

## STANDARD FAMILY CODE LTCH10001\*A05

| Family Type                        | LTCH 1000                            |
|------------------------------------|--------------------------------------|
| Number / Type of Poles             | 1 / NO                               |
| Mounting Position                  | Horizontal - Vertical <sup>1</sup>   |
| Control Voltage Rating Uc (DC) [V] | 24 - 36 - 48 - 72 - 110 <sup>1</sup> |
| 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      | S8                                   |
| Electric Diagram                   | SC27207                              |
| Layout Drawing                     | D56339                               |

 $<sup>^{\</sup>scriptscriptstyle 1}\,\text{To}$  be specified in order phase.



## Description

Contactor with double interruption in air, electromagnetic control by starter power savew system for double winding coil. Single state functioning. Reference Standards IEC 60077, IEC 61992 and IEC 60947.

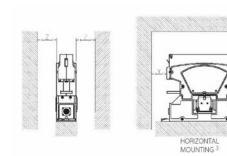
| Insulation Characteristics   | D/1  | 1000 / 000                           |
|--|------|--------------------------------------|
| Rated Operational Voltage (AC / DC)                                    | [V]  | 1800 / 900                           |
| Max Operational Voltage (AC / DC)                                      | [V]  | 2000                                 |
| Rated Insulation Voltage   | [V]  | 2000                                 |
| Rated Impulse Voltage  | [kV] | 12                                   |
| Rated Power Frequency Withstand Voltage (50 Hz for 60 s)               |      |                                      |
| Between HV to LV Circuit + Earth                                       | [V]  | 6000                                 |
| Between Open Contacts  | [V]  | 4700                                 |
| Between Each Pole (if more than 1)                                     | [V]  | -                                    |
| Between LV Circuit and Earth   | [V]  | 1500                                 |
| Minimum Clearance Distance between Open Contacts                       | [mm] | 14                                   |
| 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                                  |
| Electrical Characteristics   |      |                                      |
| Conventional Free Air Thermal  | [A]  | 1100                                 |
| Current at 40 °C <sup>2</sup>  | p q  | 1100                                 |
| Conventional Free Air Thermal<br>Current at 75 °C²                     | [A]  | 1000                                 |
| DC - Rated Operational Current<br>(τ = 15 ms)                          |      |                                      |
| 1800 V   | [A]  | 600                                  |
| 900 V  | [A]  | 1200                                 |
| DC - Maximum Breaking Capacity<br>(τ = 5 ms)                           |      |                                      |
| 1800 V   | [A]  | 1600                                 |
| 900 V  | [A]  | 3200                                 |
| AC - Maximum Breaking Capacity ( $\cos \varphi = 0.8; 50 \text{ Hz}$ ) |      |                                      |
| 1800 V   | [A]  | 1600                                 |
| 900 V  | [A]  | 3200                                 |
| Component Category / Operational<br>Frequency Class                    |      | A2 / C3                              |
| Rated Short Time Withstand Current                                     | [kA] | 20 (for 100 ms)                      |
| Critical Current Range   | [A]  | None                                 |
| Fault Making Capacity  | [kA] | 20                                   |
| Blow Out Circuit Type  |      | Indirect Coil with<br>Arcing Contact |

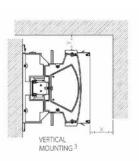
 $<sup>^{\</sup>scriptscriptstyle 2}$  Device cabled according IEC 60947

<sup>&</sup>lt;sup>3</sup> Other mounting positions not allowed, reduced distances should be approved by Microelettrica

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

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





| Mechanical Characteristics  |          |   |
|---|----------|---|
| Mechanical Endurance  | [cycles] | 2 x 10 <sup>6</sup>                       |
| Shock and Vibrations (IEC 61373)  |          | Cat.1 - Class B                           |
| Weight  | [kg]     | 9.9                                       |
| Control Circuit   |          |   |
| Control Voltage Range   | [V]      | 0.7Uc ÷ 1.25Uc                            |
| Power Consumption (Uc and T = $20  ^{\circ}$ C) at Pick Up - when Holding     | [W]      | 300 - 10                                  |
| Mechanical Operation Time (Uc and T = $20 ^{\circ}$ C) when Closing - Opening | [ms]     | 150 - 40                                  |
| Time Constant (L/R) at Pick Up - when Holding                                 | [ms]     | 5 - 5                                     |
| Electrical Connections  |          | Burndy Connector 12 pins                  |
| Auxiliary Contact   |          |   |
| Rated Operational Voltage (AC / DC)   | [V]      | 250                                       |
| Conventional Free Air Thermal Current at 40 °C                                | [A]      | 10  |
| Tips Material   |          | Silver Alloy<br>(Optional: Golden Plated) |
| Minimum Let-through Current at 24 - 72 - 110 VDC <sup>4</sup>                 | [mA]     | 20(10) - 15(7.5) - 10(5) <sup>4</sup>     |
| 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                                      |

<sup>&</sup>lt;sup>4</sup> 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  $^{\rm 5}$  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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