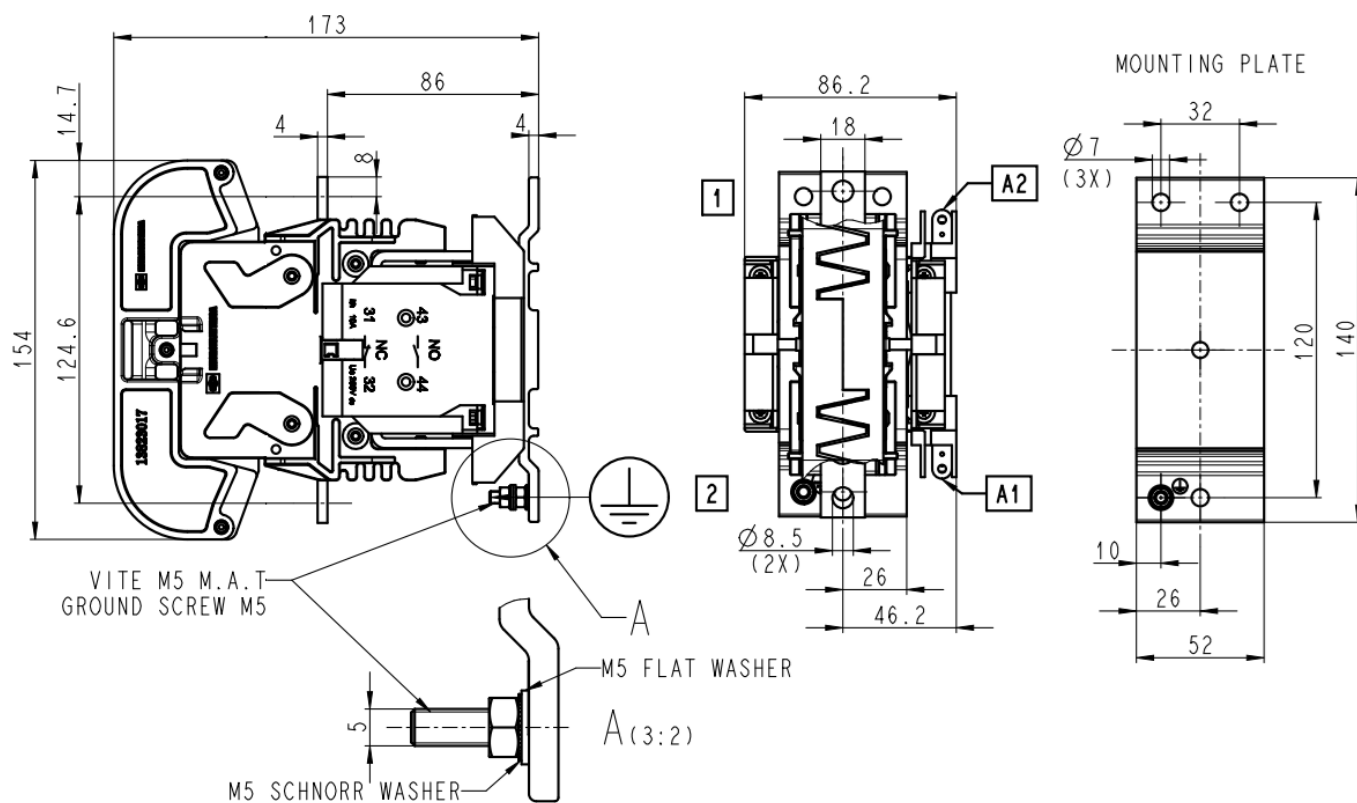
⁴ Other mounting positions not allowed, reduced distances should be approved by Microelettrica

Mechanical Characteristics		
Mechanical Endurance	[cycles]	2 x 10 ⁶
Shock and Vibrations (IEC 61373)		Cat.1 - Class B
Weight	[kg]	2.7
Control Circuit		
Control Voltage Range	[V]	0.7U _c ÷ 1.25U _c
Power Consumption (U _c and T = 20 °C) at Pick Up - when Holding	[W]	32 - 32 ⁵
Mechanical Operation Time (U _c and T = 20 °C) when Closing - Opening	[ms]	50 - 20
Time Constant (L/R) at Pick Up - when Holding	[ms]	25 - 50
Electrical Connections		Fast-on 6.35 x 0.8 mm
Auxiliary Contact		
Rated Operational Voltage (AC / DC)	[V]	250
Conventional Free Air Thermal Current at 40 °C	[A]	10
Tips Material		Silver Alloy (Optional: Golden Plated)
Minimum Let-through Current at 110 VDC ⁶	[mA]	20(10) - 15(7.5) - 10(5) ⁵
Electrical Connections		Fast-on 6.35 x 0.8 mm
Environmental Conditions		
Stock Temperature Range	[°C]	-50 ÷ +85
Operational Temperature Range	[°C]	T _x (-40 ÷ +75) ⁷
Pollution Degree - Overvoltage Category (EN 50124-1)		PD3 - OV3
Max Altitude without Performance Derating	[m]	2000

⁵ Energy saving configuration on customer request

⁶ Reference Standard IEC 60947-5-4. Tested in a DRY and CLEAN condition with an LR load. The values with golden plated tips are indicated between brackets. For different working conditions, please contact Microelettrica

⁷ According to EN 50125-1



The technical specifications reported are not binding and they should be agreed in the contract.

For further technical information on our products visit www.microelettrica.com

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