

SWITCHES

STANDARD FAMILY CODE LTHS08003DAA0

| Family Type | LTHS 800 |
|------------------------------------|--------------------------------------|
| 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 | PBX |
| Arc-chute Material | Ceramic |
| Main Contacts Tips Material | S6 |
| Arcing Contacts Tips Material | - |
| Electric Diagram | SC27219 |
| Layout Drawing | D53950 |

 $^{^{\}scriptscriptstyle 1}$ To be specified in order phase.



Description

Contactor with double interruption in air, electromagnetic control by starter power save system plus saving resistor. Reference Standards IEC 60077, IEC 61992 and IEC 60947.

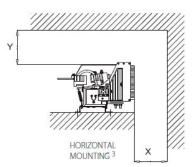
| Insulation Characteristics Rated Operational Voltage (AC / DC) | [V] | 1800 / 900 |
|---|--------|---------------|
| Max Operational Voltage (AC / DC) | [V] | 2000 |
| Rated Insulation Voltage | [V] | 2000 |
| Rated Impulse Voltage | [kV] | 12 |
| Rated Power Frequency Withstand Voltage (50 Hz for 60 s) | Free 1 | |
| 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] | 14 |
| Minimum Creepage Distance between Power Circuit to Earth | [mm] | 25 |
| Comparative Tracking Index (CTI) (IEC 60112) | [V] | 600 |
| lectrical Characteristics | | |
| Conventional Free Air Thermal Current at 40 °C² | [A] | 920 |
| onventional Free Air Thermal Current at 75 °C² | [A] | 800 |
| PC - Rated Operational Current ($\tau = 15 \text{ ms}$) | | |
| 1800 V | [A] | - |
| 900 V | [A] | - |
| DC - Maximum Breaking Capacity ($\tau = 5 \text{ ms}$) | | |
| 1800 V | [A] | - |
| 900 V | [A] | - |
| nC - Maximum Breaking Capacity (cosφ = 0,8; 50 Hz) | | |
| 1800 V | [A] | 1150 |
| 900 V | [A] | 2300 |
| omponent Category / Operational Frequency Class | | A2 / C3 |
| lated Short Time Withstand Current | [kA] | 12 (for 5 ms) |
| ritical Current Range | [A] | None |
| ault Making Capacity | [kA] | 7.2 |
| Blow Out Circuit Type | | Indirect Coil |

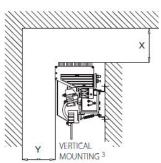
² Device cabled according IEC 60947

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

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

| Minimum clearances [mm] from: | | | | |
|-------------------------------|---------------|-----|----|----|
| Rated Operational Voltage | | X | Υ | Z |
| 0001/ | Metal Parts | 100 | 50 | 30 |
| 900 V | Plastic Parts | 50 | 30 | 20 |



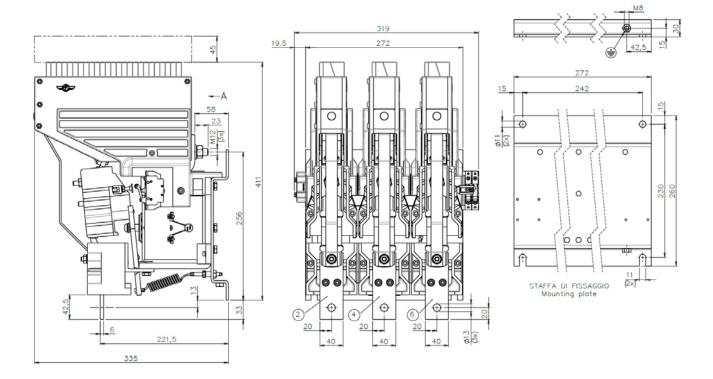


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| Mechanical Characteristics | | |
|---|----------|---|
| Mechanical Endurance | [cycles] | 2 x 10 ⁶ |
| Shock and Vibrations (IEC 61373) | | Cat.1 - Class B |
| Weight | [kg] | 38.5 |
| Control Circuit | | |
| Control Voltage Range | [V] | 0.7Uc ÷ 1.25Uc |
| Power Consumption (Uc and T = $20 ^{\circ}$ C) at Pick Up - when Holding | [W] | 100 - 60 |
| Mechanical Operation Time (Uc and T = $20 ^{\circ}$ C) when Closing - Opening | [ms] | 220 - 40 |
| 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 VDC⁴ | [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 |

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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