

SWITCHES

STANDARD FAMILY CODE N0000190P2A01

Type	N 190
Number of Poles	2 NO
Connection between poles	Series ¹
Mounting Position	Vertical
Control Voltage Rating Uc [Vdc]	110Vdc/Vac - 220Vdc/Vac ¹
Auxiliary Contact Blocks	5 NO + 5 NC
Block Type	B
Arc chute Material	Platic Shells
Main Contacts tips Material	S6
Arcing Contacts tips Material	-
Electric Diagram	TU0165/B (DC) - TU0165/C (AC)
Layout Drawing	D53560

¹ Series bar connections available under request

² To be specified in order phase.



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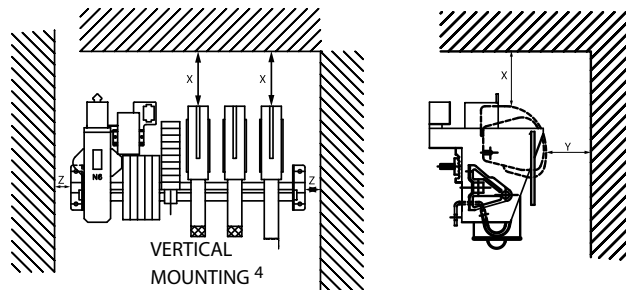
Description

Contactors with single interruption in air, electromagnetic control by power save system (economy resistor).
 Typical application 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] ²	190				
Conventional Free air thermal current Ith [at 60°C] ²	165				
Maximum Making Capacity for 100 ms Ich [kA]	3				
Short Circuit Withstand Current for 100 ms Icw [kA]	4				
Average impedance per pole at 50 Hz [MicroOhm]	400				
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]	3000	2000	1400	1232	924
Utilization Category according to IEC60947-4-1: DC3					
Rated Operational Power Pe [kW]	41,8	83,6	125,4	142,5	180
Rated Operational Current Ie [A]	190	190	190	190	180
Utilization Category according to IEC60947-4-1: DC5					
Rated Operational Power Pe [kW]	41,8	83,6	125,4	128	0
Rated Operational Making and breaking Current Ie [A]	190	190	190	170	0

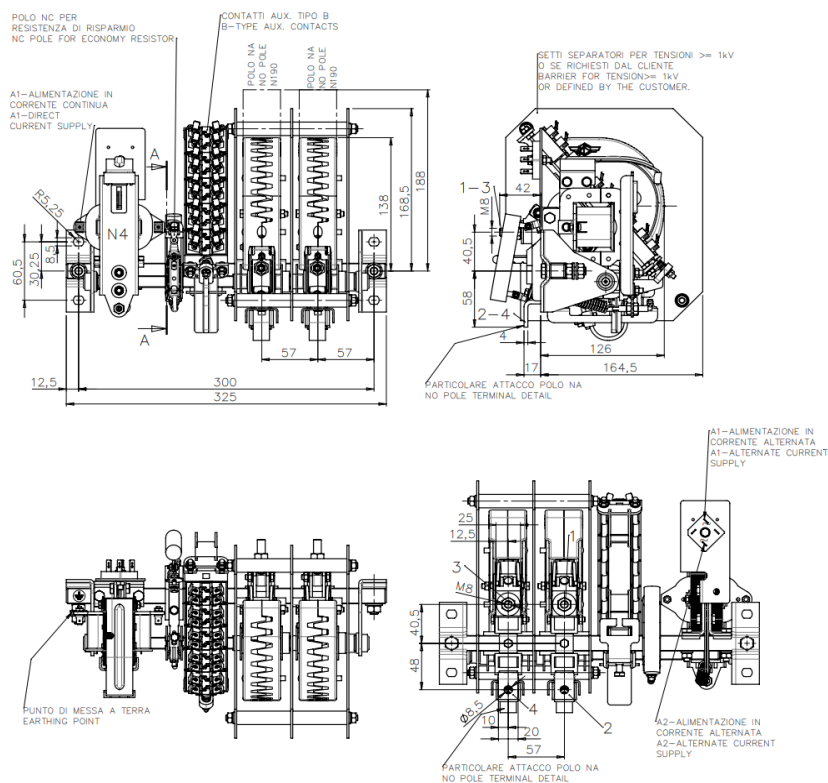
³ Device cabled according IEC 60947 ⁴ Other mounting positions not allowed

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) ⁵	1x10 ⁶
Weight [kg]	6.1
Control Circuit	
Control Voltage Range	0.85U _c ÷ 1.1U _c
Power Consumption (U _c and T = 20°C) at Closing - at Opening [W]	130-15
Mechanical Operation Time (U _c and T = 20°C) when Closing - Opening [ms]	50-15
Mechanical Operation Time (in the worst condition) when Closing - Opening [ms]	200-20
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 _{ac} / V _{dc}]	250
Rated Current [A]	10
Minimum Switching Current at 16V _{dc} [mA] ⁵	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

⁵With respect of the maintenance operations ⁶In clean and dry conditions



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

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