PEH 200 85°C

- High CV-value
- Long Life
- Low ESR and ESL
- Compact size

APPLICATION

Typical applications for the new PEH 200 would be found in Uninterruptable Power Supplies (UPS), Ground Power Units (GPU), Welding Equipments and Drives where high current ratings and compact size are important.

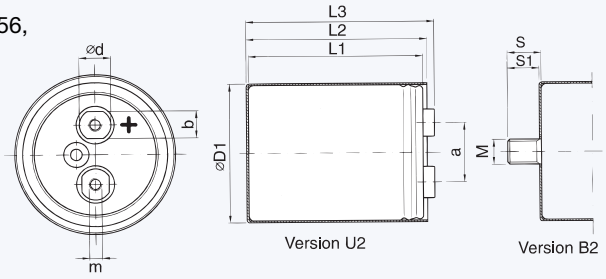
BASIC DESIGN

Dubbed the Elyt Long Life, the compact PEH 200 series has a polarized, all-welded design, heavy duty screw terminals, negative pole connected to the case, safety vent and plastic insulation. The sealing systems designed for electrolyte leakage free operation and a very low gas-diffusion rate of electrolyte.

Mechanical contact between the winding and the aluminium case allows excellent heat transfer from the winding hot spot to the ambient, which means cooler operation and very high current ratings.

SPECIFICATION

Standards	IEC 384-4 Long Life Grade 40/85/56, DIN 41240
Capacitance range	100–330000 µF
Capacitance tolerance	–20 to +20%
Rated voltage	25–550 VDC
Temperature range	–40 to +85°C
Shelf life	2000 h at 0V +85°C, or 4 years at 0V +40°C
Operational life time	60000 h at +85°C (Case ⌀ = 90 mm)
Diameter range	35–90 mm



Dimensions table PEH 200 (mm)

D x L	Case code	D1 ±1.0	L1 ±1.0	L2 ±1.0	L3 ±1.0	S	S1	M	a ±0.5	b	d	m*	Weight approx (g)
35 x 47	E	36.6	47.5	50.5	55.0	12	11.0	M8	13.0	—	8	M5	60
35 x 51	A	36.6	51.5	54.5	58.9	12	11.0	M8	13.0	—	8	M5	70
35 x 60	B	36.6	59.5	62.5	66.9	12	11.0	M8	13.0	—	8	M5	85
35 x 75	C	36.6	73.5	76.5	80.9	12	11.0	M8	13.0	—	8	M5	105
35 x 95	D	36.6	94.5	97.5	101.9	12	11.0	M8	13.0	—	8	M5	130
50 x 49	G	51.6	48.5	51.5	56.4	16	15.0	M12	22.0	13	15	M5	150
50 x 75	H	51.6	74.5	77.5	82.4	16	15.0	M12	22.0	13	15	M5	180
50 x 95	J	51.6	95.5	98.5	103.4	16	15.0	M12	22.0	13	15	M5	240
50 x 105	K	51.6	103.5	106.5	111.4	16	15.0	M12	22.0	13	15	M5	265
50 x 115	I**	51.6	115.5	118.5	123.4	16	15.0	M12	22.0	13	15	M5	300
65 x 105	O	66.6	106.0	109.2	113.0	16	14.8	M12	28.5	13	15	M5	415
65 x 115	Q**	66.6	118.0	121.2	125.0	16	14.8	M12	28.5	13	15	M5	460
65 x 130	S**	66.6	129.0	132.2	136.0	16	14.8	M12	28.5	13	15	M5	520
65 x 140	R**	66.6	141.0	144.2	148.0	16	14.8	M12	28.5	13	15	M5	650
75 x 78	L	76.6	77.0	80.2	84.0	16	14.8	M12	32.0	13	15	M5	430
75 x 98	P**	76.6	98.0	101.2	105.0	16	14.8	M12	32.0	13	15	M5	530
75 x 105	T	76.6	106.0	109.2	113.0	16	14.8	M12	32.0	13	15	M5	585
75 x 115	U	76.6	118.0	121.2	125.0	16	14.8	M12	32.0	13	15	M5	640
75 x 145	V	76.6	146.0	149.2	153.0	16	14.8	M12	32.0	13	15	M5	800
75 x 220	X	76.6	221.0	224.2	228.0	16	14.8	M12	32.0	13	15	M5	1400
90 x 78	M	91.6	76.5	79.7	83.4	16	14.8	M12	32.0	13	15	M5	750
90 x 98	N	91.6	97.5	100.7	104.4	16	14.8	M12	32.0	13	15	M5	950
90 x 145	Y	91.6	145.5	148.7	152.4	16	14.8	M12	32.0	13	15	M5	1400
90 x 220	Z	91.6	220.0	223.2	226.9	16	14.8	M12	32.0	13	15	M5	1500

