

SWITCHES

STANDARD FAMILY CODE LTHS15003*A02

Family Type	LTHS 1500
Number / Type of Poles	3 / 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	SL
Arc-chute Material	Ceramic
Main Contacts Tips Material	S6
Arcing Contacts Tips Material	-
Electric Diagram	SC27483
Layout Drawing	D53176

¹ To be specified in order phase.



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Description

Contacteur with single interruption in air, electromagnetic control by starter power system plus saving resistor. Single state functioning. Reference Standard IEC 60077.

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]	30
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]	6000
Between LV Circuit and Earth	[V]	1500
Minimum Clearance Distance between Open Contacts	[mm]	16
Minimum Clearance Distance between Power Circuit to Earth	[mm]	30
Minimum Creepage Distance between Power Circuit to Earth	[mm]	80
Comparative Tracking Index (CTI) (IEC 60112)	[V]	600
Electrical Characteristics		
Conventional Free Air Thermal Current at 40 °C ²	[A]	1350
Conventional Free Air Thermal Current at 75 °C ²	[A]	1250
DC - Rated Operational Current ($\tau = 15$ ms)		
1800 V	[A]	-
900 V	[A]	-
DC - Maximum Breaking Capacity ($\tau = 5$ ms)		
1800 V	[A]	-
900 V	[A]	-
AC-Maximum Breaking Capacity ($\cos\phi = 0,8$; 50 Hz)		
1800 V	[A]	2300
900 V	[A]	5000
Component Category / Operational Frequency Class		A2 / C3
Rated Short Time Withstand Current	[kA]	9 (for 100 ms)
Critical Current Range	[A]	None for AC; <50 (U > 1500 VDC)
Fault Making Capacity	[kA]	8
Blow Out Circuit Type		Indirect coil

² Device cabled according IEC 60947

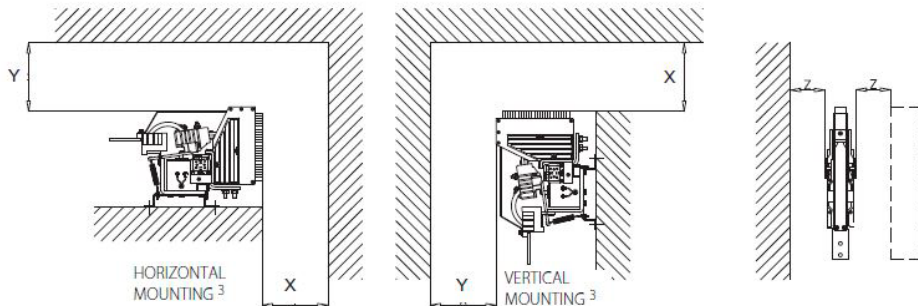
³ Other mounting positions not allowed, reduced distances should be approved by Microelettrica

Minimum clearances [mm] from:

Rated Operational Voltage		X	Y	Z
1800 V	Metal Parts	120	50	40
	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]	2×10^6
Shock and Vibrations (IEC 61373)		Cat.1 - Class B
Weight	[kg]	42

Control Circuit

Control Voltage Range	[V]	$0.7U_c \div 1.25U_c$
Power Consumption (U_c and $T = 20^\circ\text{C}$) at Pick Up - when Holding	[W]	150 - 70
Mechanical Operation Time (U_c and $T = 20^\circ\text{C}$) when Closing - Opening	[ms]	200 - 60
Time Constant (L/R) at Pick Up - when Holding	[ms]	5 - 5
Electrical Connections		Fast-on 6.35 x 0.8 mm

Auxiliary Contact

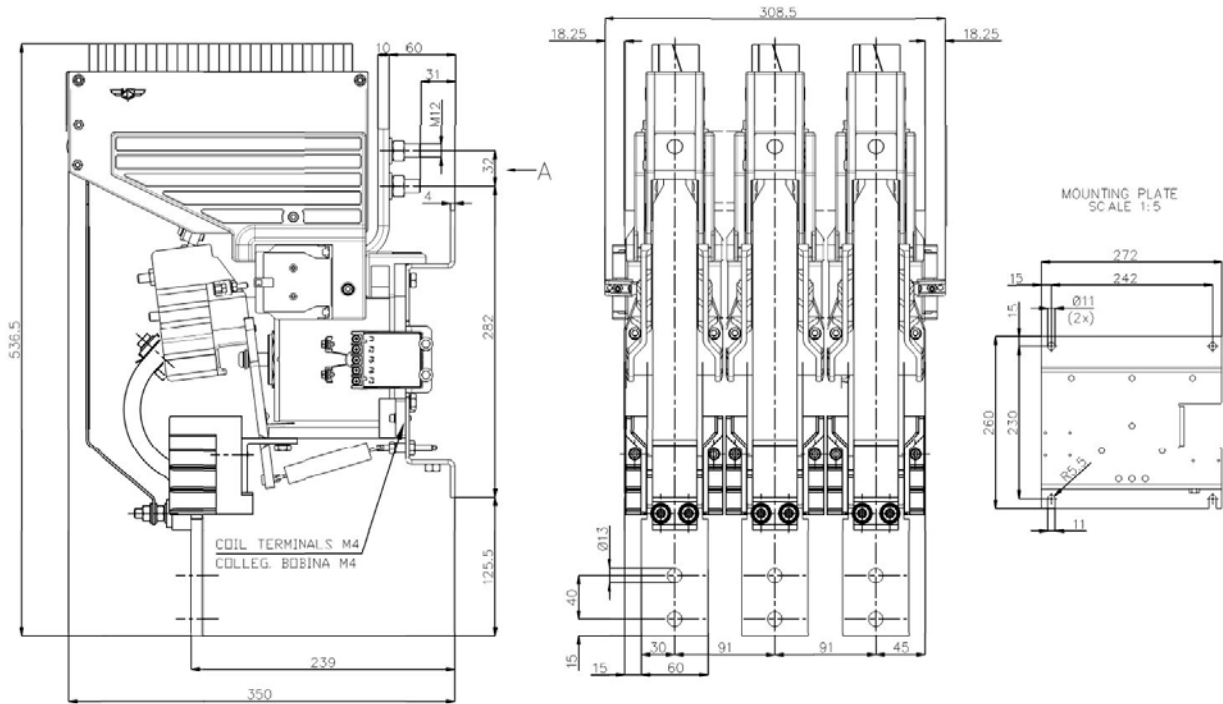
Rated Operational Voltage (AC / DC)	[V]	250
Conventional Free Air Thermal Current at 40°C	[A]	10
Tips Material		Silver Alloy (Optional: Golden Plated)
Minimum Let-through Current at 24 - 72 - 110 VDC ⁴	[mA]	20(10) - 15(7.5) - 10(5) ⁴
Electrical Connections		Fast-on 6.35 x 0.8 mm

Environmental Conditions

Stock Temperature Range	[°C]	$-50 \div +85$
Operational Temperature Range	[°C]	$T_x (-40 \div +75)^5$
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

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