

# SWITCHES

## STANDARD FAMILY CODE LTHM15002XA00

Type	LTHMU 1500
Number of Poles	2 NO
Mounting Position	Horizontal - Vertical <sup>1</sup>
Control Voltage Rating [V <sup>dc</sup> ]	24 - 36 - 72 - 110 <sup>1</sup>
Customer Auxiliary Blocks	2 (1 NO + 1 NC)
Feedback Signal Scope	AUX B (a0, b0)
	AUX D (a1, b1)
Block Type	PBX
Contact Material	Cu
Electric Diagram	SC27702
Layout Drawing	D55169

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



**MICROELETTRICA**

## Description

Disconnecter switch, electric motor control with 1 auxiliary relay, 2 positions, bi-stable.  
Reference standard IEC 60077-2(2017), IEC 61992 and IEC 60947.

### Electrical Characteristics

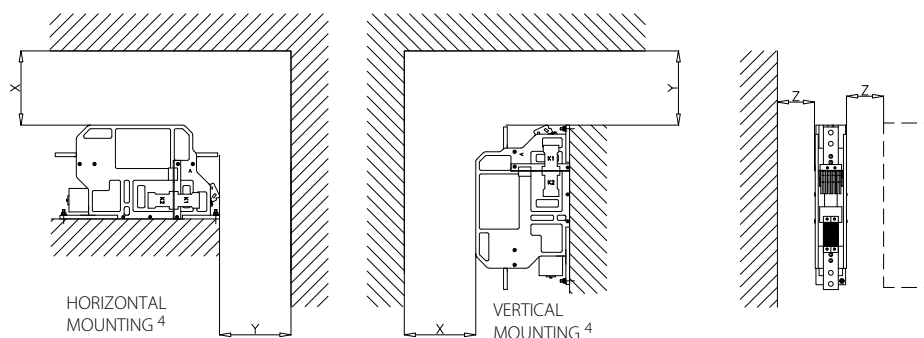
Rated Operational Voltage [ $V_{ac}$ / $V_{dc}$ ]	3600
Max Operational Voltage [ $V_{ac}$ / $V_{dc}$ ]	4000
Conventional Free Air Thermal Current [A] at 40°C <sup>2</sup>	1500
Conventional Free Air Thermal Current [A] at 75°C <sup>2</sup>	1350
Main circuit resistance [ $\mu\Omega$ ] <sup>3</sup>	60
DC-Rated Operational Current ( $\tau=15ms$ ) [A]	0
DC-Maximum Breaking Capacity ( $\tau=5ms$ ) [A]	0.2
AC-Maximum Breaking Capacity ( $\cos\phi=0,8$ ) [A]	0.5
Short Circuit Withstand Capacity for 5ms [kA]	140
Component Category / Operational Frequency Class	A4 / C3

### Insulation Characteristics

Rated Insulation Voltage [V]	4000
Pollution Degree - Overvoltage Category (EN 50124-1)	PD3/OV3
Rated impulse voltage [kV]	30
Rated Power Frequency Withstand Voltage (50Hz; 60")	
Between HV to LV circuit + Earth [V]	10000
Between open contacts [V]	7900
Between each pole (if more than 1) [V]	10000
Between LV circuit to Earth [V]	1500
Minimum clearance distance Between open contacts [mm]	32
Minimum clearance distance between power circuit to earth [mm]	40
Minimum creepage distance	50
Comparative Tracking Index (CTI) (IEC 60112) [V]	600

<sup>2</sup> Device cabled according IEC 60947 <sup>3</sup> In new and clean condition for power loss calculation only

<sup>4</sup> Other mounting positions not allowed, reduced distances should be approved by Microelettrica.



