

# SWITCHES

## STANDARD FAMILY CODE LTC002502SA\*0

Family Type	LTC 250
Number / Type of Poles	2 / NO
Mounting Position	Horizontal - Vertical <sup>1</sup>
Connection between Poles	Single - Parallel
Control Voltage Rating U <sub>c</sub> (DC) [V]	24 - 36 - 48 - 72 - 110 <sup>1</sup>
Auxiliary Contact Blocks	2 x (1 NO + 1 NC)
Block Type	SL
Arc-chute Material	Polyester Resin - Ceramic <sup>1</sup>
Main Contacts Tips Material	S6
Arcing Contacts Tips Material	-
Electric Diagram	-
Polyester Resin Layout Drawing	D54699
Ceramic Layout Drawing	D56346

<sup>1</sup> To be specified in order phase.



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## Description

Contacteur with double interruption in air, electromagnetic control full power coil. Single state functioning. Reference Standards IEC 60077, IEC 61992 and IEC 60947.

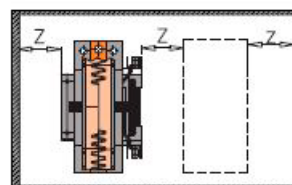
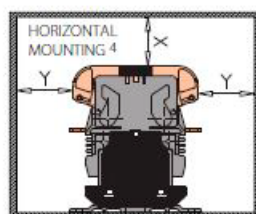
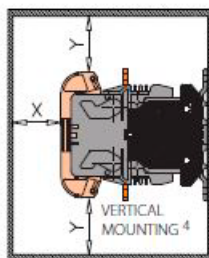
Insulation Characteristics					
Rated Operational Voltage (AC / DC)		[V]		1800 / 900	
Max Operational Voltage (AC / DC)		[V]		2000	
Rated Insulation Voltage		[V]		2000	
Rated Impulse Voltage		[kV]		12	
Rated Power Frequency Withstand Voltage (50 Hz for 60 s)					
Between HV to LV Circuit + Earth		[V]		6000	
Between Open Contacts		[V]		4700	
Between Each Pole (if more than 1)		[V]		6000	
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		Parallel <sup>2</sup>	
Arc-chute		Polyester Resin	Ceramic	Polyester Resin	Ceramic
Conventional Free Air Thermal Current at 40 °C <sup>3</sup>	[A]	250	250	500	500
Conventional Free Air Thermal Current at 75 °C <sup>3</sup>	[A]	200	200	400	400
DC - Rated Operational Current (τ = 15 ms)					
1800 V	[A]	16	16	16	20
900 V	[A]	65	100	65	100
DC - Maximum Breaking Capacity (τ = 5 ms)					
1800 V	[A]	25	30	25	30
900 V	[A]	130	150	130	150
AC - Maximum Breaking Capacity (cosφ = 0,8; 50 Hz)					
1800 V	[A]	80	100	80	100
900 V	[A]	160	200	160	200
Component Category / Operational Frequency Class		A2 / C3	A2 / C3	A2 / C3	A2 / C3
Rated Short Time Withstand Current	[kA]	5 (for 100 ms)	5 (for 100 ms)	9 (for 100 ms)	9 (for 100 ms)
Critical Current Range	[A]	DC Reverse Current	DC Reverse Current	DC Reverse Current	DC Reverse Current
Fault Making Capacity	[kA]	2.4	2.4	4.8	4.8
Blow Out Circuit Type		Permanent Magnet	Permanent Magnet	Permanent Magnet	Permanent Magnet

<sup>2</sup> Device cabled according IEC 60947    <sup>3</sup> Series or parallel bar connection are available under request

<sup>4</sup> Other mounting positions not allowed, reduced distances should be approved by Microelettrica

