

LD 100

Air choke with copper/layer winding



Unique Selling Point

- No saturation
- Wide range of material selection
- Special protective coating
- High linearity L (i)
- Very good mechanical strength
- No hysteresis
- Optimal weight by forced air cooling
- Directional air flow through GRP conduits
- Very efficient liquid cooling option (waveguide)
- Able to be universally applied.

Description

Air chokes are particularly used where high inductive linearity is required. Due to their relatively simple mechanical structure, they are not only compact, but also very robust.

With our expertise, the REO air chokes perform to the required standard, even in the most arduous conditions.

- Frequency of the current: DC und AC
- Tolerances: + 10 / - 10 %, + 5 / - 5 %
- Taps: By default, no taps (available on request)
- Insulation: F or H
- Cooling method and cooling liquid according to IEC 60310: AN, AF or WF
- Test voltage: up to 12kV 60s 50Hz, up to 25kV 1,2/50μs
- Mounting: Suspended, vertical or horizontal
- Mechanical strength, mechanical simulation (FEM): EN 12663
- Shock - and vibration stress: IEC 61373 Kat. 1 Kl. B

REO Mix & Match principle

With REO Mix & Match you can choose from a wide range of options - combine the various options in order to always get the best product for your application.

REO is able to offer different designs and winding techniques, a variety of conductor materials and structures. Depending on the specific requirements, we are able to produce an optimal solution by combining these parameters to provide the perfect solution.

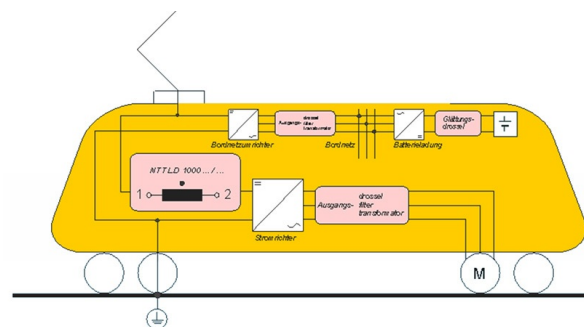
Optional

- Layer winding/Disc winding
- Aluminium, Copper or aluminium+copper
- Protections: Paint coating, protective coating, housing or REO Xtreme
- Cooling fan/unit
- Sensors: Switch NO / NC, PT100, NTC, PTC

Technical Data

- Rated current : 50 - 1000 A
- Inductance : 0,2 - 8 mH

Circuit example



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Air choke with copper/layer winding