* M6 and other threads on request. **on request

ARTICLE TABLE PEH 200 (85°C)

C_R	D x L	Case code	I_{RAC} * 85°C 100 Hz	I_{RAC}* 50°C ** 10 kHz	I_{RAC}* 40°C 10 kHz	ESR* 20°C 100 Hz	ESR* 20°C 100 kHz	L_{ESL} Approx.	Article code 1st block
µF	mm		A	A	A	mΩ	mΩ	nH	
25 VDC (U_R)									
15000	35 x 51	A	11.9	28.7	19.0	25	21	12	PEH200HA5150M
22000	35 x 75	C	15.2	34.3	24.4	17	14	12	PEH200HC5220M
33000	35 x 95	D	17.8	38.0	28.1	12	10	12	PEH200HD5330M
47000	50 x 75	H	20.2	43.3	30.1	11	10	16	PEH200HH5470M
68000	50 x 95	J	23.4	47.4	34.6	8	7	16	PEH200HJ5680M
100000	50 x 105	K	23.9	46.1	34.7	7	7	16	PEH200HK6100M
150000	65 x 105	O	26.3	50.0	37.2	7	7	16	PEH200HO6150M
220000	75 x 105	T	35.0	63.6	49.5	5	5	17	PEH200HT6220M
330000	75 x 145	V	40.0	73.1	56.9	4	4	17	PEH200HV6330M
40 VDC (U_R)									
6800	**35 x 51**	**A**	**9.9**	**27.2**	**18.1**	**33**	**25**	**12**	**PEH200KA4680M**
10000	35 x 60	B	12.0	31.5	21.4	23	18	12	PEH200KB5100M
15000	**35 x 75**	**C**	**14.6**	**36.1**	**25.5**	**16**	**12**	**12**	**PEH200KC5150M**
22000	35 x 95	D	17.1	39.8	29.2	12	9	12	PEH200KD5220M
33000	50 x 75	H	18.9	41.1	28.8	11	9	16	PEH200KH5330M
47000	**50 x 95**	**J**	**22.1**	**46.3**	**33.6**	**8**	**7**	**16**	**PEH200KJ5470M**
68000	65 x 105	O	25.2	49.9	35.6	7	7	16	PEH200KO5680M
100000	**65 x 105**	**O**	**24.9**	**46.3**	**36.9**	**8**	**8**	**16**	**PEH200KO6100M**
150000	75 x 115	U	35.7	67.7	51.2	5	4	17	PEH200KU6150M
220000	**75 x 145**	**V**	**34.4**	**62.3**	**48.9**	**5**	**5**	**17**	**PEH200KV6220M**
63 VDC (U_R)									
4700	**35 x 51**	**A**	**9.0**	**26.8**	**18.0**	**32**	**21**	**12**	**PEH200MA4470M**
6800	35 x 75	C	11.5	32.7	23.5	21	14	12	PEH200MC4680M
10000	**35 x 95**	**D**	**13.6**	**36.0**	**27.0**	**15**	**10**	**12**	**PEH200MD5100M**
15000	50 x 75	H	16.1	37.3	26.5	14	11	16	PEH200MH5150M
