

# SWITCHES

## STANDARD FAMILY CODE N0002000P3A01

Type	N 2000
Number of Poles	3 NO
Connection between poles	None
Mounting Position	Vertical
Control Voltage Rating $U_c$ [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	S8
Electric Diagram	TU0165/B (DC) - TU0165/C (AC)
Layout Drawing	D53364

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



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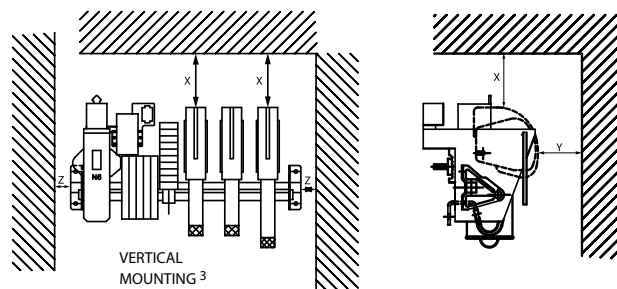
## Description

Contactors with single interruption in air, electromagnetic control by power save system (economy resistor).  
 Typical application 3 Phase AC Motor control. Reference Standard IEC 60947-4-1.

Electrical Characteristics				
Rated Operational Voltage $U_e$ [Vac]	220	380	600	690
Rated Insulation Voltage $U_i$ [Vac]	1000			
Conventional Free air thermal current $I_{th}$ [ at 40°C] <sup>2</sup>	2000			
Conventional Free air thermal current $I_{th}$ [ at 60°C] <sup>2</sup>	1750			
Maximum Making Capacity for 100 ms $I_{ch}$ [kA]	25			
Short Circuit Withstand Current for 100 ms $I_{cw}$ [kA]	30			
Average impedance per pole at 50 Hz [MicroOhm]	150			
Blow out circuit type	Indirect with arcing contact			
Electrical Characteristics 3NO pole (S6) for AC application				
Rated Operational Voltage $U_e$ [Vac]	220	380	600	690
Maximum Breaking Capacity $\cos\Phi=0,5$ $I_{acmax}$ [A]	38000	22000	17200	15000
Utilization Category according to IEC60947-4-1: AC1&AC2&AC3				
Rated Operational Power $P_e$ [kW]	520	900	1350	1350
Rated Operational Current $I_e$ [A]	1800	1800	1800	1414
Utilization Category according to IEC60947-4-1: AC4				
Rated Operational Power $P_e$ [kW]	470	810	1090	1090
Rated Operational Current $I_e$ [A]	1600	1600	1600	1141
Exceptional Maximum Breaking Capacity @ 1000Vac $\cos\Phi=0,5$ [A]	10000			

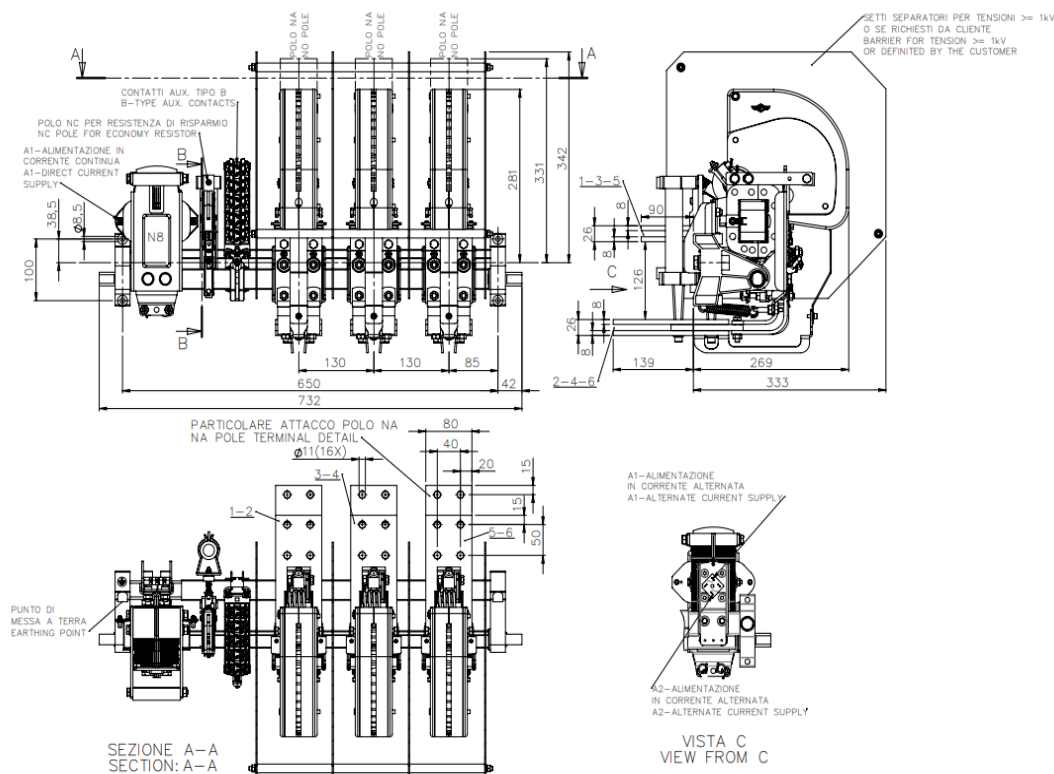
<sup>2</sup> Device cabled according IEC 60947 <sup>3</sup> Other mounting positions not allowed

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]	74
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]	1000-50
Mechanical Operation Time (U <sub>c</sub> and T = 20°C) when Closing - Opening [ms]	120-15
Mechanical Operation Time (in the worst condition) when Closing - Opening [ms]	450-20
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>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



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

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