Technical data

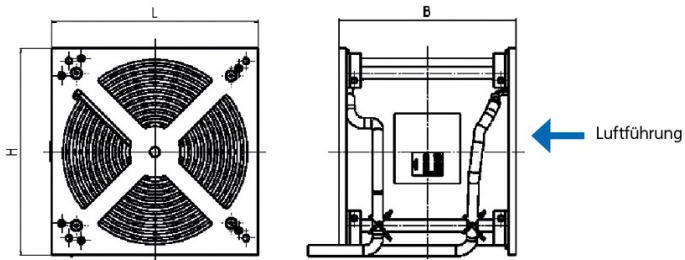
Type	Inductance [mH]	Cooling 3 m/s			Cooling 5 m/s			Cooling 8 m/s		
		I [A]	magn. Energy [J]	P [kVA] at 20°C	I [A]	magn. Energy [J]	P [kVA] at 20°C	I [A]	magn. Energy [J]	P [kVA] at 20°C
LD 100/50/0,2	0,2	50	0,25	0,1	60	0,4	0,1	70	0,5	0,2
LD 100/100/0,2	0,2	100	1	0,2	120	1,4	0,2	145	2,1	0,4
LD 100/200/0,2	0,2	200	4	0,4	240	5,8	0,6	280	7,8	0,8
LD 100/400/0,2	0,2	400	16	0,9	490	24	1,4	585	34,2	1,9
LD 100/700/0,2	0,2	700	49	1,6	850	72,3	2,3	1020	104	3,3
LD 100/1000/0,2	0,2	1000	100	1,7	1225	150,1	2,6	1450	210,3	3,7
LD 100/50/0,5	0,5	50	0,625	0,2	60	0,9	0,2	72	1,3	0,3
LD 100/100/0,5	0,5	100	2,5	0,3	122	3,7	0,4	145	5,3	0,6
LD 100/200/0,5	0,5	200	10	0,6	245	15	0,9	295	21,8	1,3
LD 100/400/0,5	0,5	400	40	1,5	490	60	2,2	585	85,6	3,1
LD 100/700/0,5	0,5	700	122,5	2,7	865	187,1	4,1	1030	265,2	5,7
LD 100/1000/0,5	0,5	1000	250	3,1	1200	360	4,5	1430	511,2	6,4
LD 100/50/1	1	50	1,25	0,2	60	1,8	0,3	72	2,6	0,5
LD 100/100/1	1	100	5	0,5	125	7,8	0,8	147	10,8	1,1
LD 100/200/1	1	200	20	0,9	240	28,8	1,4	290	42,1	2
LD 100/400/1	1	400	80	2,2	490	120,1	3,3	585	171,1	4,7
LD 100/700/1	1	700	245	4,1	870	378,5	6,4	1030	530,5	8,9
LD 100/1000/1	1	1000	500	5	1200	720	7,1	1430	1022,5	10,1
LD 100/50/2	2	50	2,5	0,4	63	4	0,6	75	5,6	0,8
LD 100/100/2	2	100	10	0,9	125	15,6	0,8	147	21,6	1,1
LD 100/200/2	2	200	40	1,4	245	60	2,2	290	84,1	3
LD 100/400/2	2	400	160	3,6	490	240,1	5,3	580	336,4	7,5
LD 100/700/2	2	700	490	6,5	870	756,9	10	1030	1060,9	14,1
LD 100/1000/2	2	1000	1000	7,2	1250	1562,5	11,2	1480	2190,4	15,8
LD 100/50/4	4	50	5	0,6	63	7,9	0,9	75	11,3	1,3
LD 100/100/4	4	100	20	1,3	123	30,3	1,9	145	42,1	2,7
LD 100/200/4	4	200	80	2,2	245	120,1	3,3	290	168,2	4,6
LD 100/400/4	4	400	320	5,6	490	480,2	8,5	580	672,8	11,9
LD 100/700/4	4	700	980	9,9	870	1513,8	15,2	1040	2163,2	21,8
LD 100/1000/4	4	1000	2000	11	1250	3125	17,8	1480	4380,8	24,9
LD 100/50/8	8	50	10	11,4	64	16,4	1,4	77	23,7	2
LD 100/100/8	8	100	40	1,9	125	62,5	3	150	90	4,4
LD 100/200/8	8	200	160	3,4	245	240,1	5	290	336,4	7,1
LD 100/400/8	8	400	640	8,5	490	960,4	12,7	585	1368,9	18,2
LD 100/700/8	8	700	1960	15,3	875	3062,5	23,9	1050	4410	34,4

