

## Switches

## Standard Family Code LTC002503\*A01



Description

Contactor with double interruption in air, electromagnetic control by delayed auxiliary switch power system for double winding coil. Single state functioning.

Reference Standard IEC 60077, IEC 61992 and IEC 60947.

| Type                            | LTCS 250 or LTCH 250                   |
|---------------------------------|--|
| Number of Poles                 | 3 NO                                   |
| Mounting Position               | Horizontal - Vertical <sup>1</sup>     |
| Control Voltage Rating Uc [Vdc] | 24 - 36 - 48 - 72 - 110 <sup>1</sup>   |
| Auxiliary Contact Blocks        | 2 (1 NO + 1 NC)                        |
| Block Type                      | SL                                     |
| Arc chute Material              | Polyester Resin - Ceramic <sup>1</sup> |
| Main Contacts tips Material     | S6                                     |
| Arcing Contacts tips Material   | -                                      |
| Electric Diagram                | -                                      |
| Polyester Resin Layout Drawing  | D47488                                 |
| Ceramic Layout Drawing          | D47612                                 |

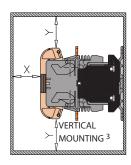
<sup>&</sup>lt;sup>1</sup> To be specified in order phase.

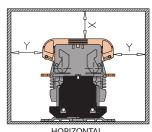
| Electrical Characteristics                                     |                              |                   |  |
|--|------------------------------|-------------------|--|
| Rated Operational Voltage [Vac / Vdc]                          | 440 /900 / 1800 <sup>1</sup> |                   |  |
| Max Operational Voltage [Vac / Vdc]                            | 2000                         |                   |  |
| Rated Insulation Voltage [V]                                   | 2000                         |                   |  |
| Conventional Free Air Thermal Current [A] at 40°C <sup>2</sup> | 250                          |                   |  |
| Conventional Free Air Thermal Current [A] at 75°C <sup>2</sup> | 200                          |                   |  |
|  | Polyester Resin arc chute    | Ceramic arc chute |  |
|  |                              |                   |  |
| AC-Maximum Breaking Capacity (cosφ=0,8; 50Hz) [kVA]            |                              |                   |  |
| 1800V  | 60                           | 72                |  |
| 900V   | 250                          | 300               |  |
| 440V   | 320                          | 400               |  |
| Component Category / Operational Frequency Class               | A2 / C3                      |                   |  |
| Short Circuit Withstand Capacity for 5ms [kA]                  | 4                            |                   |  |
| Critical Current Range [A]                                     | DC Reverse current           |                   |  |
| Fault Making Capacity [kA]                                     | 2.4                          |                   |  |
| Blow Out Circuit Type  | Permanent Magnet             |                   |  |

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

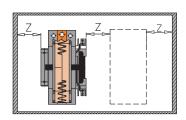
| Minimum clearances [mm] from: |               |    |    |    |
|-------------------------------|---------------|----|----|----|
| Rated Operational Voltage     |               | Х  | Υ  | Z  |
| 900V                          | Metal Parts   | 80 | 80 | 20 |
|                               | Plastic Parts | 50 | 50 | 0  |

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





HORIZONTAL MOUNTING <sup>3</sup>



<sup>&</sup>lt;sup>3</sup> OTHER MOUNTING POSITIONS NOT ALLOWED

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| Mechanical Characteristics            |                   |
|---------------------------------------|-------------------|
| Mechanical Endurance (cycles)         | 2x10 <sup>6</sup> |
| Shock and Vibrations (IEC61373)       | Cat.1 - Class B   |
| Weight Poliester Resin / Ceramic [kg] | 6.5 / 5           |

| Control Circuit   |                    |
|---|--------------------|
| Control Voltage Range   | 0.7Uc ÷ 1.25Uc     |
| Power Consumption (U <sub>c</sub> and $T = 20$ °C) at Pick Up - when Holding [W]    | 100 - 20           |
| Mechanical Operation Time (U <sub>c</sub> and T = 20°C) when Closing - Opening [ms] | 50 - 20            |
| Time Constant (L/R) at Pick Up - when Holding [ms]                                  | 25 - 80            |
| Electrical Connections  | Fast-On 6.35x0.8mm |

| Auxiliary Contacts   |                    |
|--|--------------------|
| Tips material  | Solid Silver       |
| Rated Operational Voltage [Vac / Vdc]                            | 250                |
| Rated Current [A]  | 10                 |
| Minimum Switching Current at 16V <sub>dc</sub> [mA] <sup>4</sup> | 20                 |
| Electrical Connections   | Fast-On 6.35x0.8mm |

| Environmental Conditions                             |   |
|--|---|
| Stock Temperature Range                              | -50°C ÷ +85°C                             |
| Operational Temperature Range                        | $Tx (-40^{\circ}C \div +75^{\circ}C)^{5}$ |
| Pollution Degree - Overvoltage Category (EN 50124-1) | PD3 / OV3                                 |
| Max Altitude without Performance Derating [m]        | 2000                                      |

<sup>&</sup>lt;sup>4</sup> In clean and dry conditions <sup>5</sup> In according to IEC50125-1

Layout drawing for Polyester Resin arc chute

Layout drawing for Ceramic arc chute