22000	**50 x 95**	**J**	**19.0**	**42.0**	**30.9**	**10**	**8**	**16**	**PEH200MJ5220M**
33000	65 x 105	O	22.8	45.9	34.8	10	8	16	PEH200MO5330M
47000	**65 x 105**	**O**	**21.8**	**42.7**	**32.0**	**10**	**9**	**16**	**PEH200MO5470M**
68000	75 x 115	U	31.5	61.3	46.8	6	5	17	PEH200MU5680M
100000	**75 x 145**	**V**	**34.3**	**62.2**	**50.3**	**5**	**5**	**17**	**PEH200MV6100M**
100 VDC (U_R)									
1500	35 x 51	A	5.7	18.0	12.1	92	63	12	PEH200PA4150M
2200	**35 x 60**	**B**	**7.0**	**21.3**	**14.7**	**63**	**44**	**12**	**PEH200PB4220M**
3300	35 x 75	C	8.7	25.0	17.8	43	30	12	PEH200PC4330M
4700	**35 x 95**	**D**	**10.3**	**28.9**	**21.1**	**31**	**21**	**12**	**PEH200PD4470M**
6800	50 x 75	H	12.7	30.4	21.5	33	27	16	PEH200PH4680M
10000	**50 x 95**	**J**	**15.3**	**34.7**	**25.6**	**23**	**19**	**16**	**PEH200PJ5100M**
15000	50 x 105	K	17.3	37.6	27.9	17	14	16	PEH200PK5150M
22000	**65 x 105**	**O**	**19.3**	**38.7**	**30.1**	**15**	**13**	**16**	**PEH200PO5220M**
33000	75 x 105	T	26.3	53.0	39.8	10	8	17	PEH200PT5330M
47000	**75 x 145**	**V**	**30.8**	**60.5**	**47.3**	**7**	**6**	**17**	**PEH200PV5470M**
250 VDC (U_R)									
330	35 x 51	A	2.2	13.5	8.7	330	170	12	PEH200SA3330M
470	**35 x 60**	**B**	**2.7**	**15.9**	**10.6**	**240**	**120**	**12**	**PEH200SB3470M**
680	35 x 75	C	3.4	18.7	13.0	160	84	12	PEH200SC3680M
1000	35 x 95	D	4.1	21.2	15.6	110	58	12	PEH200SD4100M
1000	**50 x 49**	**G**	**4.3**	**20.7**	**12.6**	**120**	**69**	**16**	**PEH200SG4100M**
1500	50 x 75	H	5.9	28.7	19.5	78	42	16	PEH200SH4150M
2200	**50 x 95**	**J**	**7.3**	**32.5**	**23.2**	**54**	**29**	**16**	**PEH200SJ4220M**
3300	65 x 105	O	10.0	39.8	29.4	38	22	16	PEH200SO4330M
3300	75 x 78	L	10.5	43.8	29.6	38	22	17	PEH200SL4330M
4700	**65 x 105**	**O**	**11.3**	**38.2**	**27.2**	**29**	**18**	**16**	**PEH200SO4470M**