LD 100

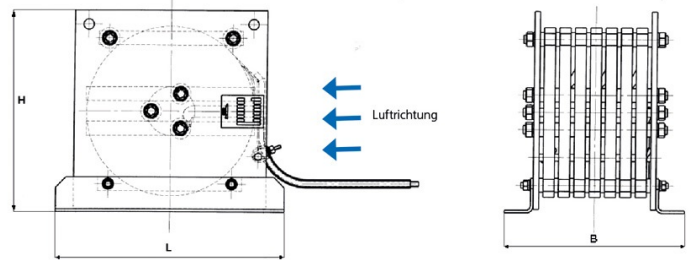
Air choke with copper/layer winding

Dimension drawings

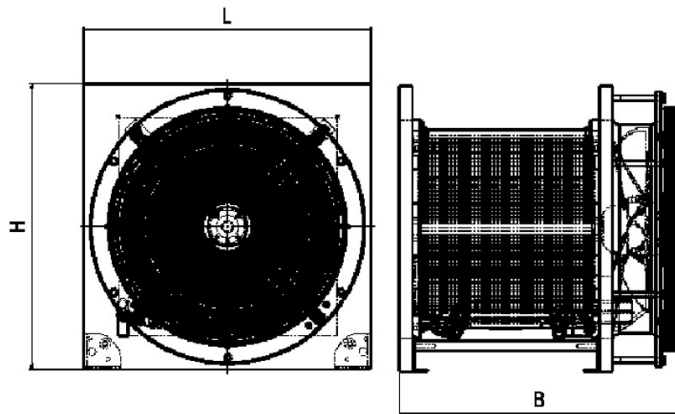
Air choke with layer winding (without cooling unit)



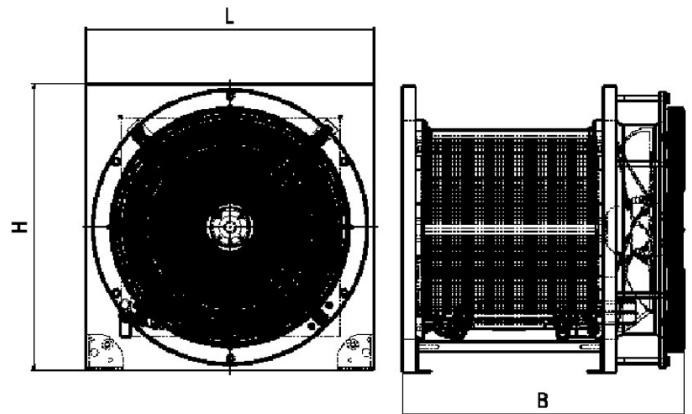
Air choke with disc winding (without cooling unit)



Air choke with layer winding (with cooling unit 0,3m³/s)



Air choke with layer winding (with cooling unit 0,6m³/s)



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Air choke with copper/layer winding

Dimensions

Type	B [mm]	H [mm]	T [mm]	Copper [kg]	Weight [kg]	Type	B [mm]	H [mm]	T [mm]	Copper [kg]	Weight [kg]
LD 100/50/0,2	150	150	60	1,5	5	LD 100/50/2	250	250	80	5,1	9
LD 100/100/0,2	180	180	80	3,6	7	LD 100/100/2	250	250	120	11,7	16
LD 100/200/0,2	220	220	130	8,5	13	LD 100/200/2	400	400	150	35,9	45
LD 100/400/0,2	350	350	170	19,7	27	LD 100/400/2	420	420	280	88,9	102
LD 100/700/0,2	350	350	270	51,3	62	LD 100/700/2	450	450	480	212	234
LD 100/1000/0,2	400	400	340	110	123	LD 100/1000/2	550	550	580	460	495
LD 100/50/0,5	180	180	60	2,2	6	LD 100/50/4	250	250	100	7,8	12
LD 100/100/0,5	200	200	90	6,2	10	LD 100/100/4	300	300	130	17,4	23
LD 100/200/0,5	300	300	140	16,7	23	LD 100/200/4	400	400	200	55,1	68
LD 100/400/0,5	400	400	170	36,5	45	LD 100/400/4	450	450	410	141	157
LD 100/700/0,5	400	400	270	86,4	98	LD 100/700/4	550	550	550	321	354
LD 100/1000/0,5	500	500	310	173	188	LD 100/1000/4	550	550	770	727	770
LD 100/50/1	180	180	70	3,3	7	LD 100/50/8	250	250	120	11,8	16
LD 100/100/1	250	250	110	8,6	12	LD 100/100/8	350	350	140	26,9	36
LD 100/200/1	350	350	140	23,5	31	LD 100/200/8	450	450	240	83,9	98
LD 100/400/1	420	420	190	55	66	LD 100/400/8	500	500	470	212	231
LD 100/700/1	420	420	360	134,3	148	LD 100/700/8	550	550	750	499	545
LD 100/1000/1	550	550	400	266	283						