

# SWITCHES

## STANDARD FAMILY CODE LTHM30012XA00

| Туре                                      | LTHMD 3000                         |
|---|------------------------------------|
| 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)                    |
| Foodback Signal Scope                     | AUX C (a1, b1)                     |
| Feedback Signal Scope                     | AUX D (a0, b0)                     |
| Block Type                                | PBX                                |
| Contact Material                          | Cu                                 |
| Electric Diagram                          | SC27695                            |
| Layout Drawing                            | D56232                             |

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



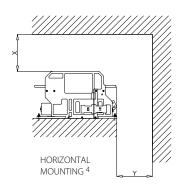
#### Description

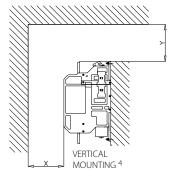
Disconnector switch, electric motor control with out auxiliary relay, 2 positions, bi-stable. Reference standard IEC 60077-2(2017), IEC 61992 and IEC 60947.

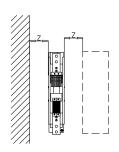
| Florida Champanistics   |   |  |  |
|---|---|--|--|
| Electrical Characteristics  |   |  |  |
| Rated Operational Voltage [Vac / Vdc]   | 3600  |  |  |
| Max Operational Voltage [Vac / Vdc]   | 4000  |  |  |
| Conventional Free Air Thermal Current [A] at 40°C <sup>2</sup>  | 3000  |  |  |
| Conventional Free Air Thermal Current [A] at 75°C <sup>2</sup>  | 2700  |  |  |
| Main circuit resistance $[\mu\Omega]^3$   | 40  |  |  |
| DC-Rated Operational Current ( τ=15ms) [A]  | 0   |  |  |
| DC-Maximum Breaking Capacity (τ=5ms) [A]  | 0.2   |  |  |
| AC-Maximum Breaking Capacity (cos φ=0,8) [A]  | 0.5   |  |  |
| Short Circuit Withstand Capacity for 5ms [kA]   | 140   |  |  |
| Component Category / Operational Frequency Class  | A4 / C3   |  |  |
| Insulation Characteristics  |   |  |  |
|   | 4000  |  |  |
| Rated Insulation Voltage [V]  | 4000  |  |  |
| Rated Insulation Voltage [V] Pollution Degree - Overvoltage Category (EN 50124-1)   | 4000<br>PD3/OV3                                 |  |  |
| 5 - 1   |   |  |  |
| Pollution Degree - Overvoltage Category (EN 50124-1)  | PD3/OV3   |  |  |
| Pollution Degree - Overvoltage Category (EN 50124-1) Rated impulse voltage [kV]   | PD3/OV3   |  |  |
| Pollution Degree - Overvoltage Category (EN 50124-1) Rated impulse voltage [kV] Rated Power Frequency Withstand Voltage (50Hz; 60")   | PD3/OV3<br>30                                   |  |  |
| Pollution Degree - Overvoltage Category (EN 50124-1) Rated impulse voltage [kV] Rated Power Frequency Withstand Voltage (50Hz; 60") Between HV to LV circuit + Earth [V]  | PD3/OV3<br>30<br>10000                          |  |  |
| Pollution Degree - Overvoltage Category (EN 50124-1) Rated impulse voltage [kV] Rated Power Frequency Withstand Voltage (50Hz; 60") Between HV to LV circuit + Earth [V] Between open contacts [V]  | PD3/OV3<br>30<br>10000<br>7900                  |  |  |
| Pollution Degree - Overvoltage Category (EN 50124-1) Rated impulse voltage [kV] Rated Power Frequency Withstand Voltage (50Hz; 60") Between HV to LV circuit + Earth [V] Between open contacts [V] Between each pole (if more than 1) [V]   | PD3/OV3<br>30<br>10000<br>7900<br>10000         |  |  |
| Pollution Degree - Overvoltage Category (EN 50124-1) Rated impulse voltage [kV] Rated Power Frequency Withstand Voltage (50Hz; 60") Between HV to LV circuit + Earth [V] Between open contacts [V] Between each pole (if more than 1) [V] Between LV circuit to Earth [V]   | PD3/OV3<br>30<br>10000<br>7900<br>10000<br>1500 |  |  |
| Pollution Degree - Overvoltage Category (EN 50124-1) Rated impulse voltage [kV] Rated Power Frequency Withstand Voltage (50Hz; 60") Between HV to LV circuit + Earth [V] Between open contacts [V] Between each pole (if more than 1) [V] Between LV circuit to Earth [V] Minimum clearance distance Between open contacts [mm] | PD3/OV3 30  10000 7900 10000 1500 32            |  |  |

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

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





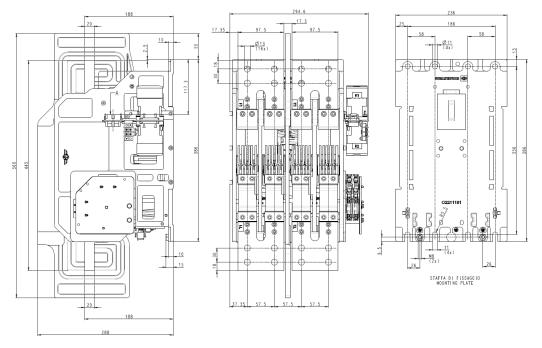


| Minimum clearances [mm] from: |               |    |    |    |
|-------------------------------|---------------|----|----|----|
| Rated Operational<br>Voltage  |               | X  | Υ  | Z  |
| 4000V                         | Metal Parts   | 50 | 50 | 30 |
|                               | Plastic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

| Mechanical Characteristics   |   |  |  |
|--|---|--|--|
| Mechanical Endurance (cycles)  | 2.5x10⁵                                   |  |  |
| Shock and Vibrations (IEC61373)  | Cat. 1 - Class B                          |  |  |
| Weight [kg]  | 35  |  |  |
| Control Circuit  |   |  |  |
| Control Voltage Range  | 0.7Uc ÷ 1.25Uc                            |  |  |
| Power Consumption (Uc and T = 20°C) at Pick Up - when Holding [W]                          | 35 - 0                                    |  |  |
| Mechanical Operation Time (U $_{\text{\tiny C}}$ and T = 20°C) when Closing - Opening [ms] | 3000 - 3000                               |  |  |
| Mechanical Operation Time (in the worst condition) [ms]                                    | 6000 - 6000                               |  |  |
| Electrical Connections   | Connector SOURIAU SMS24R3                 |  |  |
| Auxiliary Contacts   |   |  |  |
| Rated Operational Voltage [Vac / Vdc]  | 250                                       |  |  |
| onventional Free Air Thermal Current [A] at 40° C  |   |  |  |
| 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 Connector SOURIA  |   |  |  |
| Environmental Conditions   |   |  |  |
| Stock Temperature Range  | -50°C ÷ +85°C                             |  |  |
| Operational Temperature Range  | $Tx (-40^{\circ}C \div +75^{\circ}C)^{6}$ |  |  |
| Max Altitude without Performance Derating [m]  | 2000                                      |  |  |

<sup>&</sup>lt;sup>5</sup> Reference standard IEC 60947-5-4. Tested in a DRY and CLEAN condition with an LR load. For different working condiotions, please contact Microelettrica.

<sup>&</sup>lt;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

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