

SWITCHES

STANDARD FAMILY CODE LTHH01001*A01

Family Type	LTHH 100
Number / Type of Poles	1 / NO
Mounting Position	Horizontal - Vertical ¹
Control Voltage Rating Uc (DC) [V]	24 - 36 - 48 - 72 - 110 ¹
Auxiliary Contact Blocks	2 x (1 NO + 1 NC)
Block Type	PBX
Arc-chute Material	Ceramic
Main Contacts Tips Material	S6
Arcing Contacts Tips Material	-
Electric Diagram	-
Layout Drawing	D45661

¹ To be specified in order phase.



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Description

Contactors single 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]	3600 / 1800 / 900
Max Operational Voltage (AC / DC)	[V]	4000
Rated Insulation Voltage	[V]	4000
Rated Impulse Voltage	[kV]	30
Rated Power Frequency Withstand Voltage (50 Hz for 60 s)		
Between HV to LV Circuit + Earth	[V]	10000
Between Open Contacts	[V]	7900
Between Each Pole (if more than 1)	[V]	-
Between LV Circuit and Earth	[V]	1500
Minimum Clearance Distance between Open Contacts	[mm]	27
Minimum Clearance Distance between Power Circuit to Earth	[mm]	40
Minimum Creepage Distance between Power Circuit to Earth	[mm]	50
Comparative Tracking Index (CTI) (IEC 60112)	[V]	600
Electrical Characteristics		
Conventional Free Air Thermal Current at 40 °C ²	[A]	120
Conventional Free Air Thermal Current at 75 °C ²	[A]	100
DC - Rated Operational Current (τ = 15 ms)		
3600 V	[A]	110
1800 V	[A]	230
900 V	[A]	460
DC - Maximum Breaking Capacity (τ = 5 ms)		
3600 V	[A]	125
1800 V	[A]	250
900 V	[A]	500
AC - Maximum Breaking Capacity (cosφ = 0,8; 50 Hz)		
3600 V	[A]	180
1800 V	[A]	360
900 V	[A]	660
Component Category / Operational Frequency Class		A2 / C3
Rated Short Time Withstand Current	[kA]	4 (for 5 ms)
Critical Current Range	[A]	None
Fault Making Capacity	[kA]	2.4
Blow Out Circuit Type		Indirect Coil

² Device cabled according IEC 60947

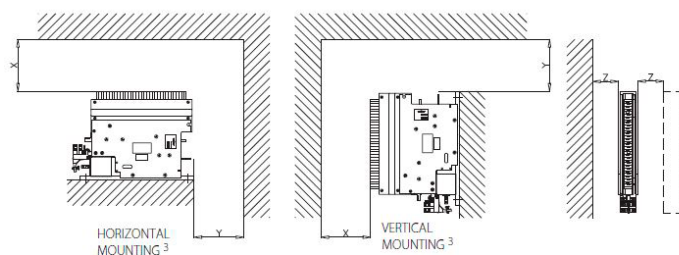
³ Other mounting positions not allowed, reduced distances should be approved by Microelettrica

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

Minimum clearances [mm] from:				
Rated Operational Voltage		X	Y	Z
3600 V	Metal Parts	200	80	50
	Plastic Parts	100	50	30

Minimum clearances [mm] from:				
Rated Operational Voltage		X	Y	Z
1800 V	Metal Parts	120	50	50
	Plastic Parts	50	30	20

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



Mechanical Characteristics		
Mechanical Endurance	[cycles]	2 x 10 ⁶
Shock and Vibrations (IEC 61373)		Cat.1 - Class B
Weight	[kg]	6.5
Control Circuit		
Control Voltage Range	[V]	0.7Uc ÷ 1.25Uc
Power Consumption (Uc and T = 20 °C) at Pick Up - when Holding	[W]	20 - 20
Mechanical Operation Time (Uc and T = 20 °C) when Closing - Opening	[ms]	90 - 25
Time Constant (L/R) at Pick Up - when Holding	[ms]	25 - 75
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 ⁴	[mA]	20(10) - 15(7.5) - 10(5) ⁴
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) ⁵
Pollution Degree - Overvoltage Category (EN 50124-1)		PD3 - OV3
Max Altitude without Performance Derating	[m]	2000

⁴ 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

⁵ According to IEC 50125-1

