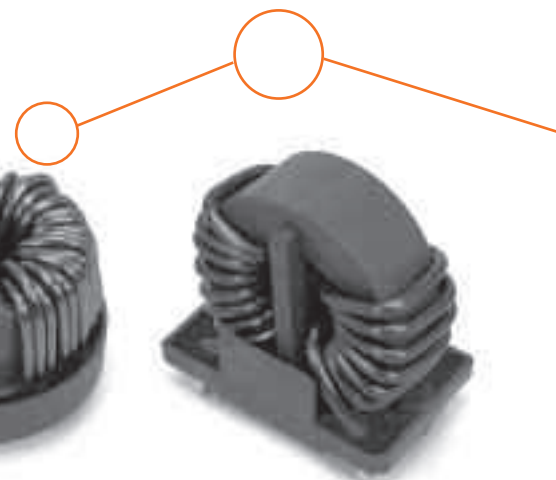


Common mode chokes

UL1446 STANDARD SERIES



General information

Chokes are designed, manufactured and tested in compliance with EN50178.

Plastic materials comply with the following UL standards:

- UL94 (file number E41871)
- UL1446 (file number OBJY2.E329745)

Temperature class B (130 °C)

- I_N = nominal current in each winding
- $U_{N\text{ OVCat III / II}}$ = operating voltage for overvoltage category III / II
- L_N = nominal inductance, tolerance +50 % / -30 %
- Ambient temperature $T_a = -40\text{ °C} \dots +70\text{ °C}$ (short-term +90 °C)
- Operating temperature $T_{op} = -40\text{ °C} \dots +130\text{ °C}$ (short-term +150 °C)

The standard chokes are designed for a temperature rise of $\Delta T = 45 \dots 60\text{ K}$ at $T_a = 70\text{ °C}$ and $I = I_N$ in each winding. Data derating is necessary for deviating ambient temperature or deviating nominal current. Please contact VAC for further detailed information.

Standard series CMCs for single-phase applications

I_N A	design	U_N OVCat III / II V	L_N mH		R_{Cu} typ. mΩ	$ Z $ 100kHz Ω	f_R typ. MHz	I_{cm} 10 kHz mA	dimensions			part number
			10 kHz	100 kHz					l mm	b mm	h mm	
2	upright	300 / 600	2x12.1	2x2.8	101	3000	3,6	17	22	12	25	T60405-R6131-X402
4	upright	300 / 600	2x10.8	2x2.5	27,5	2320	1.2	12	22	12	25	T60405-R6131-X204
4.5	upright	300 / 600	2x28.3	2x6.6	36	6500	0,4	18	27	17	29	T60405-R6161-X504
6	upright	300 / 600	2x29.1	2x6.7	37,6	8500	0,25	14	35	21	37	T60405-R6166-X206
8	upright	300 / 600	2x16.4	2x3.7	19,1	4200	0,5	20	35	21	36,5	T60405-R6166-X208
10	low profile	300 / 600	2x11.4	2x2.6	12,2	3200	0,7	16	35	35	23	T60405-R6123-X210
10	upright	300 / 600	2x11.4	2x2.6	12,7	3150	0.7	16	35	21	37	T60405-R6166-X210
12	upright	300 / 600	2x11.4	2x2.6	8.9	2950	0,7	22	38	22	35	T60405-R6126-X212
12	low profile	300 / 600	2x11.4	2x2.6	8,8	2950	0,7	22	35	35	25	T60405-R6123-X213
13	low profile	300 / 600	2x8.6	2x2.2	6,3	2250	1,1	28	35	35	22	T60405-R6122-X100
16	low profile	300 / 600	2x12.9	2x3.1	5,7	3000	3.0	37	40	40	24	T60405-R6123-X616
16	upright	300 / 600	2x6	2x1.5	4,6	1600	1.0	35	38	21	38	T60405-R6166-X033
16	upright	300 / 600	2x2.9	2x0.7	3,9	830	3,3	60	36	21	38	T60405-R6166-X039
20	low profile	300 / 600	2x1.8	2x0.4	3,2	500	11,5	40	35	35	23,5	T60405-R6123-X220
20	low profile	300 / 600	2x6.6	2x1.6	2.9	1470	5,7	35	43	43	24	T60405-R6123-X221
25	low profile	300 / 600	2x4.2	2x1	1.9	970	7,1	50	42,5	42,5	25	T60405-R6123-X226
25	low profile	600 / 1000	2x12	2x2.8	3,5	2900	2,4	55	52	52	32	T60405-R6123-X227
25	upright	300 / 600	2x4.2	2x1	1.9	970	4,9	50	42	27	40	T60405-R6128-X225
30	low profile	600 / 1000	2x3.9	2x0.9	2.4	920	7.0	50	52	52	29	T60405-R6123-X232
30	upright	600 / 1000	2x3.9	2x0.9	2,3	900	4.0	65	51	27	50	T60405-R6128-X031
40	low profile	600 / 1000	2x3.6	2x0.8	1.4	870	8,2	90	52	52	32	T60405-R6123-X241
48	low profile	600 / 1000	2x2.5	2x0.6	0.75	660	6,7	110	52	52	32	T60405-R6123-X248
63	low profile	600 / 1000	2x1.6	2x0.4	0,5	390	9,3	150	53,5	53,5	32	T60405-R6123-X263
85	low profile	600 / 1000	2x1.6	2x0.5	0.6	510	1,6	200	73	73	40	T60405-R6123-X285

R_{Cu} : winding resistance per winding |Z| : choke impedance f_R : choke resonance frequency

For more detailed technical information please see our product data sheets at www.vacuumschmelze.com. Custom CMCs for other nominal currents, in different designs and with other properties are available on request.