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

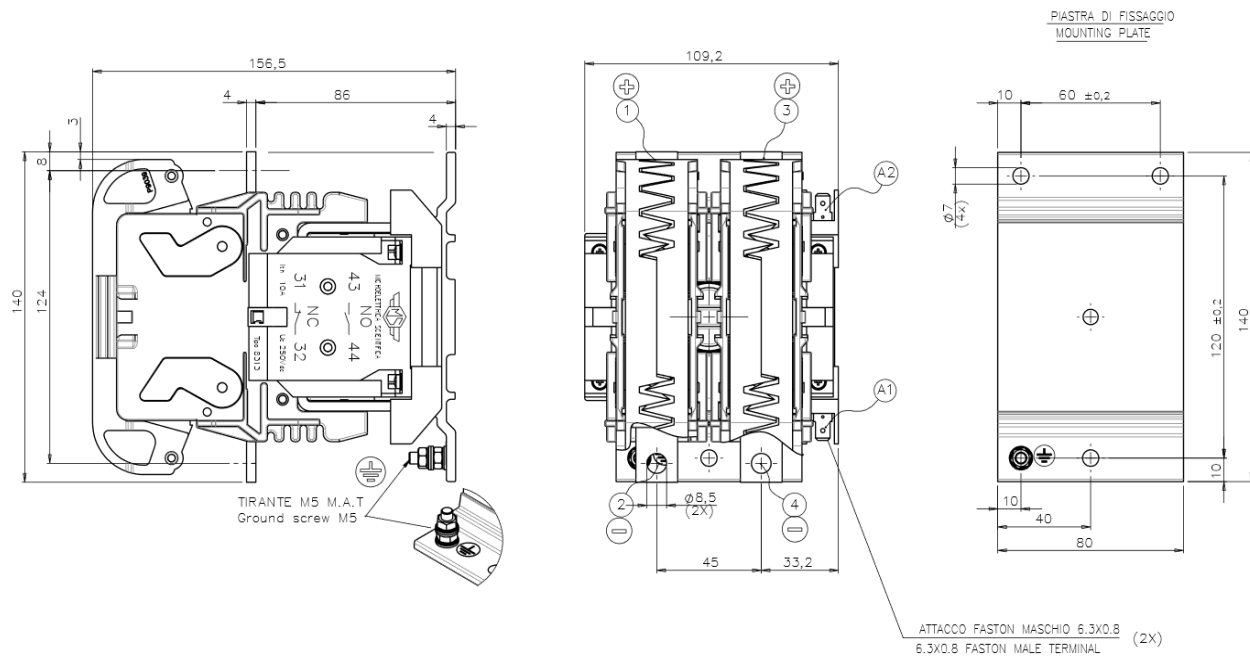


Mechanical Characteristics		
Mechanical Endurance	[cycles]	2 x 10 <sup>6</sup>
Shock and Vibrations (IEC 61373)		Cat.1 - Class B
Weight	[kg]	3.5
Control Circuit		
Control Voltage Range	[V]	0.7U <sub>c</sub> ÷ 1.25U <sub>c</sub>
Power Consumption (U <sub>c</sub> and T = 20 °C) at Pick Up - when Holding	[W]	35 - 35
Mechanical Operation Time (U <sub>c</sub> and T = 20 °C) when Closing - Opening	[ms]	55 - 25
Time Constant (L/R) at Pick Up - when Holding	[ms]	25 - 85
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 24 - 72 - 110 VDC <sup>5</sup>	[mA]	20(10) - 15(7.5) - 10(5) <sup>5</sup>
Electrical Connections		Fast-on 6.35 x 0.8 mm
Environmental Conditions		
Stock Temperature Range	[°C]	-50 ÷ +85
Operational Temperature Range	[°C]	Tx (-40 ÷ +75) <sup>6</sup>
Pollution Degree - Overvoltage Category (EN 50124-1)		PD3 - OV3
Max Altitude without Performance Derating	[m]	2000

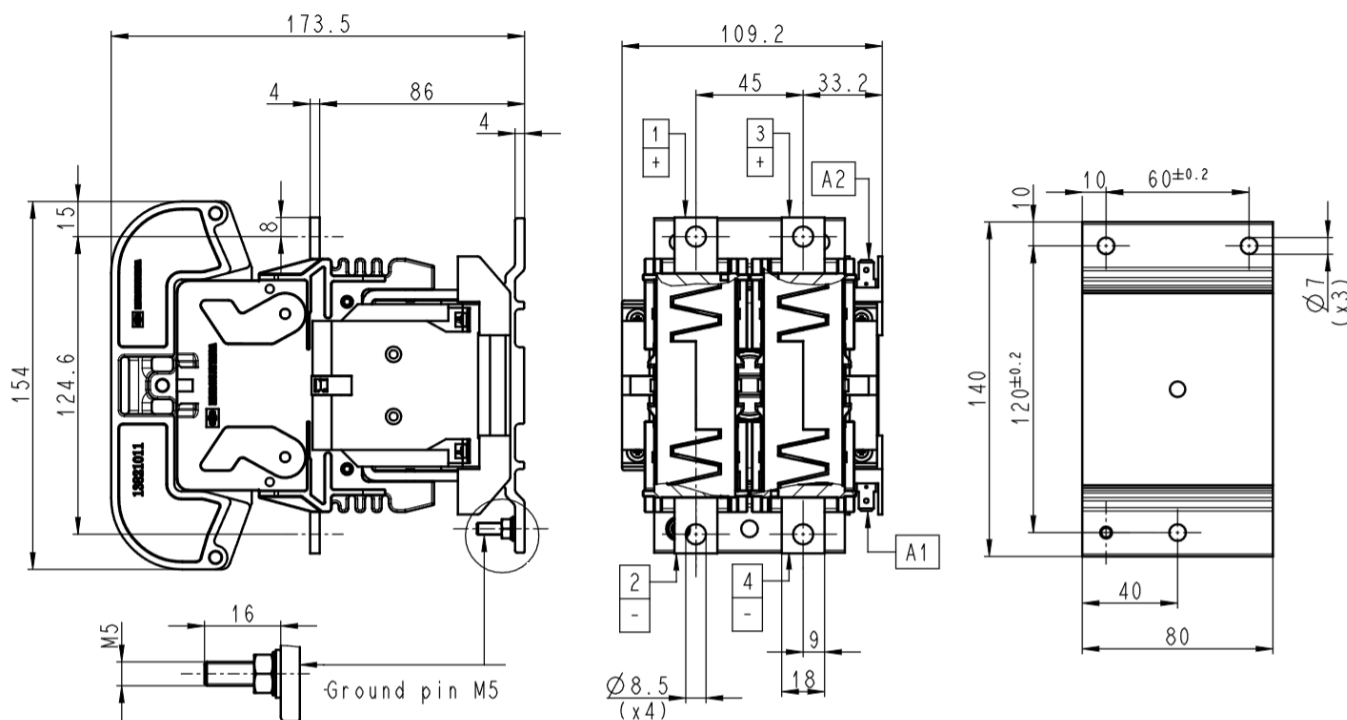
<sup>5</sup> Reference Standard IEC 60947-5-4. Tested in a DRY and CLEAN condition with an LR load. The values with golden plated tips are indicated between brackets. For different working conditions, please contact Microelettrica

<sup>6</sup> According to EN 50125-1

## Polyester Resin Layout Drawing



## Ceramic Layout Drawing



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](http://www.microelettrica.com)**

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