* Maximum values. ** 2 m/s forced air, studmounted on 3°C/W aluminium chassis.
Items marked in **bold**, are available on short lead-times

ARTICLE TABLE PEH 200 (85°C)

C_R	D x L	Case code	I_{RAC}* 85°C	I_{RAC}* 50°C **	I_{RAC}* 40°C	ESR* 20°C	ESR* 20°C	L_{ESL} Approx.	Article code 1st block
µF	mm		100 Hz A	10 kHz A	10 kHz A	100 Hz mΩ	100 kHz mΩ	nH	
250 VDC (U_R)									
4700	90 x 78	M	12.7	44.2	30.4	30	18	16	PEH200SM4470M
6800	75 x 105	T	14.7	51.5	36.5	20	12	17	PEH200ST4680M
6800	90 x 98	N	15.8	52.1	37.3	21	13	16	PEH200SN4680M
10000	**75 x 145**	**V**	**18.0**	**59.0**	**44.0**	**14**	**9**	**17**	**PEH200SV5100M**
12000	75 x 145	V	18.8	58.6	43.6	14	9	17	PEH200SV512AM
15000	**75 x 220**	**X**	**20.6**	**61.6**	**49.2**	**10**	**6**	**17**	**PEH200SX5150M**
15000	90 x 145	Y	21.8	60.1	45.5	12	8	16	PEH200SY5150M
350 VDC (U_R)									
220	35 x 51	A	2.0	13.7	8.8	360	170	12	PEH200UA3220M
330	35 x 60	B	2.6	16.6	11.0	240	110	12	PEH200UB3330M
470	35 x 75	C	3.2	19.3	13.4	170	79	12	PEH200UC3470M
680	35 x 95	D	3.8	21.9	16.0	120	55	12	PEH200UD3680M
680	50 x 49	G	4.0	20.7	12.6	130	66	16	PEH200UG3680M
1000	50 x 75	H	5.5	28.8	19.5	85	41	16	PEH200UH4100M
1500	**50 x 95**	**J**	**6.8**	**32.9**	**23.4**	**57**	**28**	**16**	**PEH200UJ4150M**
2200	**65 x 105**	**O**	**9.4**	**39.8**	**29.2**	**41**	**21**	**16**	**PEH200UO4220M**
2200	75 x 78	L	9.8	43.5	29.4	41	21	17	PEH200UL4220M
3300	**65 x 105**	**O**	**10.9**	**38.6**	**27.5**	**31**	**17**	**16**	**PEH200UO4330M**
3300	90 x 78	M	13.1	54.0	37.0	28	15	16	PEH200UM4330M
4700	75 x 115	U	14.5	54.7	39.5	20	11	17	PEH200UU4470M
4700	90 x 98	N	15.0	51.3	36.7	22	13	16	PEH200UN4470M
6800	**75 x 145**	**V**	**16.8**	**57.0**	**42.3**	**15**	**8**	**17**	**PEH200UV4680M**
10000	75 x 220	X	19.4	60.8	48.5	11	7	17	PEH200UX5100M
10000	**90 x 145**	**Y**	**23.3**	**75.2**	**56.9**	**11**	**6**	**16**	**PEH200UY5100M**
15000	90 x 220	Z	27.3	79.8	64.4	8	5	16	PEH200UZ515AM
385 VDC (U_R)									
220	35 x 51	A	2.1	14.6	9.3	330	150	12	PEH200XA3220M
330	35 x 75	C	2.7	17.0	12.0	220	97	12	PEH200XC3330M
470	35 x 95	D	3.3	19.1	14.2	150	69	12	PEH200XD3470M
470	50 x 49	G	3.6	20.9	12.8	160	78	16	PEH200XG3470M
680	50 x 75	H	4.7	26.8	18.4	110	51	16	PEH200XH3680M
1000	50 x 95	J	5.9	31.7	22.8	76	35	16	PEH200XJ4100M
1500	50 x 105	K	7.1	34.1	24.7	52	25	16	PEH200XK4150M
2200	65 x 105	O	9.6	36.7	26.1	38	20	16	PEH200XO4220M
2200	75 x 78	L	10.0	42.7	28.8	38	20	17	PEH200XL4220M
3300	75 x 105	T	12.8	52.5	37.4	25	13	17	PEH200XT4330M
3300	90 x 78	M	13.3	52.6	36.0	26	14	16	PEH200XM4330M
4700	75 x 145	V	15.2	57.6	43.9	19	11	17	PEH200XV4470M
4700	90 x 98	N	16.6	62.4	44.4	19	10	16	PEH200XN4470M
6800	90 x 145	Y	20.9	74.8	57.2	14	8	16	PEH200XY4680M
6800	75 x 220	X	17.4	58.9	47.0	14	8	17	PEH200XX4680M
400 VDC (U_R)									
220	35 x 51	A	2.2	11.4	9.6	310	130	12	PEH200VA3220M
330	35 x 75	C	2.8	14.3	12.6	210	90	12	PEH200VC3330M
470	35 x 95	D	3.4	16.5	14.8	140	63	12	PEH200VD3470M
470	50 x 49	G	3.7	15.0	12.7	150	73	16	PEH200VG3470M
680	50 x 75	H	4.9	21.2	18.3	110	55	16	PEH200VH3680M
1000	50 x 95	J	5.9	24.2	21.3	76	38	16	PEH200VJ4100M
1500	65 x 105	O	9.1	49.1	35.1	53	27	16	PEH200VO415AQ
1500	75 x 78	L	8.8	34.0	29.0	52	27	17	PEH200VL4150M
2200	65 x 105	O	9.6	29.1	25.6	39	21	16	PEH200VO4220M
2200	90 x 78	M	11.8	44.1	37.1	36	19	16	PEH200VM4220M
3300	65 x 105	O	11.0	30.5	26.7	29	16	16	PEH200VO433AM
3300	75 x 115	U	13.8	52.0	45.7	22	10	17	PEH200VU433AQ
3300	90 x 98	N	14.9	52.8	45.2	25	13	16	PEH200VN4330M

