

# Switches

## Disconnectors

### N line

#### Applications

Transit and railway systems

Power generation

Control high power motors

Heavy industries

Crane control

Microelettrica Scientifica N series bar mounted contactors, in spite of their 60 years old technical concept are still state of the art for many industrial, low voltage, heavy duty applications. These contactors are designed and tested according to the standard IEC 60947-4-1. They provide excellent operational performances, making them the best choice for high power load connection, often covering the function of a fault clearing protection device.

The N series contactors are characterised by modular design so that their configuration can be tailored to the specific requirements of each application. In fact, the pole ratings cover a wide range, from 85A up to 6000A, and can be mounted side by side regardless of their size and number on a customisable length shafts set, this way offering custom solutions to a wide range of technical needs.

The maintenance is simplified by direct accessibility to all parts due to open construction so that, in most cases, it is not necessary to remove the contactor from the cabinet.

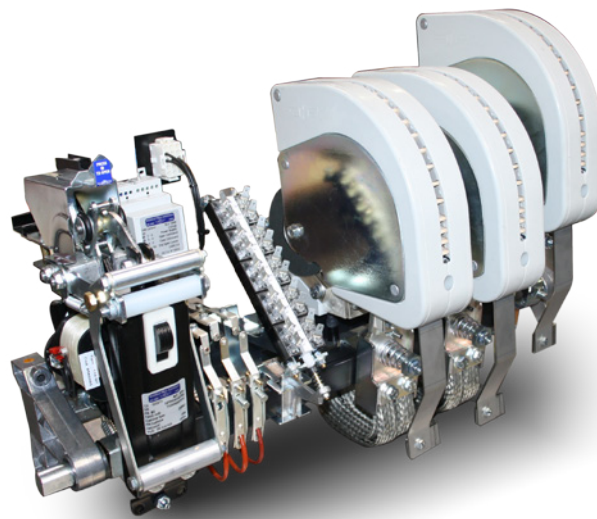
Microelettrica Scientifica has been certified since 1993 according to the International Quality Standard UNI EN ISO 9001:2008. Microelettrica has always paid great attention to the environment and is certified according to the standard UNI EN ISO 14001:2004 and all materials used are RoHS compliant.

Type	Thermal Current I <sub>th</sub> [A]	Rated Nominal Voltage U <sub>n</sub> [V]	Rated Insulation Voltage U <sub>i</sub> [V]	D1/D4 [mm] Length (1-4 poles)	H [mm]	W [mm]
N 85	85	600	1000	250-400	165	155
N 125	125	600	1000	250-400	175	155
N 190	190	600	1000	250-400	205	170
N 270	270	600	1000	250-500	265	215
N 350	350	600	1000	250-500	275	215
N 550	550	600	1000	105-277	300	160
N 650	800	600	1000	300-600	320	160
N 800	650	600	1000	350-650	365	300
N 1000	1000	600	1000	350-650	365	300
N 1250	1250	600	1000	350-700	380	345
N 1600	1600	600	1000	350-800	420	420
N 2000	2000	600	1000	350-800	425	420
N 3000	3000	600	1000	400-1000	475	470
N 4000	4000	600	1000	500-1250	425	420
N 6000	6000	600	1000	600-1500	475	470



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## General Characteristics

- The bar mounted modular extra heavy duty line, up to 1000V<sub>DC/AC</sub> application, up to 6000A/pole
- Stationary application only
- Up to 6 poles configuration, NO and NC poles direct arc blow out various aux contacts options
- Flexible control and adjustment configurations, total unit customization possible

Contactor	Breaking Capacity						Making capacity I <sub>ch</sub> [A]	Consumption of coils				Operation time (m sec.)		Mech. endurance in million operations)
	A.C. cos $\theta = 0,5$ I <sup>'</sup> <sub>ca</sub> [A] RMS value			D.C. L/R = 15 ms I <sup>'</sup> <sub>cc</sub> [A] (2 poles)				A.C. [VA]		D.C. [W]		Closing	Opening	
	440 V	750 V	1000 V	220 V	440 V	660 V		Pick-up	Holding	Pick-up	Holding			
<b>N 85</b>	1600	700	600	1700	1000	800	2750	350	50	110	15	26	13	15
<b>N 125</b>	2100	1000	900	2500	1500	1000	3500	450	60	130	15	23	13	15
<b>N 190</b>	2500	1600	1300	3000	2000	1400	4200	450	60	130	15	23	12	15
<b>N 270</b>	4300	2500	2000	4500	3000	2500	7000	1300	110	180	12	30	18	15
<b>N 350</b>	4800	3000	2500	5000	3500	3000	8500	1300	110	180	12	30	18	15
<b>N 550</b>	6000	4500	3900	7000	5000	4000	10000	1500	110	300	20	65	15	15
<b>N 650</b>	8000	5500	4500	9000	6000	5000	12000	–	–	300	20	65	15	10
<b>N 800</b>	9500	6500	6000	10000	7000	6000	16000	–	–	650	30	80	16	10
<b>N 1000</b>	12500	8000	7000	13000	9000	7500	21000	–	–	650	30	80	16	10
<b>N 1250</b>	15000	10000	9000	16000	12000	10000	30000	–	–	1000	50	90	10	10
<b>N 1600</b>	20000	15000	10000	25000	16000	12000	35000	–	–	1000	50	95	11	10
<b>N 2000</b>	20000	15000	10000	30000	20000	15000	35000	–	–	1000	50	95	11	10
<b>N 3000</b>	30000	15000	10000	35000	25000	18000	50000	–	–	1500	80	90	10	10
<b>N 4000</b>	35000	20000	10000	40000	30000	20000	50000	–	–	1500	80	90	10	10
<b>N 6000</b>	40000	20000	10000	40000	35000	20000	80000	–	–	2500	100	90	10	10



**KNORR-BREMSE**



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