

# SWITCHES

## STANDARD FAMILY CODE N000650P2A01

Type	N 650
Number of Poles	2 NO
Connection between poles	Series <sup>1</sup>
Mounting Position	Vertical
Control Voltage Rating Uc [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
Arcing Contacts tips Material	-
Electric Diagram	TU0165/B (DC) - TU0165/C (AC)
Layout Drawing	D53386

<sup>1</sup> Series bar connections available under request

<sup>2</sup> To be specified in order phase.



**MICROELETTRICA**

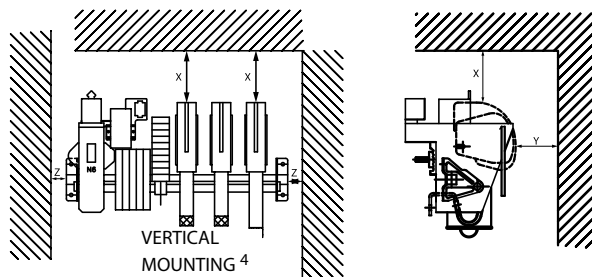
### Description

Contactor with single interruption in air, electromagnetic control by power save system (economy resistor).  
 Typical application DC Motor control. Reference Standard IEC 60947-4-1.

Electrical Characteristics					
Rated Operational Voltage Ue [Vdc]	220	440	660	750	1000
Rated Insulation Voltage Ui [Vdc]	1000				
Conventional Free air thermal current Ith [ at 40°C] <sup>3</sup>	650				
Conventional Free air thermal current Ith [ at 60°C] <sup>3</sup>	570				
Maximum Making Capacity for 100 ms Ich [kA]	10				
Short Circuit Withstand Current for 100 ms Icw [kA]	12				
Average impedance per pole at 50 Hz [MicroOhm]	300				
Blow out circuit type	Direct				
Electrical Characteristics 2NO poles series connected (S6) for DC application					
Rated Operational Voltage [Vdc]	220	440	660	750	1000
Maximum Breaking Capacity tau=15ms Idcmax [A]	9000	6000	5000	4400	3300
Utilization Category according to IEC60947-4-1: DC3					
Rated Operational Power Pe [kW]	143	286	429	487,5	600
Rated Operational Current Ie [A]	650	650	650	650	600
Utilization Category according to IEC60947-4-1: DC5					
Rated Operational Power Pe [kW]	143	286	413	413	0
Rated Operational Current Ie [A]	650	650	625	550	0

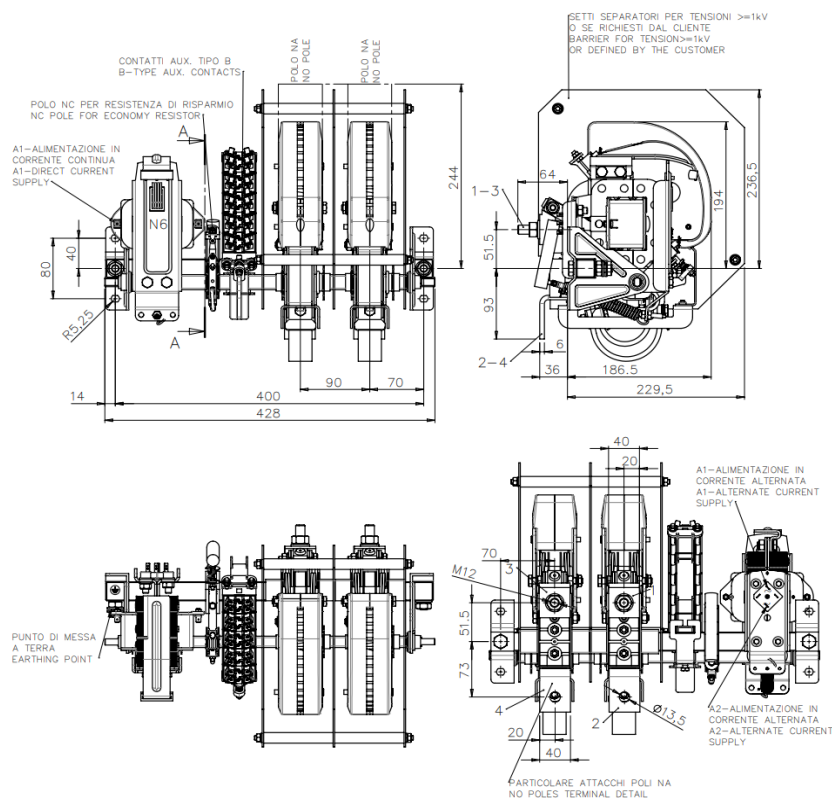
<sup>3</sup> Device cabled according IEC 60947    <sup>4</sup> Other mounting positions not allowed

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



Mechanical Characteristics	
Mechanical Endurance (cycles) <sup>4</sup>	1x10 <sup>6</sup>
Weight [kg]	23
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 - at Opening [W]	300-20
Mechanical Operation Time (U <sub>c</sub> and T = 20°C) when Closing - Opening [ms]	70-20
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	Fast-On 6.35x0.8mm
Auxiliary Contacts	
Tips material	Solid Silver
Rated Operational Voltage [V <sub>ac</sub> / V <sub>dc</sub> ]	250
Rated Current [A]	10
Minimum Switching Current at 16V <sub>dc</sub> [mA] <sup>6</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>5</sup>With respect of the maintenance operations      <sup>6</sup> In clean and dry conditions



The technical specifications reported are not binding and they should be agreed in the contract.

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