

Current-compensated chokes

RD Series

- 6 to 64A ratings
- Up to 600VAC or 850VDC
- DC to 400Hz frequencies
- Dual, triple and quad choke configurations
- Nennströme zwischen 6 und 64A
- bis zu 600VAC oder 850VDC
- Resonanzfrequenzen von DC bis 400Hz
- Doppel-, drei- und vierfache Wicklungskonfigurationen
- Courant de service entre 6 et 64A
- Tension de service jusqu'à 600Vca ou 850Vcc
- Fréquence secteur de 0 à 400Hz
- Configurations avec 2, 3 ou 4 enroulements



Choke selection table Choose the choke **RD xxxx** offering the required current rating and inductance characteristics. The name provides a verification of selection: in RD wxyz-??-??, w = diameter of housing in cm; x = housing height (1 denoting standard); y = number of lines (2 = phase+neut., 3 = 3-phase, 4 = 3-phase+neut.), and z = connection type (2 = PCB pins, 7 = wire); -??-?? indicates current and inductance ratings.

Choke type	Nominal current A@40°C	Inductance L* mH/path	Circuit symbol	R [†] mΩ/ path	Weight approx. g
RD 5122-6-9m6	6	9.6		52.55	160
RD 5122-10-6m0	10	6		24.25	160
RD 5122-16-2m0	16	2		9.50	160
RD 5132-6-5m0	6	5		38	160
RD 5132-10-3m0	10	3		17.60	160
RD 5132-16-1m0	16	1		6.90	160
RD 6127-6-15m0	6	15		66.65	235
RD 6127-10-9m0	10	9		25.90	235
RD 6127-16-3m0	16	3		10.90	235
RD 6137-6-7m5	6	7.5		49	235
RD 6137-10-4m5	10	4.5		18.35	235
RD 6137-16-1m5	16	1.5		8.30	235
RD 7127-6-25m0	6	25		84.20	320
RD 7127-10-14m0	10	14		33.50	350
RD 7127-16-5m7	16	5.7		14.10	370
RD 7127-25-2m8	25	2.8		6.40	400
RD 7127-36-1m0	36	1		3.30	380
RD 7137-6-12m0	6	12		60.60	340
RD 7137-10-6m6	10	6.6		21.90	380
RD 7137-16-2m8	16	2.8		10.70	380
RD 7137-25-1m3	25	1.3		4.45	440
RD 7137-36-0m5	36	0.5		2.75	400

Choke type	Nominal current A@40°C	Inductance L* mH/path	Circuit symbol	R [†] mΩ/ path	Weight approx. g
RD 7147-6-6m0	6	6		45.10	320
RD 7147-10-3m5	10	3.5		19.10	370
RD 7147-16-1m5	16	1.5		8.50	390
RD 7147-25-0m7	25	0.7		3.65	430
RD 7147-36-0m2	36	0.2		2.30	400
RD 8127-16-12m0	16	12		20.05	590
RD 8127-25-5m0	25	5		8.45	630
RD 8127-36-3m0	36	3		4.55	690
RD 8127-50-1m0	50	1		2.50	640
RD 8127-64-0m8	64	0.8		1.60	710
RD 8137-16-5m0	16	5		11.60	630
RD 8137-25-2m5	25	2.5		6.40	650
RD 8137-36-1m5	36	1.5		3.65	720
RD 8137-50-0m6	50	0.6		2.15	700
RD 8137-64-0m5	64	0.5		1.35	780
RD 8147-16-3m0	16	3		9.25	650
RD 8147-25-1m3	25	1.3		5.05	650
RD 8147-36-0m8	36	0.8		3.00	760
RD 8147-50-0m3	50	0.3		1.75	740
RD 8147-64-0m2	64	0.2		1.10	820

