

# SWITCHES

## STANDARD FAMILY CODE LTC001002\*A01

Family Type	LTC 100
Number / Type of Poles	2 / NO
Connection between Poles	Single - Series - Parallel <sup>1</sup>
Mounting Position	Horizontal - Vertical <sup>1</sup>
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	SJ
Arc-chute Material	Polyester Resin
Main Contacts Tips Material	S6
Arcing Contacts Tips Material	-
Electric Diagram	-
Layout Drawing	D50564

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



## Description

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

Insulation Characteristics					
Rated Operational Voltage (AC / DC)		[V]	900 / 440		
Max Operational Voltage (AC / DC)		[V]	1000		
Rated Insulation Voltage		[V]	1000		
Rated Impulse Voltage		[kV]	8		
Rated Power Frequency Withstand Voltage (50 Hz for 60 s)					
Between HV to LV Circuit + Earth		[V]	3500		
Between Open Contacts		[V]	3100		
Between Each Pole (if more than 1)		[V]	3500		
Between LV Circuit and Earth		[V]	1500		
Minimum Clearance Distance between Open Contacts		[mm]	9		
Minimum Clearance Distance between Power Circuit to Earth		[mm]	8		
Minimum Creepage Distance between Power Circuit to Earth		[mm]	12.5		
Comparative Tracking Index (CTI) (IEC 60112)		[V]	600		
Electrical Characteristics					
Connection Type			Single	Series <sup>2</sup>	Parallel <sup>2</sup>
Conventional Free Air Thermal Current at 40 °C <sup>3</sup>	[A]	100		100	200
Conventional Free Air Thermal Current at 75 °C <sup>3</sup>	[A]	80		80	160
DC - Rated Operational Current (τ = 15 ms)					
900 V	[A]	16		30	16
440 V	[A]	40		72	40
DC - Maximum Breaking Capacity (τ = 5 ms)					
900 V	[A]	25		40	25
440 V	[A]	60		100	60
AC - Maximum Breaking Capacity (cosφ = 0,8; 50 Hz)					
900 V	[A]	40		60	40
440 V	[A]	80		120	80
Component Category / Operational Frequency Class		A2 / C3		A2 / C3	A2 / C3
Rated Short Time Withstand Current	[kA]	1.5 (for 5 ms)		1.5 (for 5 ms)	3 (for 5 ms)
Critical Current Range	[A]	DC Reverse Current		DC Reverse Current	DC Reverse Current
Fault Making Capacity	[kA]	0.9		0.9	1.8
Blow Out Circuit Type		Permanent Magnet		Permanent Magnet	Permanent Magnet

<sup>2</sup> Series or parallel bar connections are available under request

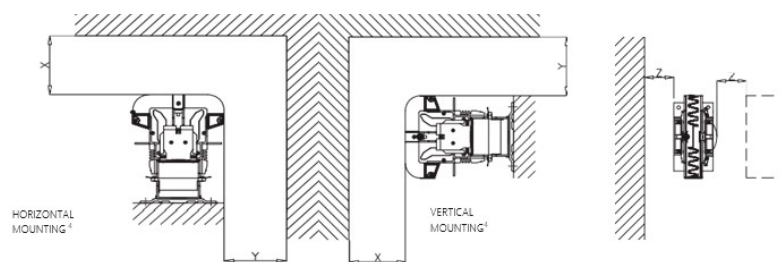
<sup>3</sup> Device cabled according IEC 60947    <sup>4</sup> Other mounting positions not allowed, reduced distances should be approved by Microelettrica

**Minimum clearances [mm] from:**

Rated Operational Voltage		X	Y	Z
900 V	Metal Parts	100	100	30
	Plastic Parts	50	50	20

**Minimum clearances [mm] from:**

Rated Operational Voltage		X	Y	Z
440 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]	2

**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]	24 - 24
Mechanical Operation Time (U <sub>c</sub> and T = 20 °C) when Closing - Opening	[ms]	50 - 20
Time Constant (L/R) at Pick Up - when Holding	[ms]	70 - 125
Electrical Connections		Fast-on 6.35 x 0.8 mm

**Auxiliary Contact**

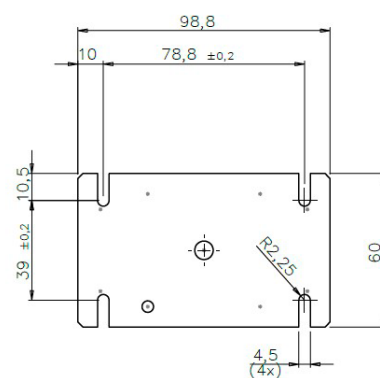
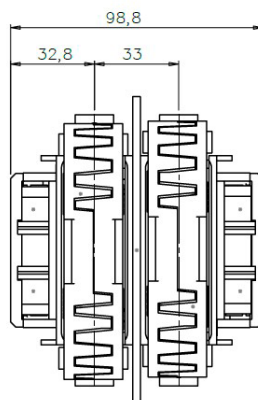
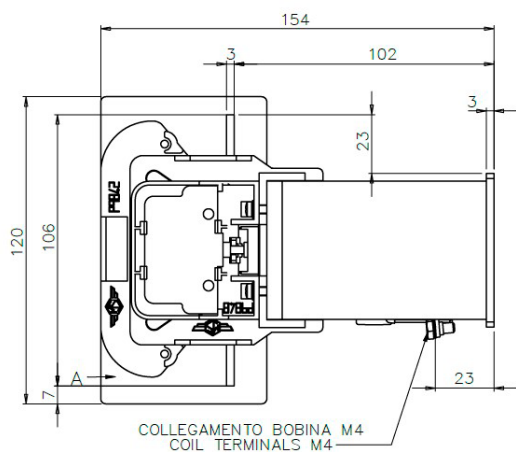
Rated Operational Voltage (AC / DC)	[V]	250
Conventional Free Air Thermal Current at 40 °C	[A]	10
Tips Material		Silver Alloy (Optional: Golden Plated)
Minimum Let-through Current at 24 - 72 - 110 VDC <sup>5</sup>	[mA]	20(10) - 15(7.5) - 10(5) <sup>5</sup>
Electrical Connections		Fast-on 6.35 x 0.8 mm

**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



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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