

## SWITCHES

## STANDARD FAMILY CODE LTHS06501DAA0

Family Type	LTHS 650
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	PBX
Arc-chute Material	Ceramic
Main Contacts Tips Material	S6
Arcing Contacts Tips Material	-
Electric Diagram	-
Layout Drawing	D54583

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



## Description

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

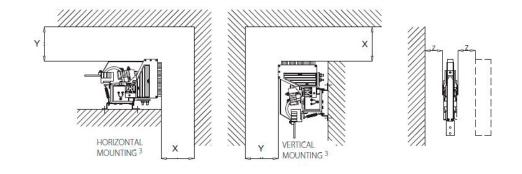
Rated Operational Voltage (AC / DC)	Rated Operational Voltage (AC / DC)			1800 / 900
Max Operational Voltage (AC / DC)				2000
Rated Insulation Voltage		[V]		2000
Rated Impulse Voltage		[kV]		12
Rated Power Frequency Withstand Voltage (50 Hz for	60 s)			
Between HV to LV Circuit + Earth		[V]		6000
Between Open Contacts	Between Open Contacts			4700
Between Each Pole (if more than 1)		[V]		-
Between LV Circuit and Earth		[V]		1500
Minimum Clearance Distance between Open Contact	s	[mm]		16
Minimum Clearance Distance between Power Circuit	to Earth	[mm]		14
Minimum Creepage Distance between Power Circuit t	cuit to Earth [mm			25
Comparative Tracking Index (CTI) (IEC 60112)		[V]		600
Electrical Characteristics				
Conventional Free Air Thermal Current at 40 °C <sup>2</sup>	[A]		700	
Conventional Free Air Thermal Current at 75 °C <sup>2</sup>	[A]		650	
DC - Rated Operational Current ( $\tau = 15 \text{ ms}$ )				
1800 V	[A]		600	
900 V	[A]		1200	
DC - Maximum Breaking Capacity ( $\tau = 5 \text{ ms}$ )				
1800 V	[A]		800	
900 V	[A]		2000	
AC - Maximum Breaking Capacity ( $\cos \varphi = 0.8$ ; 50 Hz)				
1800 V	[A]		1600	
900 V	[A]		3200	
Component Category / Operational Frequency Class			A2 / C3	
Rated Short Time Withstand Current	[kA]		12 (for	5 ms)
Critical Current Range	[A]		< 50 (U	> 1500 VDC)
entreal current hunge				
Fault Making Capacity	[kA]		7.2	

<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 Op Voltage	perational	х	Y	z
1800 V	Metal Parts	120	50	50
	Plastic Parts	50	30	20

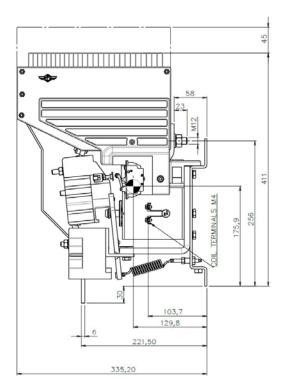
Minimum clearances [mm] from:				
Rated Op Voltage	perational	х	Y	Z
900 V	Metal Parts	100	50	30
	Plastic Parts	50	30	20

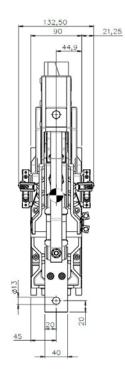


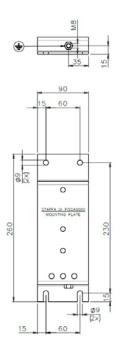
Mechanical Characteristics		
Mechanical Endurance	[cycles]	2 x 10 <sup>6</sup>
Shock and Vibrations (IEC 61373)		Cat.1 - Class B
Weight	[kg]	15
Control Circuit		
Control Voltage Range	[V]	0.7Uc ÷ 1.25Uc
Power Consumption (Uc and T = 20 °C) at Pick Up - when Holding	[W]	50 - 50
Mechanical Operation Time (Uc and $T = 20 \degree C$ ) when Closing - Opening	[ms]	210 - 40
Time Constant (L/R) at Pick Up - when Holding	[ms]	170 - 190
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 IEC 50125-1







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

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