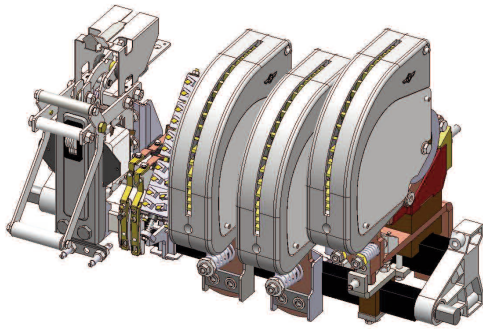


# Switches

## Standard Family Code TADN1000P3E01



### Description

Contactor with single interruption in air, electromagnetic control by two coils (one for close and one for open), and also handle lever.  
Double state functioning thanks to mechanical latching device.  
Reference standard ANSI-IEEE CE 37.18-1979 and C37.16-1988.

|   |                                      |
|---|--------------------------------------|
| Type  | TADN 1000                            |
| Number of Poles                             | 2 NO + 1 NC                          |
| Connection between poles                    | Series for NO pole <sup>1</sup>      |
| Mounting Position                           | Vertical                             |
| Control Voltage Rating U <sub>c</sub> [Vdc] | 110Vdc/Vac - 220Vdc/Vac <sup>1</sup> |
| Auxiliary Contact Blocks                    | 5 NO + 5 NC                          |
| Block Type                                  | B                                    |
| Arc chute Material                          | Ceramic in plastic shells            |
| Main Contacts tips Material                 | S6 (NO pole) - S4 (NC pole)          |
| Arcing Contacts tips Material               | -                                    |
| Electric Diagram 110V / 220V                | SCE1552 / SC26303                    |
| Layout Drawing                              | D53576                               |

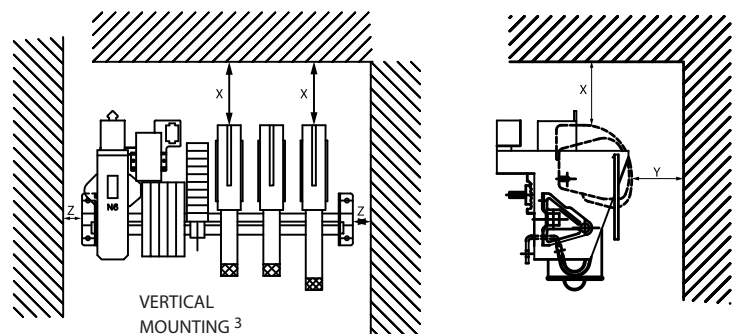
<sup>1</sup> To be specified in order phase.

### Electrical Characteristics

|   |        |
|---|--------|
| Rated Nominal Voltage Class V <sub>n</sub> [V <sub>ac</sub> / V <sub>dc</sub> ]   | 750    |
| Rated Insulation Voltage U <sub>i</sub> [V]   | 1000   |
| Characteristics of the main Contacts (2 Poles NO Series)  |        |
| Conventional Free Air Thermal Current I <sub>th</sub> [A] at 40°C <sup>2</sup>  | 1000   |
| Conventional Free Air Thermal Current I <sub>th</sub> [A] at 60°C <sup>2</sup>  | 870    |
| Rated short-time voltage of main contacts V' [V <sub>dc</sub> ]   | 700    |
| Rated interruption current I' <sub>cc</sub> of main contacts at V' (short-circuit in the field circuit) [kA]                | 15     |
| Rated maximum interrupting voltage of main contacts V <sub>cc</sub> [V <sub>dc</sub> ]                                      | 1000   |
| Rated interruption current I <sub>cc</sub> of main contacts at V <sub>cc</sub> (short-circuit in the armature circuit) [kA] | 8.5    |
| Rated 1/2 second short-time current I <sub>cc</sub> 0,5 [kA]  | 15     |
| Average impedance per pole at 50 Hz [μOhm]  | 335    |
| Blow out type   | Direct |
| Characteristics of Normally Closed Contact  |        |
| Rated continuous current I <sub>nd</sub> [A]  | 1000   |
| Rated interrupting current I <sub>ccd</sub> of the discharge contacts at V' [kA]  | 10     |
| Rated making current of the discharge contacts I <sub>chd</sub> (short-circuit in the armature circuit) [kA]                | 9      |
| Rated 15 seconds short-time current I <sub>d</sub> 15" [kA] of the discharge contacts                                       | 5.5    |
| Blow out type   | Direct |
| Contact Overlap between NO & NC Poles   |        |
| Time from NC closing and NO opening [ms]  | 2 ÷ 3  |
| Time from NO closing and NC opening [ms]  | 3 ÷ 5  |

