

## SWITCHES

## STANDARD FAMILY CODE LTCH12501\*A00

Family Type	LTCH 1250
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	SL
Arc-chute Material	Ceramic
Main Contacts Tips Material	S6
Arcing Contacts Tips Material	S8
Electric Diagram	SC27207
Layout Drawing	D56476

 $<sup>^{\</sup>scriptscriptstyle 1}\,\text{To}$  be specified in order phase.



## Description

Contactor with double interruption in air, electromagnetic control by starter power savew system for double winding coil. Single state functioning. Reference Standards IEC 60077, IEC 61992 and IEC 60947.

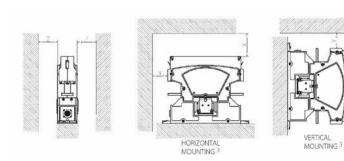
Insulation Characteristics			
Rated Operational Voltage (AC / DC)	[V]	1800 / 900	
Max Operational Voltage (AC / DC)	[V]	2000	
Rated Insulation Voltage	[V]	2000	
Rated Impulse Voltage	[kV]	12	
Rated Power Frequency Withstand Voltage (50 Hz for 60 s)			
Between HV to LV Circuit + Earth	[V]	6000	
Between Open Contacts	[V]	4700	
Between Each Pole (if more than 1)	[V]	-	
Between LV Circuit and Earth	[V]	1500	
Minimum Clearance Distance between Open Contacts	[mm]	14	
Minimum Clearance Distance between Power Circuit to Earth	[mm]	14	
Minimum Creepage Distance between Power Circuit 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]	1250	
Conventional Free Air Thermal Current at 75 °C <sup>2</sup>	[A]	1150	
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]	2200 (2500 @1ms)	
900 V	[A]	3500	
AC - Maximum Breaking Capacity ( $cos\phi = 0.8$ ; 50 Hz)			
1800 V	[A]	1600	
900 V	[A]	3200	
Component Category / Operational Frequency Class		A2/C3	
Rated Short Time Withstand Current	[kA]	20 (for 100 ms)	
Critical Current Range	[A]	None	
Fault Making Capacity	[kA]	20	
Blow Out Circuit Type		Indirect Coil with Arcing Contact	

<sup>&</sup>lt;sup>2</sup> Device cabled according IEC 60947

<sup>&</sup>lt;sup>3</sup> Other mounting positions not allowed, reduced distances should be approved by Microelettrica

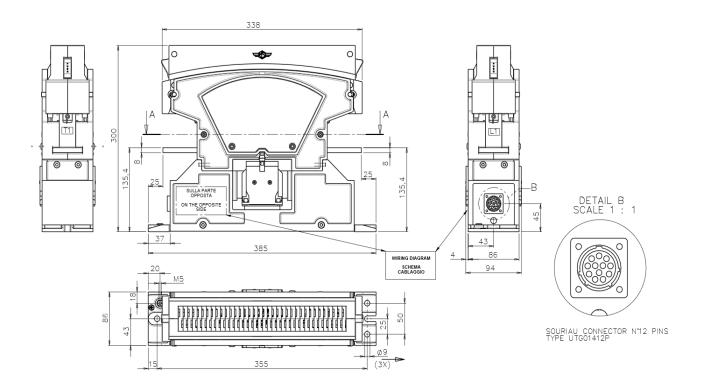
Minimum clearances [mm] from:				
Rated Operational Voltage		X	Υ	Z
1800 V	Metal Parts	120	50	50
	Plastic Parts	50	30	20

Minimum clearances [mm] from:				
Rated Operational Voltage		X	Υ	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]	10,3		
Control Circuit				
Control Voltage Range	[V]	0.7Uc ÷ 1.25Uc		
Power Consumption (Uc and T = 20 $^{\circ}$ C) at Pick Up - when Holding	[W]	300 - 10		
Mechanical Operation Time (Uc and T = $20 ^{\circ}$ C) when Closing - Opening	[ms]	150 - 40		
Time Constant (L/R) at Pick Up - when Holding	[ms]	5 - 5		
Electrical Connections		Burndy Connector 12 pins		
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)4		
Electrical Connections		Fast-on 6.35 x 0.8 mm		
Environmental Conditions				
Stock Temperature Range	[°C]	-50 ÷ +85		
Operational Temperature Range	[°C]	$Tx (-40 \div +75)^5$		
Pollution Degree - Overvoltage Category (EN 50124-1)		PD3 - OV3		
Max Altitude without Performance Derating	[m]	2000		

<sup>&</sup>lt;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  $^{\rm 5}$  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

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