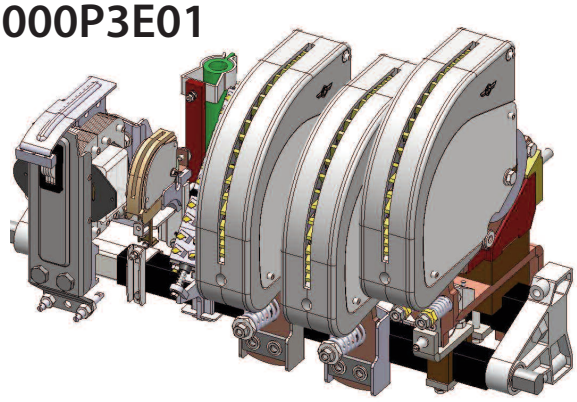
Switches

Standard Family Code
N0001000P3E01



Description

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

Type	N 1000
Number of Poles	2 NO + 1 NC
Connection between poles	Series for NO pole[1]
Mounting Position	Vertical
Control Voltage Rating Uc [Vdc]	110Vdc/Vac - 220Vdc/Vac[2]
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	TU0165/B (DC) - TU0165/C (AC)
Layout Drawing	D53415

[1] Series bar connections available under request

[2] To be specified in order phase.

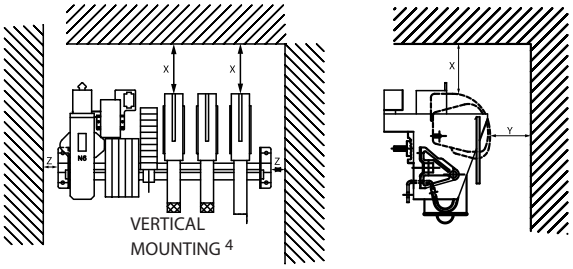
Electrical Characteristics					
Rated Operational Voltage Ue [Vdc]	220	440	660	750	1000
Rated Insulation Voltage Ui [Vdc]	1000				
Conventional Free air thermal current Ith [at 40°C][3]	1000				
Conventional Free air thermal current Ith [at 60°C][3]	870				
Blow out circuit type	Direct				

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]	13000	9000	7500	6600	4950
Utilization Category according to IEC60947-4-1: DC3					
Max Operational Power Pe [kW]	900	900	900	900	900
Max Operational Making and breaking Current Ie [A]	4091	2045	1364	1200	900
Utilization Category according to IEC60947-4-1: DC5					
Max Operational Power Pe [kW]	600	600	600	600	0
Max Operational Making and breaking Current Ie [A]	2727	1364	909	800	0
Maximum Making Capacity for 100 ms Ich [kA]	18				
Short Circuit Withstand Current for 100 ms Icw [kA]	20				
Average impedence per pole at 50 Hz [MicroOhm]	335				

Electrical Characteristics 1NC (S4) for DC application					
Rated Operational Voltage [Vdc]	220	440	660	750	1000
Maximum Breaking Capacity tau=15ms Idcmax [A]	4000	2500	1750	0	0
Max Operational Making Current [A]	2045	1023	682	600	450
Max Operational Breaking Current [A]	1259	568	318	0	0
Maximum Making Capacity for 100 ms Ich [kA]	9				
Short Circuit Withstand Current for 100 ms Icw [kA]	12				
Average impedence per pole at 50 Hz [MicroOhm]	480				

[3] 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



[4] **OTHER MOUNTING POSITIONS NOT ALLOWED**

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

Microelettrica Scientifica

Switches

Standard Family Code
N0001000P3E01

Mechanical Characteristics	
Mechanical Endurance (cycles)[5]	3 x10^6
Weight [kg]	53

