

# SWITCHES

## STANDARD FAMILY CODE LTC001001\*A00

Family Type	LTC 100
Number / Type of Poles	1 / NO
Mounting Position	Horizontal - Vertical <sup>1</sup>
Control Voltage Rating Uc (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	D55335

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



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## Description

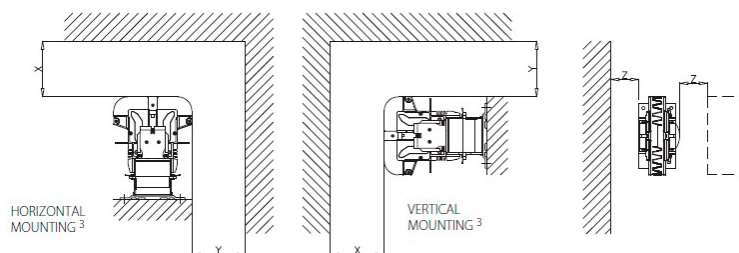
Contactor with double interruption in air, electromagnetic control by full power coil. Single state functioning. Reference Standards IEC 60077, IEC 61992 and IEC 60947.

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]	-
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		
Conventional Free Air Thermal Current at 40 °C <sup>2</sup>	[A]	100
Conventional Free Air Thermal Current at 75 °C <sup>2</sup>	[A]	80
DC - Rated Operational Current ( $\tau = 15$ ms)		
900 V	[A]	16
440 V	[A]	40
DC - Maximum Breaking Capacity ( $\tau = 5$ ms)		
900 V	[A]	25
440 V	[A]	60
AC - Maximum Breaking Capacity ( $\cos\phi = 0,8$ ; 50 Hz)		
900 V	[A]	40
440 V	[A]	80
Component Category / Operational Frequency Class		A2 / C3
Rated Short Time Withstand Current	[kA]	1.5 (for 5 ms)
Critical Current Range	[A]	DC Reverse Current
Fault Making Capacity	[kA]	0.9
Blow Out Circuit Type		Permanent Magnet

<sup>2</sup> Device cabled according IEC 60947    <sup>3</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

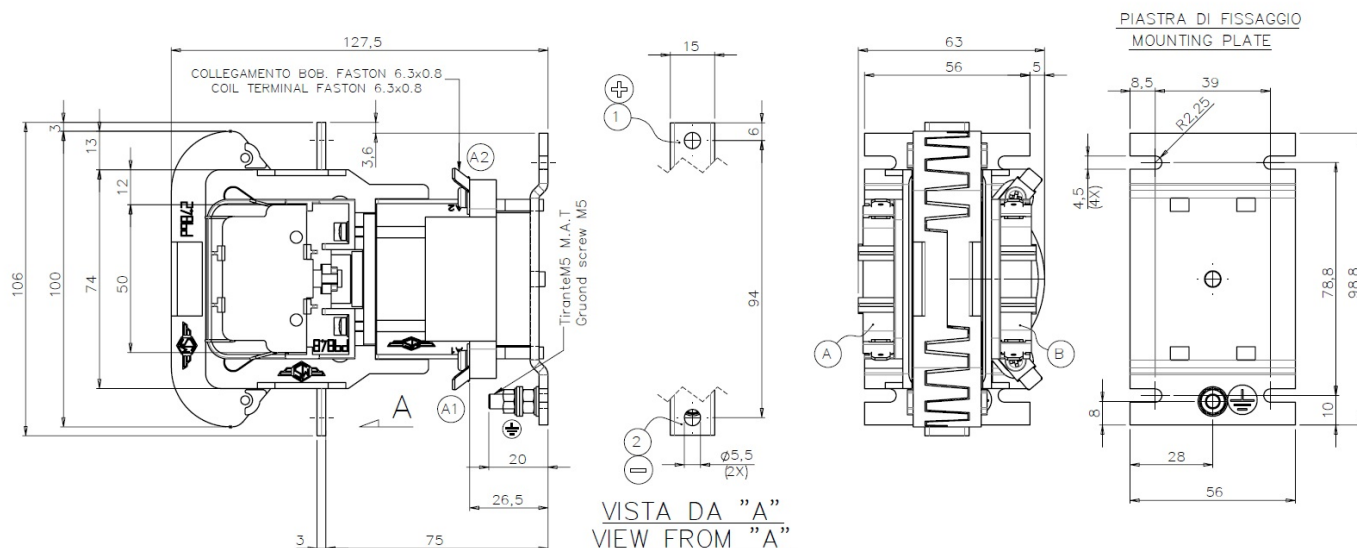
Minimum clearances [mm] from:				
Rated Operational Voltage		X	Y	Z
440 V	Metal Parts	100	100	30
	Plastic Parts	50	50	20



Mechanical Characteristics		
Mechanical Endurance	[cycles]	2 x 10 <sup>6</sup>
Shock and Vibrations (IEC 61373)		Cat.1 - Class B
Weight	[kg]	1.1
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]	18 - 18
Mechanical Operation Time (U <sub>c</sub> and T = 20 °C) when Closing - Opening	[ms]	40 - 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 24 - 72 - 110 VDC <sup>4</sup>	[mA]	20(10) - 15(7.5) - 10(5) <sup>4</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>5</sup>
Pollution Degree - Overvoltage Category (EN 50124-1)		PD3 - OV3
Max Altitude without Performance Derating	[m]	2000

<sup>4</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>5</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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