

Current-compensated chokes

RN Series

- 0.3 to 10A ratings
- 0.7 to 100mH inductances (dual choke configurations)
- 100kHz-3MHz common-mode resonance frequencies
- 11 different PCB-mount housing sizes
- Nennströme zwischen 0.3 und 10A
- Induktivitäten zwischen 0.7 und 100mH (Konfigurationen mit zwei Wicklungen)
- Gleichtakt-Resonanzfrequenzen zwischen 100kHz und 3MHz
- 11 verschiedene Gehäuse für Leiterplatten-Montage
- courant de service entre 0,3 et 10A
- inductance de 0,7 à 100mH (selfs monophasées)
- fréquence de résonance en mode commun de 100kHz à 3MHz
- 11 dimensions de boîtier pour montage sur carte électronique



Choke selection table Choose the choke **RN ?xx** offering the required current rating and inductance characteristics. ? determines package style: insert 1 for a lower profile , 2 for a taller component  with a smaller footprint. Example: RN 122-1/02 is a lower profile choke.

Choke type ? (1 =  2 = )	Nominal current A@40°C	Inductance L* mH/path	Circuit symbol	R [†] mΩ/ path	Weight approx.g  / 
RN ?02-0.3/02	0.3	12		1275	2/3
RN ?02-0.6/02	0.6	4.4		385	2/3
RN ?02-1/02	1	3		205	2/3
RN ?02-1.5/02	1.5	1.6		100	2/3
RN ?02-2/02	2	1.1		70	2/3
RN ?12-0.4/02	0.4	39		1460	5/6
RN ?12-0.5/02	0.5	27		1250	5/6
RN ?12-0.6/02	0.6	15		465	5/6
RN ?12-0.8/02	0.8	10		370	5/6
RN ?12-1.2/02	1.2	6.8		245	5/6
RN ?12-1.5/02	1.5	3.3		135	5/6
RN ?12-2/02	2	1.8		75	5/6
RN ?12-4/02	4	0.7	27	5/6	
RN ?14-0.3/02	0.3	47		1750	9/12
RN ?14-0.5/02	0.5	39		810	9/12
RN ?14-0.8/02	0.8	27		500	9/12
RN ?14-1/02	1	15		375	9/12
RN ?14-1.2/02	1.2	10		200	9/12
RN ?14-1.5/02	1.5	6.8		130	9/12
RN ?14-2/02	2	4.2		102	9/12
RN ?14-2.5/02	2.5	3.3		72	9/12
RN ?14-3/02	3	2		55	9/12
RN ?14-4/02	4	1.5		35	9/12

Choke type ? (1 =  2 = )	Nominal current A@40°C	Inductance L* mH/path	Circuit symbol	R [†] mΩ/ path	Weight approx.g  / 
RN ?22-0.6/02	0.6	47		1180	17/21
RN ?22-0.8/02	0.8	39		1000	17/21
RN ?22-1/02	1	18		610	17/21
RN ?22-1.5/02	1.5	10		220	17/21
RN ?22-2/02	2	6.8		147	17/21
RN ?22-2.5/02	2.5	5.6		105	17/21
RN ?22-3/02	3	4.5		80	17/21
RN ?22-4/02	4	3.3	45	17/21	
RN ?42-0.5/02	0.5	82		2700	32
RN ?42-1/02	1	33		810	32
RN ?42-1.4/02	1.4	27		500	32
RN ?42-2/02	2	6.8		190	32
RN ?42-4/02	4	3.3		66	32
RN ?42-6/02	6	1.8	20	32	
RN 143-0.5/02	0.5	100		2900	33
RN 143-1/02	1	47		880	33
RN 143-2/02	2	10		230	33
RN 143-4/02	4	3.9		58	33
RN 143-6/02	6	1.8		20	33
RN 152-1/02	1	68		1300	54
RN 152-2/02	2	18		350	54
RN 152-4/02	4	6.8		87	54
RN 152-6/02	6	3.9		41	54
RN 152-8/02	8	2.7		22	54
RN 152-10/02	10	1.8		14	54

Environmental ratings

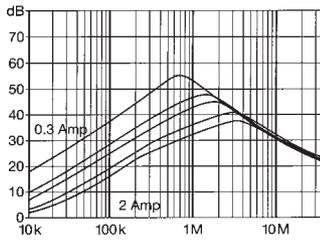
Maximum operating voltage: 250V at 40°C
 High potential test voltage
 winding-to-winding at 25°C: 1500VAC, 1 minute, guaranteed
 1500V, 50Hz, 2 sec, factory test
 winding-to-housing at 25°C: 4000VAC, 1 minute, guaranteed
 Surge current at 10msec: 20 x I_{nominal} at 25°C
 Power operating frequency: DC to 1kHz at 40°C
 Operating temperature: -40°C to +125°C
 Storage temperature: -40°C to +125°C
 Climatic class per IEC 68: 40/125/56
 Flammability: UL94V0