### Minimum clearances [mm] from:

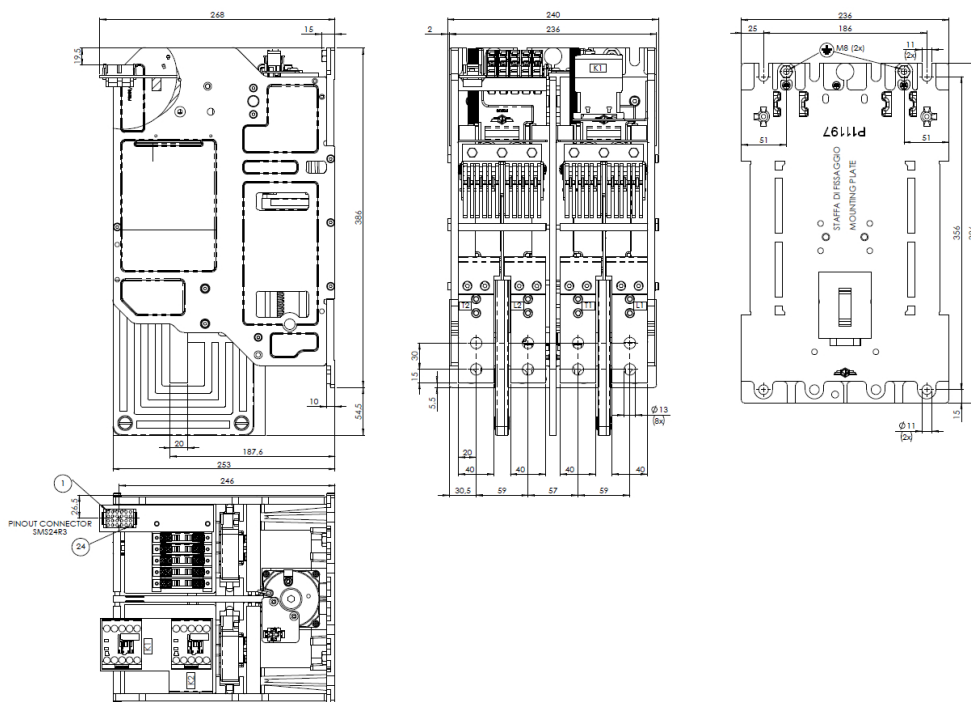
Rated Operational Voltage		X	Y	Z
4000V	Metal Parts	50	50	30
	Plastic Parts	30	30	30

Mechanical Characteristics	
Mechanical Endurance (cycles)	2.5x10 <sup>5</sup>
Shock and Vibrations (IEC61373)	Cat. 1 - Class B
Weight [kg]	18.5
Control Circuit	
Control Voltage Range	0.7U <sub>c</sub> ÷ 1.25U <sub>c</sub>
Power Consumption (U <sub>c</sub> and T = 20°C) at Pick Up - when Holding [W]	35 - 0
Mechanical Operation Time (U <sub>c</sub> and T = 20°C) when Closing - Opening [ms]	3000 - 3000
Mechanical Operation Time (in the worst condition) [ms]	6000 - 6000
Electrical Connections	Low voltage SOURIAU SMS24R3
Auxiliary Contacts	
Rated Operational Voltage [V <sub>ac</sub> / V <sub>dc</sub> ]	250
Conventional Free Air Thermal Current [A] at 40° C	10
Tips material Rated Current [A]	Silver Alloy (Optional: Golden Plated)
Minimum Let-Through Current at 24/72/110V <sub>dc</sub> [mA] <sup>5</sup>	20(10)/15(7.5)/10(5)
Electrical Connections	Low voltage SOURIAU SMS24R3
Environmental Conditions	
Stock Temperature Range	-50°C ÷ +85°C
Operational Temperature Range	Tx (-40°C ÷ +75°C) <sup>6</sup>
Max Altitude without Performance Derating [m]	2000

<sup>5</sup> Reference standard IEC 60947-5-4. Tested in a DRY and CLEAN condition with an LR load.

For different working conditions, please contact Microelettrica.

<sup>6</sup> In according to IEC50125-1



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](http://www.microelettrica.com)

**Microelettrica Scientifica S.p.A.**

20090 Buccinasco (MI) , Via Lucania 2, Italy

Tel.: +39 02 575731

E-mail: [info@microelettrica.com](mailto:info@microelettrica.com)

[www.microelettrica.com](http://www.microelettrica.com)



 **KNORR-BREMSE**

 **NEW YORK AIR BRAKE**

 **IFE**

 **MERAK**

 **MICROELETTRICA**

 **SELECTRON**

 **EVAC**

 **ZELISKO**

 **RAILSERVICES**