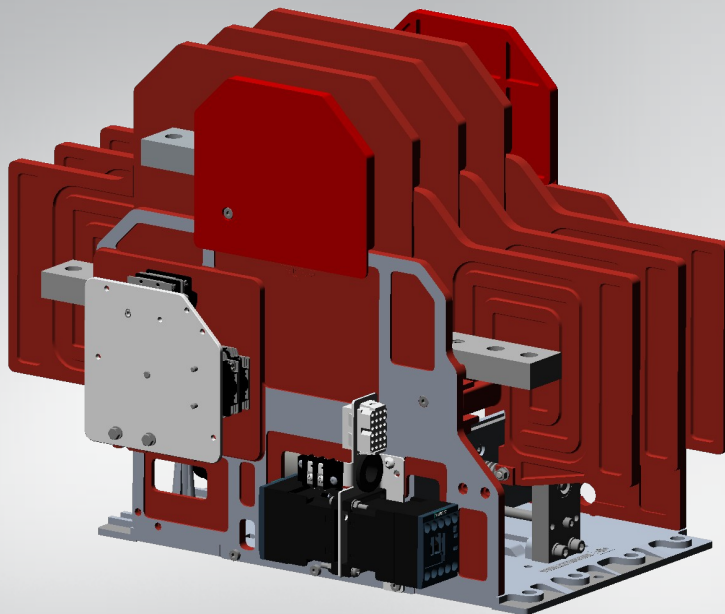




# SWITCHES

## STANDARD FAMILY CODE LTHM15014XA00

| Type                                      | LTHMD 1500                         |
|-------------------------------------------|------------------------------------|
| Number of Poles                           | 4 NO                               |
| Mounting Position                         | Horizontal - Vertical <sup>1</sup> |
| Control Voltage Rating [V <sup>dc</sup> ] | 24 - 36 - 72 - 110 <sup>1</sup>    |
| Auxiliary Contact Blocks                  | 4 ( 1 NO + 1 NC)                   |
| Feedback Signal Scope                     | AUX C (a0, b0)                     |
|                                           | AUX D (a1, b1)                     |
| Block Type                                | PBX                                |
| Main Contacts tips Material               | Cu                                 |
| Electric Diagram                          | SC27695                            |
| Layout Drawing                            | D56620                             |

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



**MICROELETTRICA**

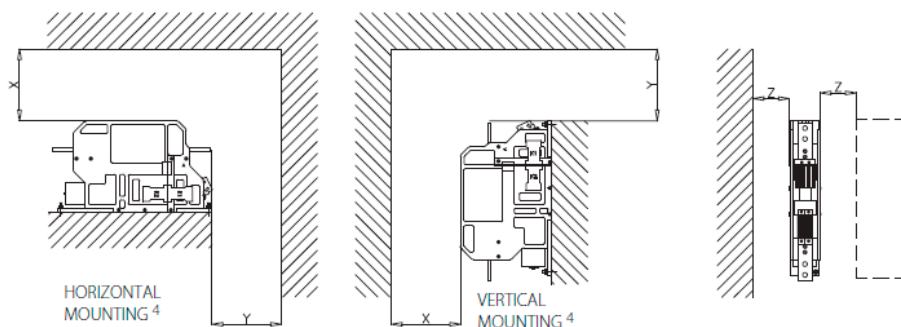
## Description

Disconnecter switch, electric motor control with 2 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 ( $\cos\phi=0,8$ ; 50Hz) [A]      | 0.5     |
| Short Circuit Withstand Capacity for 5ms [kA]                  | 100     |
| Component Category / Operational Frequency Class               | A4 / C3 |
| Insulation Characteristics                                     |         |
| Rated Insulation Voltage [V]                                   | 4000    |
| 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 clarence distance between power circuit to earth [mm]  | 40      |
| Minimum creepage distance [mm]                                 | 50      |
| Compartive 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.



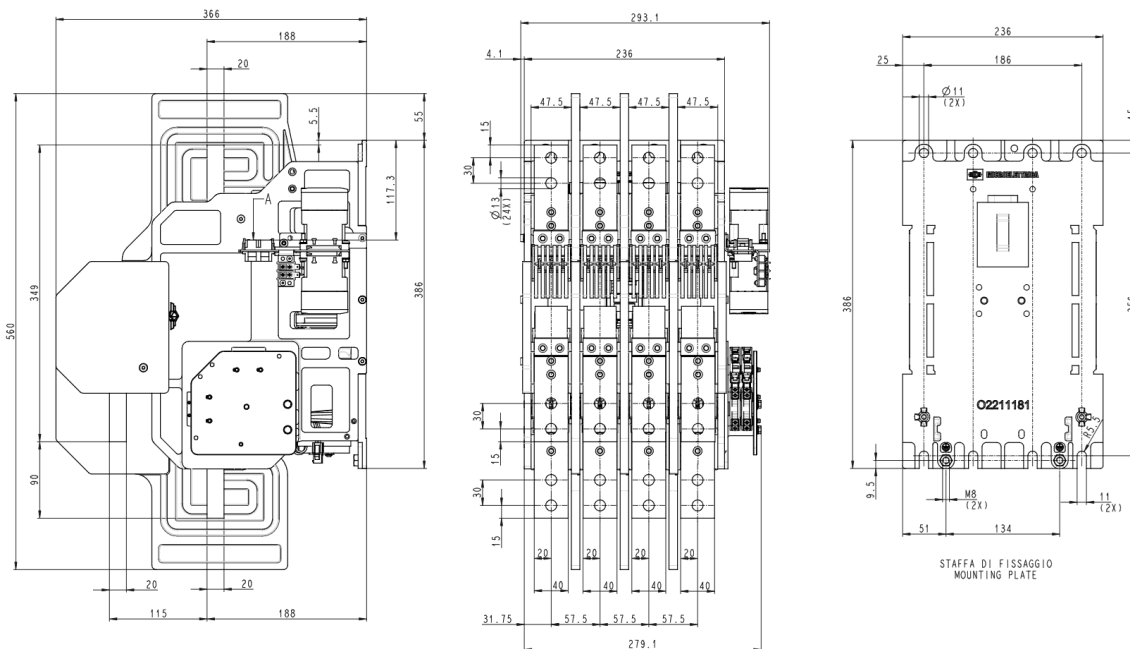
| Minimum clearances [mm] from: |               |    |    |    |
|-------------------------------|---------------|----|----|----|
| Rated Operational Voltage     |               | X  | Y  | Z  |
| 4000V                         | Metal Parts   | 50 | 50 | 30 |
|                               | Plastic Parts | 30 | 30 | 30 |

| Mechanical Characteristics                                                          |                                        |
|-------------------------------------------------------------------------------------|----------------------------------------|
| Mechanical Endurance (cycles)                                                       | 2.5x10 <sup>5</sup>                    |
| Shock and Vibrations (IEC61373)                                                     | Cat. 1 - Class B                       |
| Weight [kg]                                                                         | 33                                     |
| 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                                                              | Burndy SMS 24R3                        |
| 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                                                              | Burndy SMS 24R3                        |
| Environmental Conditions                                                            |                                        |
| Stock Temperature Range                                                             | -50°C ÷ +85°C                          |
| Operational Temperature Range                                                       | Tx (-40°C ÷ +75°C) <sup>6</sup>        |
| Pollution Degree - Overvoltage Category (EN 50124-1)                                | PD3/OV3                                |
| 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 condotions, 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)**

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