

SWITCHES

STANDARD FAMILY CODE LTHH04001*A00

Family Type	LTHH 400
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	S6
Electric Diagram	-
Layout Drawing	D50338

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]	25
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]	480
Conventional Free Air Thermal Current at 75 °C ²	[A]	400
DC - Rated Operational Current ($\tau = 15$ ms)		
3600 V	[A]	270
1800 V	[A]	450
900 V	[A]	900
DC - Maximum Breaking Capacity ($\tau = 5$ ms)		
3600 V	[A]	350
1800 V	[A]	580
900 V	[A]	1160
AC - Maximum Breaking Capacity ($\cos\phi = 0,8$; 50 Hz)		
3600 V	[A]	400
1800 V	[A]	800
900 V	[A]	1160
Component Category / Operational Frequency Class		A2 / C3
Rated Short Time Withstand Current	[kA]	8 (for 5 ms)
Critical Current Range	[A]	None
Fault Making Capacity	[kA]	4.8
Blow Out Circuit Type		Indirect Coil with Arcing Contact

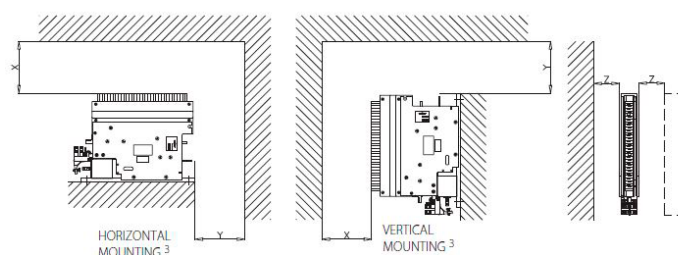
² Device cabled according IEC 60947

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

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

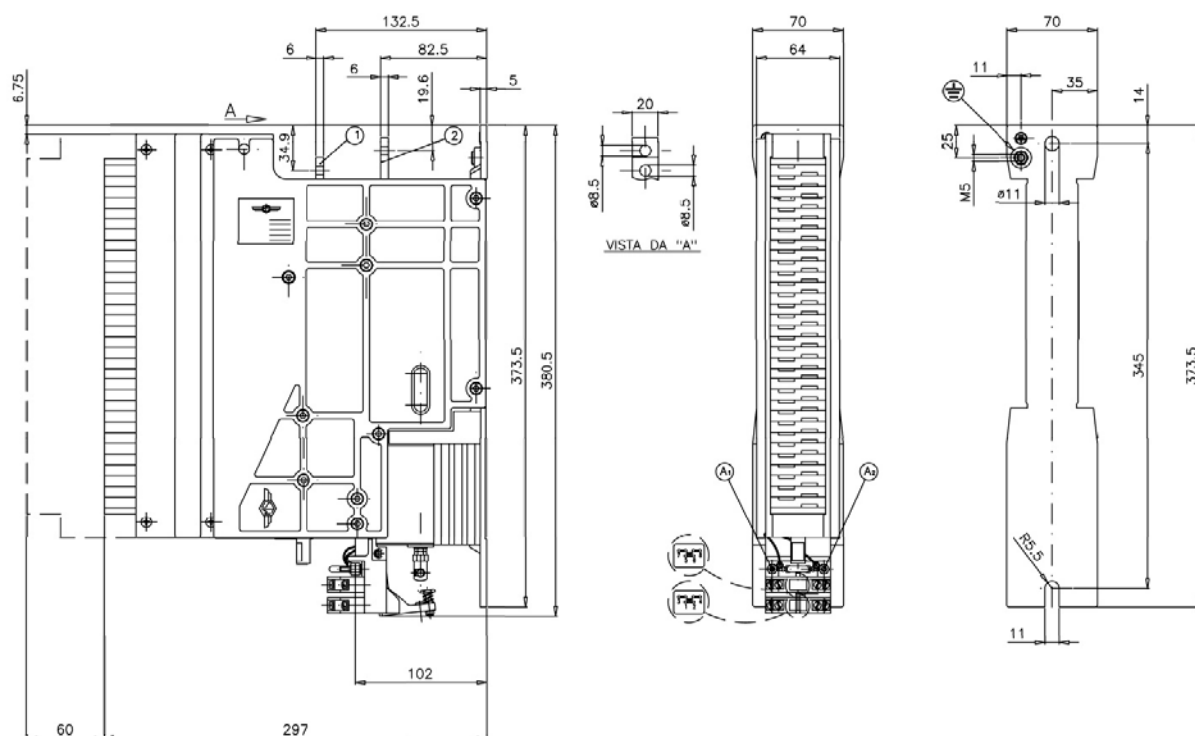
Minimum clearances [mm] from:				
Rated Operational Voltage		X	Y	Z
900 V	Metal Parts	100	50	30
	Plastic Parts	50	30	20



Mechanical Characteristics		
Mechanical Endurance	[cycles]	2 x 10 ⁶
Shock and Vibrations (IEC 61373)		Cat.1 - Class B
Weight	[kg]	9
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]	35 - 35
Mechanical Operation Time (U _c and T = 20 °C) when Closing - Opening	[ms]	100 - 25
Time Constant (L/R) at Pick Up - when Holding	[ms]	30 - 80
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



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

Microelettrica Scientifica S.p.A.

20090 Buccinasco (MI) , Via Lucania 2, Italy

Tel.: +39 02 575731

E-mail: info@microelettrica.com

www.microelettrica.com



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