

SWITCHES

STANDARD FAMILY CODE N000190P3A01

Type	N 190
Number of Poles	3 NO
Connection between poles	None
Mounting Position	Vertical
Control Voltage Rating U_c [Vdc]	110Vdc/Vac - 220Vdc/Vac ¹
Auxiliary Contact Blocks	5 NO + 5 NC
Block Type	B
Arc chute Material	Plastic Shells
Main Contacts tips Material	S6
Arcing Contacts tips Material	-
Electric Diagram	TU0165/B (DC) - TU0165/C (AC)
Layout Drawing	D53561

¹ 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] ²	190			
Conventional Free air thermal current I_{th} [at 60°C] ²	165			
Maximum Making Capacity for 100 ms I_{ch} [kA]	3			
Short Circuit Withstand Current for 100 ms I_{cw} [kA]	4			
Average impedance per pole at 50 Hz [MicroOhm]	400			
Blow out circuit type	Direct			

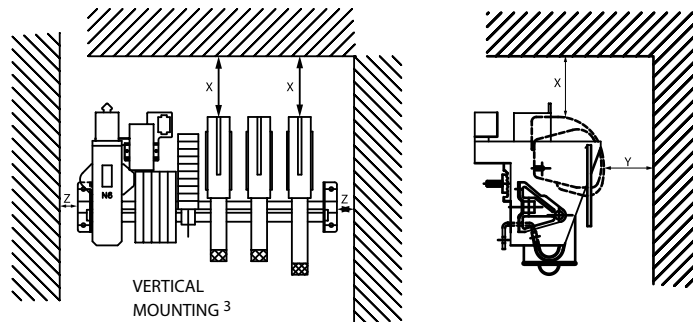
Electrical Characteristics 3NO pole (S6) for AC application

Rated Operational Voltage U_e [Vac]	220	380	600	690
Maximum Breaking Capacity $\cos\Phi=0,5$ I_{acmax} [A]	4318	2500	1840	1600
Utilization Category according to IEC60947-4-1: AC1&AC2&AC3				
Rated Operational Power P_e [kW]	52	90	135	135
Rated Operational Current I_e [A]	180	180	180	141
Utilization Category according to IEC60947-4-1: AC4				
Rated Operational Power P_e [kW]	50	85	115	115
Rated Operational Current I_e [A]	170	170	170	120
Exceptional Maximum Breaking Capacity @ 1000Vac $\cos\Phi=0,5$ [A]	1300			

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

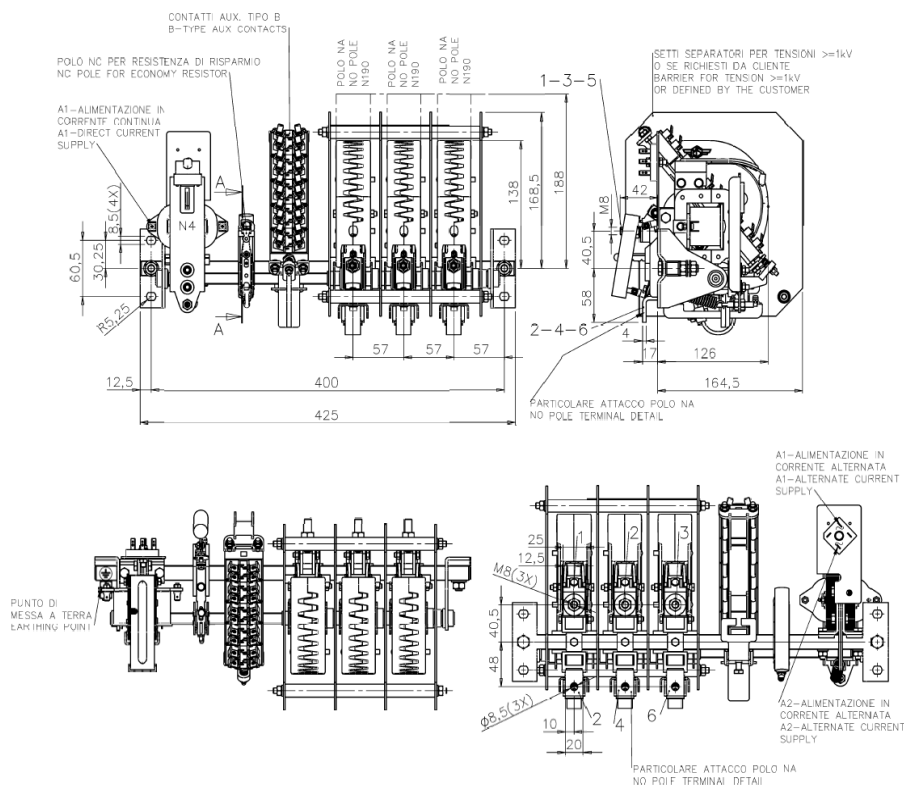
Minimum clearances [mm] from:

Rated Insulation Voltage		X	Y	Z
1000	Metal Parts	100	50	30
	Plastic Parts	50	30	20



Mechanical Characteristics	
Mechanical Endurance (cycles) ⁴	1x10 ⁶
Weight [kg]	9.8
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

⁴With respect of the maintenance operations ⁵ In clean and dry conditions



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

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