Test conditions

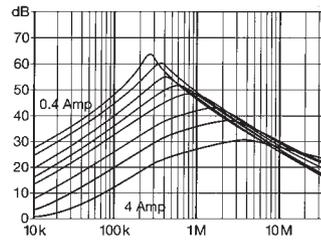
* Measuring frequency: 10kHz; 5mA < 16μH;
 500μA > 16μH < 160μH; 50μA > 160μH < 16mH;
 50mV > 16mH < 160mH; inductance tolerance +50%, -30%
 † Resistance: tolerance max. ±15% at 25°C;
 ≤ 20mΩ 1A; > 20mΩ ≤ 200mΩ 100mA; > 200mΩ ≤ 2Ω 10mA
 Electrical characteristics at 25°C ±2°C

Typical attenuation/resonance frequency characteristics

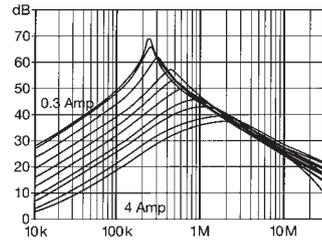
RN ?02



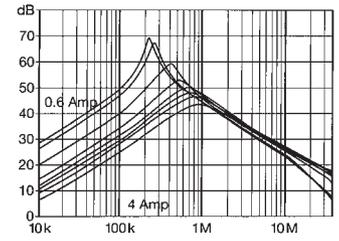
RN ?12



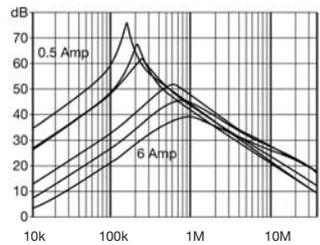
RN ?14



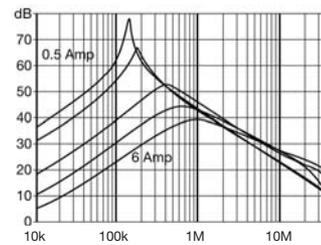
RN ?22



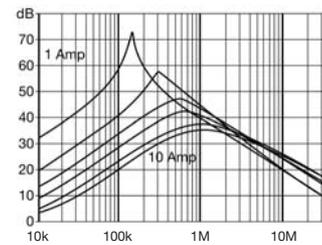
RN ?42



RN 143



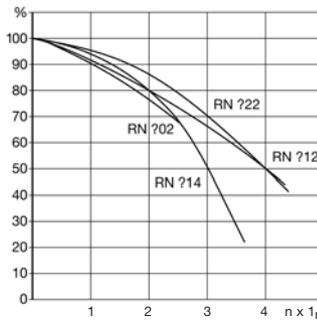
RN 152



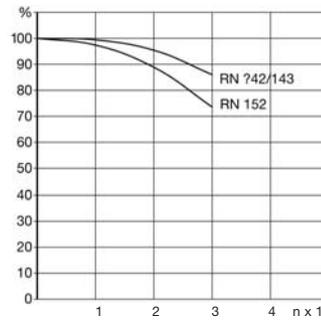
Typical saturation characteristics

Inductance (typical value in %) vs. nominal current (A DC)

RN ?02/?12/?14/?22



RN ?42/143/152



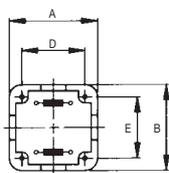
Mechanical data

Choke	RN 102	RN 112	RN 114	RN 122	RN 202	RN 212	RN 214	RN 222	RN 142 RN 143	RN 242	RN 152	Tol.* mm
A	14	17.7	22.5	28	18.2	18	23	31	33.1	31	43	± 0.3
B	14	17.1	21.5	27	8.8	12.5	15.5	18	32.5	18	41.8	± 0.3
C	9	12.6	13.2	16.5	13.5	20	25	29.3	19.7	34.3	25	± 0.3
D	10	15	20.1	25	15.21	15	10	12.5	30	12.5	40	± 0.2
E	10	12.5	15	5.08	10	12.5	15	20	15	15	15	± 0.2
F	4 ± 0.6		4.5	4.5	4		4.3	4.2	4.5	± 0.5		
G	0.6	0.8					1.2		± 0.1			

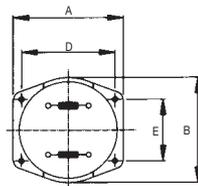
Dimensions in mm; 1 inch = 25.4mm

* Measurements share this common tolerance unless otherwise stated

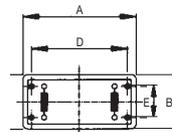
BOTTOM



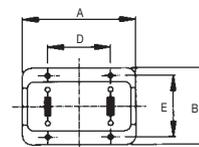
RN 102



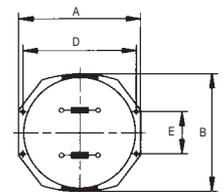
RN 112, 114, 122, 142, 143



RN 202



RN 212, 214, 222, 242



RN 152

SIDE