<sup>2</sup> Device cabled according IEC 60947

| Minimum clearances [mm] from: |               |     |    |    |
|-------------------------------|---------------|-----|----|----|
| Rated Operational Voltage     | X             | Y   | Z  |    |
| 1000                          | Metal Parts   | 100 | 50 | 30 |
|                               | Plastic Parts | 50  | 30 | 20 |



<sup>3</sup> OTHER MOUNTING POSITIONS NOT ALLOWED



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# Switches

Standard Family Code  
TADN1000P3E01

## Mechanical Characteristics

|  |                     |
|--|---------------------|
| Mechanical Endurance (cycles) <sup>4</sup> | 2.5x10 <sup>5</sup> |
| Weight [kg]                                | 53                  |

## Control Circuit

|  |  |
|--|--|
| Control Voltage Range  | 0.85U <sub>c</sub> ÷ 1.1U <sub>c</sub> |
| Power Consumption (U <sub>c</sub> and T = 20°C) at Closing - When holding - at Opening [W] | 950 - 0 - 150                          |
| Mechanical Operation Time (U <sub>c</sub> and T = 20°C) when Closing - Opening [ms]        | 90 - 15                                |
| Mechanical Operation Time (in the worst condition) when Closing - Opening [ms]             | 350-20                                 |
| Time Constant (L/R) at Pick Up - when Holding [ms]   |  |
| Electrical Connections   | Terminal board                         |

## Auxiliary Contacts

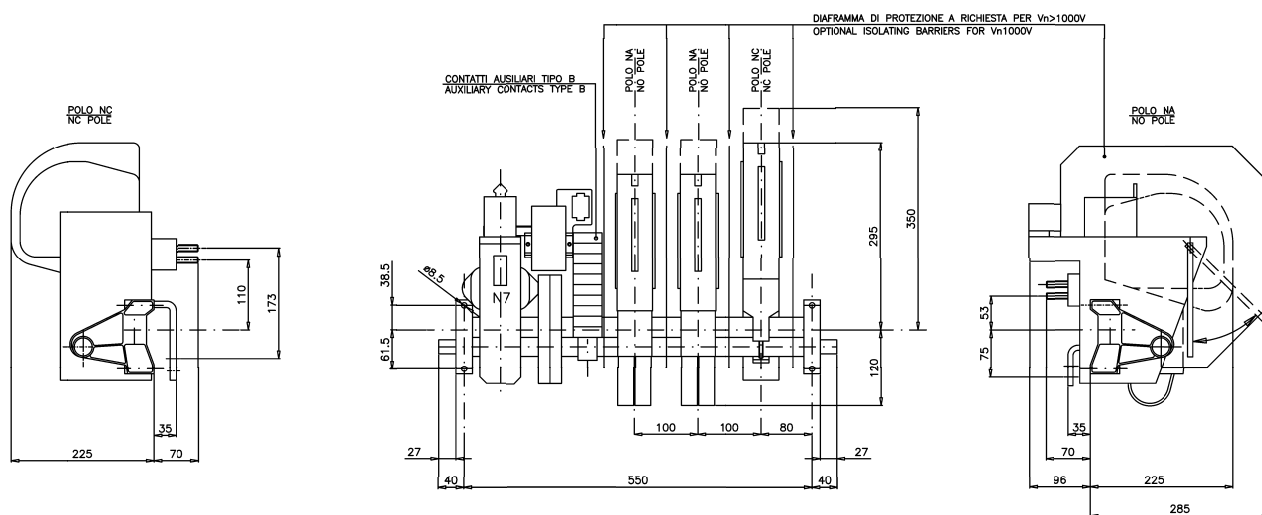
|  |                    |
|--|--------------------|
| Tips material  | Solid Silver       |
| Rated Operational Voltage [V <sub>ac</sub> / V <sub>ac</sub> ]   | 250                |
| Rated Current [A]  | 10                 |
| Minimum Switching Current at 16V <sub>ac</sub> [mA] <sup>5</sup> | 100                |
| Electrical Connections   | Fast-On 6.35x0.8mm |

## Environmental Conditions

|   |               |
|---|---------------|
| Stock Temperature Range                       | -25°C ÷ +60°C |
| Operational Temperature Range                 | -5°C ÷ +55°C  |
| Max Altitude without Performance Derating [m] | 2000          |

<sup>4</sup> With respect of the maintenance operations

<sup>5</sup> In clean and dry conditions



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