Environmental ratings

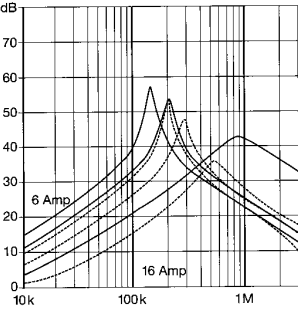
Maximum operating voltage:	600VAC/850VDC at 40°C
High potential test voltage	
winding-to-winding at 25°C:	2500VAC, 1 minute, guaranteed
winding-to-housing at 25°C:	2500V, 50Hz, 2 sec, factory test
Surge current at 10msec:	4000VAC, 1 minute, guaranteed
Power operating frequency:	20 x I _{nominal} at 25°C
Operating/storage temp:	DC to 400Hz at 40°C
Climatic class per IEC 68:	-25°C to +110°C
Flammability:	25/110/21
	UL94V0 (insulating tubes UL94V2)

Test conditions

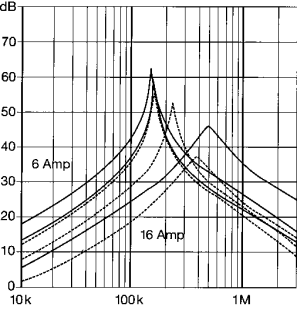
* Measuring frequency: 1kHz; 500μA > 0.16mH < 1.6mH;
50μA > 1.6mH < 160mH; inductance tolerance +50%, -30%
† Resistance: tolerance max. ±15% at 25°C; < 200mΩ 100mA
Electrical characteristics at 25°C ±2°C

Typical attenuation/resonance frequency characteristics

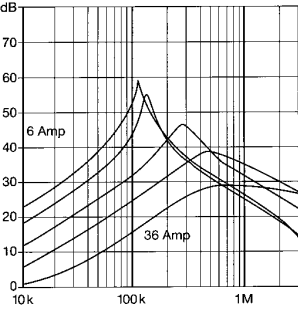
RD 5122-/5132...



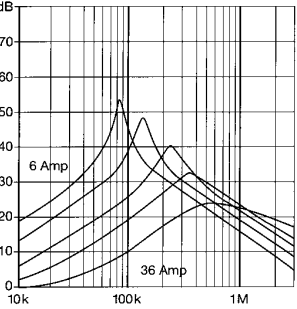
RD 6127-/6137...