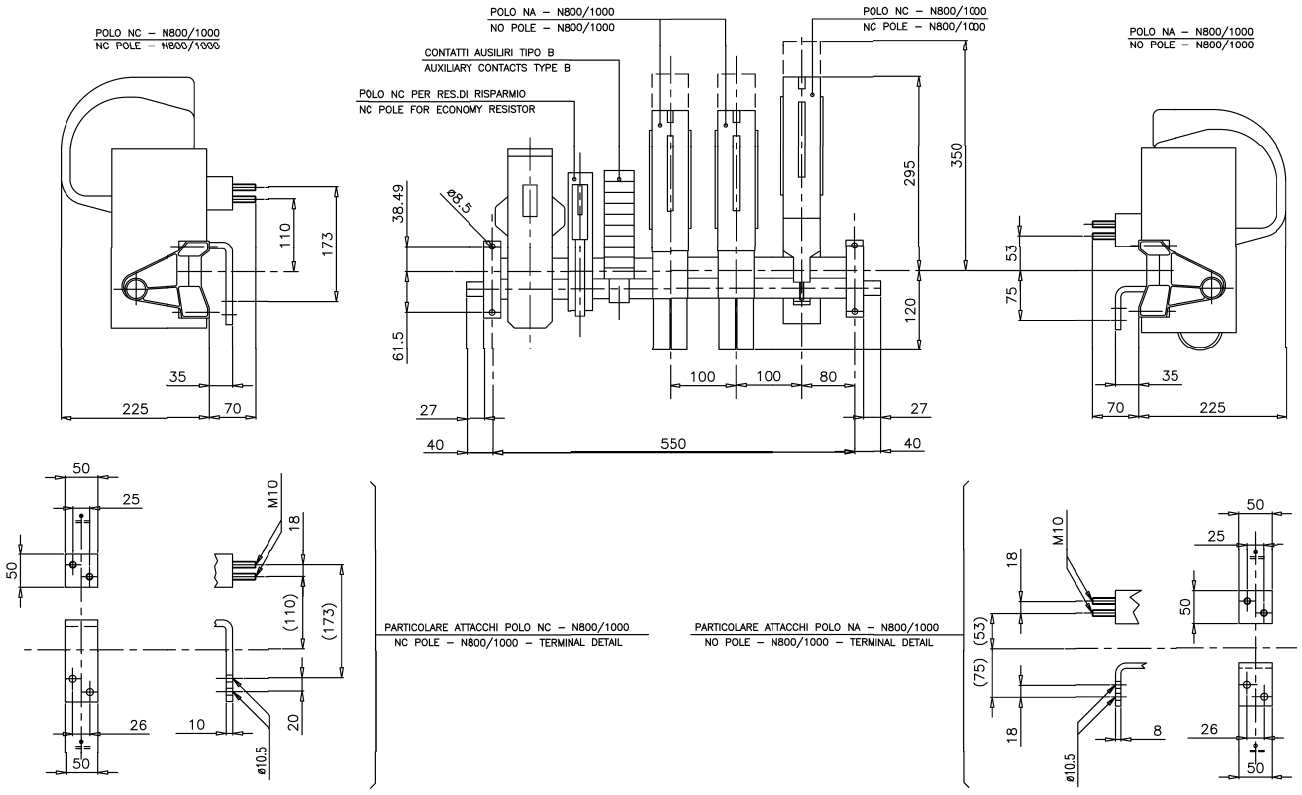
Control Circuit	
Control Voltage Range	0.85U_c ÷ 1.1U_c
Power Consumption (Uc and T = 20°C) at Closing - at Opening [W]	650 - 30
Mechanical Operation Time (U_c and T = 20°C) when Closing - Opening [ms]	90 - 15
Mechanical Operation Time (in the worst condition) when Closing - Opening [ms]	350 - 20
Time Constant (L/R) at Pick Up - when Holding [ms]	
Electrical Connections	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 16 V_{dc} [mA] [6]	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

[5] With respect of the maintenance operations

[6] In clean and dry conditions



This publication may be subject to alteration without prior notice. Therefore, a printed copy of this document may not be the latest revision. Please contact your local representative for the latest update. The trademarks MS Microelettrica Scientifica, Knorr and Knorr-Bremse as well as the figurative mark "K" are registered. Copyright © Knorr-Bremse AG and Microelettrica Scientifica SpA - all rights reserved, including industrial property rights application. Knorr-Bremse AG and Microelettrica Scientifica SpA retain any power of disposal, such as for copying and transferring.

Microelettrica Scientifica

Microelettrica Scientifica S.p.A. - 20090 Buccinasco (MI) - V. Lucania, 2 - Italy
Tel. +39 02 575731 - Fax +39 02 57510940 - E-Mail: info@microelettrica.com

Rev.00 07/2016_DP