

## SWIICHES <br> $\square$

## STANDARD FAMILY CODE LTHH00401*A05

|  |  |
| :--- | :--- |
| Family Type | LTHH 40 |
| Number / Type of Poles | 1 / NO |
| Mounting Position | Horizontal - Vertical ${ }^{1}$ |
| Control Voltage Rating Uc (DC) [V] | $24-36-48-72-110^{1}$ |
| Auxiliary Contact Blocks | $2 \times(1$ NO +1 NC $)$ |
| Block Type | SJ |
| Arc-chute Material | Ceramic |
| Main Contacts Tips Material | S6 |
| Arcing Contacts Tips Material | S6 |
| Electric Diagram | - |
| Layout Drawing | D46682 |

[^0]
## Description

Contactor with single interruption in air, electromagnetic control by full power coil. Single state functioning.
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 ) |  |  |  |
| 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] | 15 |
| 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 Current at $40^{\circ} \mathrm{C}^{2}$ | [A] |  | 60 |
| Conventional Free Air Thermal Current at $75^{\circ} \mathrm{C}^{2}$ | [A] |  | 40 |
| DC - Rated Operational Current ( $\mathrm{\tau}=15 \mathrm{~ms}$ ) |  |  |  |
| 1800 V | [A] |  | 50 |
| 900 V | [A] |  | 100 |
| DC - Maximum Breaking Capacity ( $\tau=5 \mathrm{~ms}$ ) |  |  |  |
| 1800 V | [A] |  | 60 |
| 900 V | [A] |  | 115 |
| AC - Maximum Breaking Capacity ( $\cos \varphi=0,8 ; 50 \mathrm{~Hz}$ ) |  |  |  |
| 1800 V | [A] |  | 80 |
| 900 V | [A] |  | 160 |
| Component Category / Operational Frequency Class |  |  | A2 / C3 |
| Rated Short Time Withstand Current | [kA] |  | 2 (for 5 ms ) |
| Critical Current Range | [A] |  | < 5 ( $\mathrm{l}>1500 \mathrm{VDC}$ ) |
| Fault Making Capacity | [kA] |  | 1.2 |
| Blow Out Circuit Type |  |  | Indirect Coil with Arcing Contact |


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


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



## Mechanical Characteristics

| Mechanical Endurance | [cycles] | $2 \times 10^{6}$ |
| :---: | :---: | :---: |
| Shock and Vibrations (IEC 61373) |  | Cat. 1 - Class B |
| Weight | [kg] | 1.6 |
| Control Circuit |  |  |
| Control Voltage Range | [V] | 0.7Uc $\div 1.25 \mathrm{Uc}$ |
| Power Consumption ( Uc and $\mathrm{T}=20^{\circ} \mathrm{C}$ ) at Pick Up - when Holding | [W] | 12-12 |
| Mechanical Operation Time (Uc and T $=20^{\circ} \mathrm{C}$ ) when Closing-Opening | [ms] | 50-25 |
| Time Constant (L/R) at Pick Up - when Holding | [ms] | 25-50 |
| Electrical Connections |  | Fast-on $6.35 \times 0.8 \mathrm{~mm}$ |
| Auxiliary Contact |  |  |
| Rated Operational Voltage (AC / DC) | [V] | 250 |
| Conventional Free Air Thermal Current at $40^{\circ} \mathrm{C}$ | [A] | 10 |
| Tips Material |  | Silver Alloy <br> (Optional: Golden Plated) |
| Minimum Let-through Current at 24-72-110 VDC ${ }^{4}$ | [mA] | 20(10) - 15(7.5) - 10(5) ${ }^{4}$ |
| Electrical Connections |  | Fast-on $6.35 \times 0.8 \mathrm{~mm}$ |
| Environmental Conditions |  |  |
| Stock Temperature Range | $\left[{ }^{\circ} \mathrm{C}\right]$ | $-50 \div+85$ |
| Operational Temperature Range | $\left[{ }^{\circ} \mathrm{C}\right]$ | Tx $(-40 \div+75)^{5}$ |
| Pollution Degree - Overvoltage Category (EN 50124-1) |  | PD3-OV3 |
| Max Altitude without Performance Derating | [m] | 2000 |

[^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

| (10) KNORR-BREMSE | (13) SELECTRON |
| :---: | :---: |
| (1)] NEW YORK AIR BRAKE | (18) KIEPE ELECTRIC |
| (1)] IFE | (10) ${ }^{\text {a }}$ EVAC |
| M(1)] MERAK | (10) ZELISKO |
| (al) MICROELETTRICA | (10) RAILSERVICES |


[^0]:    To be specified in order phase.

[^1]:    ${ }^{4}$ 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