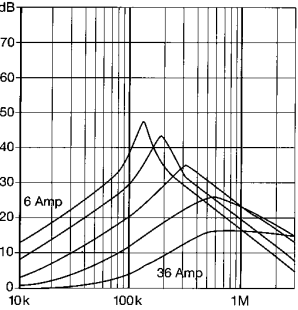
RD 7127



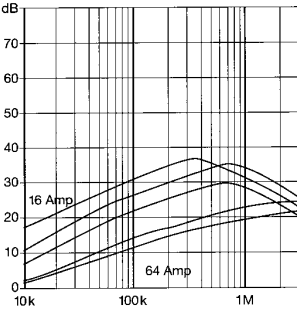
RD 7137



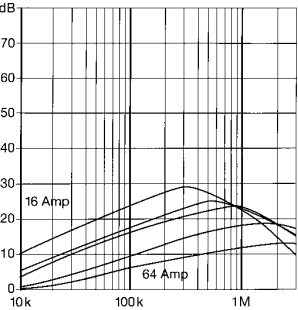
RD 7147



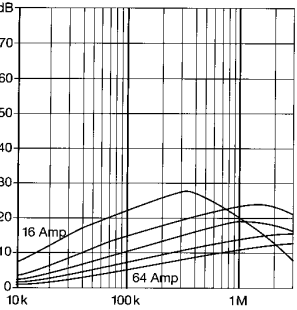
RD 8127



RD 8137



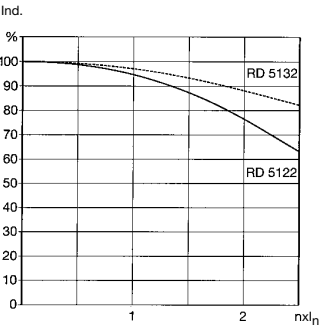
RD 8147



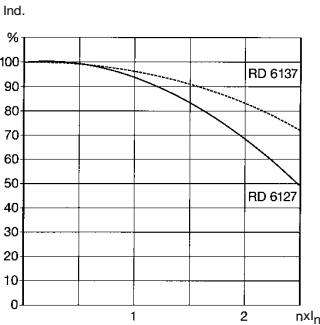
Typical saturation characteristics

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

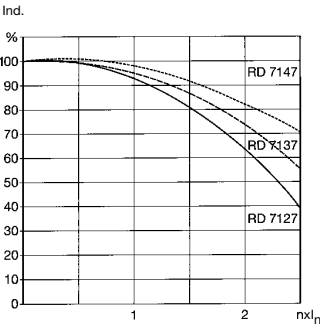
RD 5122 and 5132



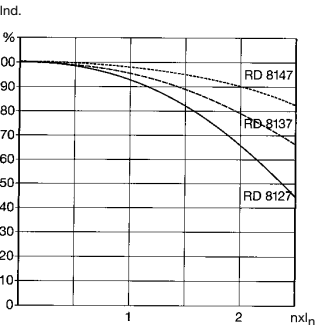
RD 6127 and 6137



RD 7127, 7137, 7147



RD 8127, 8137, 8147



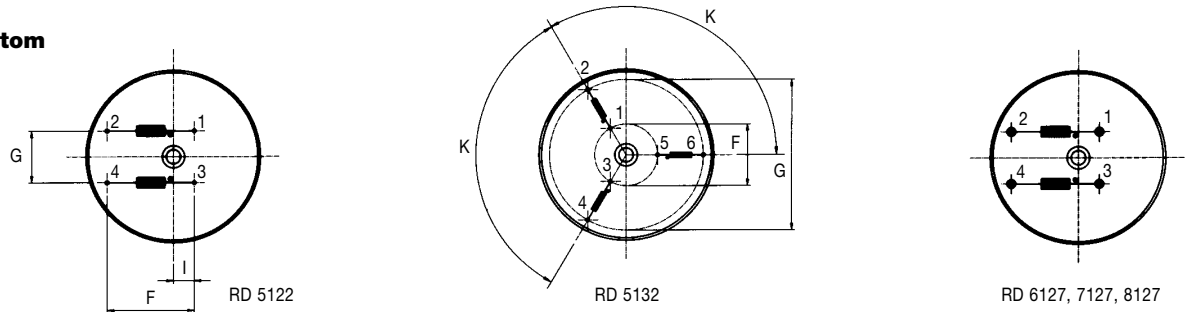
Mechanical data

Choke	RD 5122	RD 5132	RD 6127	RD 6137	RD 7127	RD 7137	RD 7147	RD 8127	RD 8137	RD 8147	Tol.* mm
A	50		60		70			80			± 0.5
B	5				150 ⁺⁵ ₋₀			200 ⁺⁵ ₋₀			± 0.5
C		35			40			50			± 0.5
D					10			20			± 1
E		4.1 ^{+0.3} ₋₀					6.1				⁺⁶ ₋₀
F	25	20									± 0.3
G	15	Ø40 ± 0.4									± 0.3
H			Sizes vary according to ratings - see separate table below								-
I	5										-
K		120°									-