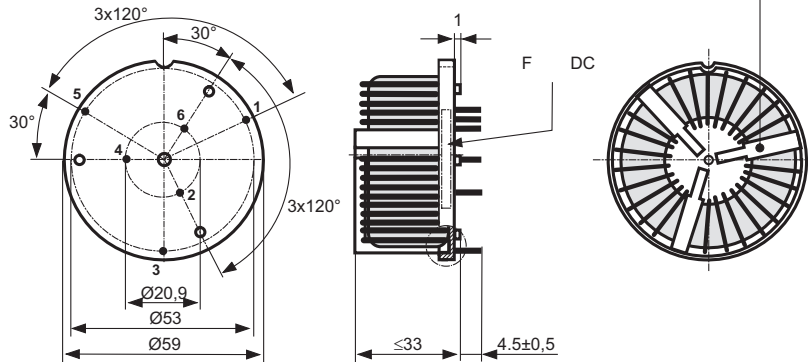
3- and 4-phase CMCs

Toleranz der Stiftabstände
±0,3mm
(Tolerances grid distance)

DC = Date Code
F = Factory

Beschriftung
(marking)

Trennsteg
(separation)
≥5.5mm



We provide more detailed technical information (data sheets) for all standard products on our web-page www.vacuumschmelze.com. Example outline of the 3-phase CMC T60405-S6123-X332.

Standard series 3-phase chokes for 3-phase applications

I _N A	design	U _N OV/Cat III / II V	L _N mH		R _{Cu} mΩ	Z 100kHz Ω	f _R MHz	I _{cm} 10 kHz mA	dimensions			part number
			10 kHz	100 kHz					l mm	b mm	h mm	
7	low profile	600 / 1000	3x31.8	3x7.4	24,6	8650	0,23	27	40,5	40,5	32,5	T60405-S6123-X306
10	low profile	600 / 1000	3x13.9	3x3.2	14	3500	1,5	30	51	51	32	T60405-S6123-X310
11	low profile	600 / 1000	3x10.6	3x2.5	8,5	2600	0,8	40	42	42	32	T60405-S6123-X308
12	low profile	600 / 1000	3x5.7	3x3.7	11,8	2650	0,48	150	51	51	32	T60405-S6123-X312
16	low profile	600 / 1000	3x4.8	3x3.1	6,5	2500	0,65	200	59	59	32	T60405-S6123-X316
16	low profile	600 / 1000	3x9.4	3x2.2	5,9	2400	1,45	35	51,5	51,5	34	T60405-S6123-X317
20	low profile	600 / 1000	3x10.6	3x2.4	4,1	2650	0,9	60	59	59	33	T60405-S6123-X320
25	low profile	600 / 1000	3x2	3x1.3	2,27	1000	2,8	380	60	60	33	T60405-S6123-X325
25	low profile	600 / 1000	3x4.9	3x1.1	2,1	1150	2	60	51,5	51,5	32	T60405-S6123-X326
32	low profile	600 / 1000	3x1.2	3x0.8	1,4	600	4,9	480	59	59	33	T60405-S6123-X332
40*	low profile	600 / 1000	3x2.5	3x0.6	1,2	600	4,7	100	52	52	33	T60405-S6123-X140
40*	low profile	600 / 1000	3x1.5	3x0.8	1,72	680	4	380	70	70	37	T60405-S6123-X240
63	low profile	600 / 1000	3x1.6	3x0.5	0,72	500	1	190	70	70	42	T60405-S6123-X363
70	low profile	600 / 1000	3x0.8	3x0.5	0,86	415	1,45	900	85	85	53	T60405-S6123-X370
110	low profile	600 / 1000	3x0.7	3x0.6	0,63	430	1,4	1750	135	135	57	T60405-S6123-X311

Standard series 4-fold chokes

10** 12	low profile	600 / 1000	4x6.9	4x1.6	7,66	1500	1,7	40	51	51	33	T60405-S6123-X400
16** 20	low profile	600 / 1000	4x3.6	4x0.8	2,75	860	3,4	90	51,5	51,5	33	T60405-S6123-X401
24** 30	low profile	600 / 1000	4x3.2	4x0.7	1,5	750	3,5	100	60	60	33,5	T60405-S6123-X402
32** 40	low profile	600 / 1000	4x1.4	4x0.3	0,82	360	7	160	60	60	33	T60405-S6123-X403

* for T_a ≤ 60°C

** for T_a ≤ 85°C