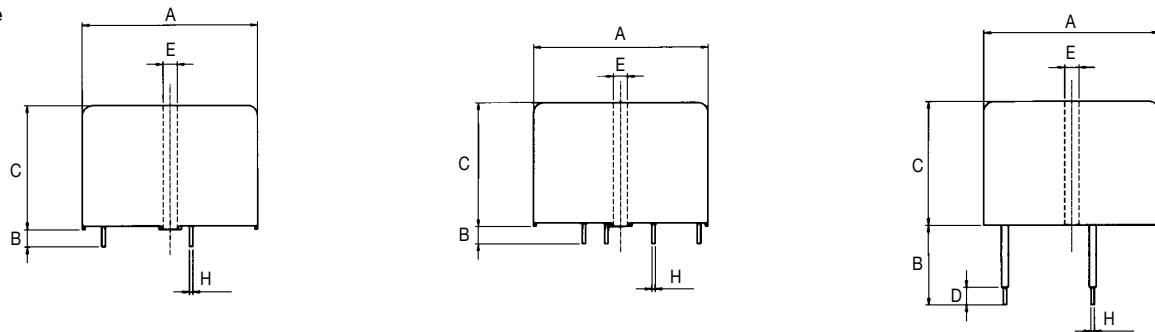
Dimensions in mm; 1 inch = 25.4mm

* Measurements share this common tolerance unless otherwise stated

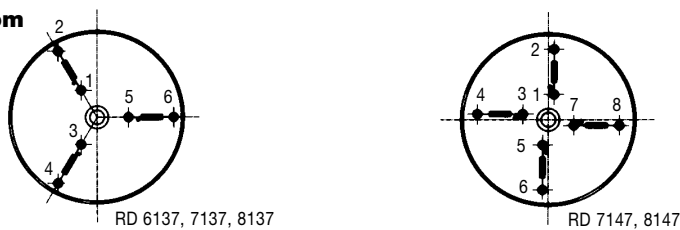
Bottom



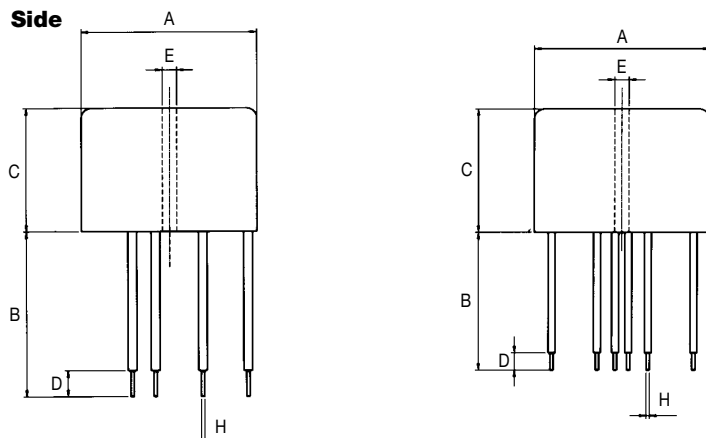
Side



Bottom



Side



Pin diameter/section sizes (dimension H)

Choke	H	Choke	H
RD 5122-6-9m6	Ø1	RD 7147-6-6m0	Ø1
-10-6m0	Ø1.3	-10-3m5	Ø1.4
-16-2m0	Ø1.6	-16-1m5	Ø1.8
		-25-0m7	Ø2.4
RD 5132-6-5m0	Ø1	-36-0m2	Ø2.5
-10-3m0	Ø1.3		
-16-1m0	Ø1.6	RD 8127-16-12m0	Ø2
		-25-5m0	Ø2.4
RD 6127-6-15m0	Ø1	-36-3m0	1.5 x 4.5
-10-9m0	Ø1.5	-50-1m0	1.7 x 5
-16-3m0	Ø1.8	-64-0m8	2.5 x 5
RD 6137-6-7m5	Ø1	RD 8137-16-5m0	Ø2
-10-4m5	Ø1.5	-25-2m5	Ø2.4
-16-1m5	Ø1.8	-36-1m5	1.5 x 4.5
		-50-0m6	1.7 x 5
RD 7127-6-25m0	Ø1	-64-0m5	2.5 x 5
-10-14m0	Ø1.4		
-16-5m7	Ø1.8	RD 8147-16-3m0	Ø2
-25-2m8	Ø2.4	-25-1m3	Ø2.4
-36-1m0	Ø2.7	-36-0m8	1.5 x 4.5
		-50-0m3	1.7 x 5
RD 7137-6-12m0	Ø1	-64-0m2	2.5 x 5
-10-6m6	Ø1.5		
-16-2m8	Ø1.8		
-25-1m3	Ø2.5		
-36-0m5	Ø2.7		