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ARTICLE TABLE PEH 200 (85°C)

C_R	D x L	Case code	I_{RAC} * 85°C 100 Hz	I_{RAC}* 50°C ** 10 kHz	I_{RAC}* 40°C 10 kHz	ESR* 20°C 100 Hz	ESR* 20°C 100 kHz	L_{ESL} Approx.	Article code 1st block
µF	mm		A	A	A	mΩ	mΩ	nH	
400 VDC (U_R)									
3300	75 x 105	T	13.0	41.5	36.3	26	14	17	PEH200VT4330M
4700	75 x 145	V	15.6	57.0	42.5	18	10	17	PEH200VV447AM
6800	75 x 220	X	17.6	51.2	47.7	13	8	17	PEH200VX4680M
6800	90 x 145	Y	21.4	64.1	56.8	13	7	16	PEH200VY4680M
10000	90 x 220	Z	24.7	69.2	64.0	9	5	16	PEH200VZ5100M
420 VDC (U_R)									
150	35 x 51	A	1.8	12.1	7.8	400	170	12	PEH200OA3150M
220	35 x 75	C	2.3	14.3	10.3	270	110	12	PEH200OC3220M
330	35 x 95	D	2.9	16.3	12.3	180	76	12	PEH200OD3330M
330	50 x 49	G	3.2	20.4	12.6	190	80	16	PEH200OG3330M
470	50 x 75	H	4.2	24.8	17.0	140	62	16	PEH200OH3470M
680	50 x 95	J	5.1	28.1	20.4	96	44	16	PEH200OJ3680M
1000	50 x 105	K	6.3	32.0	23.2	67	31	16	PEH200OK4100M
1500	65 x 105	O	8.8	38.9	28.4	47	23	16	PEH200OO4150M
1500	75 x 78	L	9.1	42.3	28.5	47	23	17	PEH200OL4150M
2200	75 x 105	T	11.5	51.6	37.0	32	16	17	PEH200OT4220M
2200	90 x 78	M	12.2	52.7	36.0	33	17	16	PEH200OM4220M
2700	65 x 105	O	12.4	57.3	40.1	24	10	16	PEH200OO427AM
3300	75 x 145	V	14.0	57.5	43.7	22	11	17	PEH200OV4330M
3300	90 x 98	N	15.4	61.9	44.0	22	12	16	PEH200ON4330M
4700	75 x 220	X	15.7	57.6	46.8	16	8	17	PEH200OX4470M
4700	90 x 145	Y	18.2	62.2	47.5	17	9	16	PEH200OY4470M
8200	90 x220	Z	23.8	77.3	63.1	10	5	16	PEH200OZ4820M
450 VDC (U_R)									
150	35 x 51	A	2.0	14.6	9.3	350	150	12	PEH200YA3150M
220	35 x 75	C	2.5	16.8	11.9	240	99	12	PEH200YC3220M
330	35 x 95	D	3.1	19.4	14.5	160	66	12	PEH200YD3330M
330	50 x 49	G	3.5	20.8	12.7	170	75	16	PEH200YG3330M
470	**50 x 75**	**H**	**4.5**	**25.5**	**17.5**	**120**	**58**	**16**	**PEH200YH3470M**
680	50 x 95	J	5.5	28.8	20.8	86	41	16	PEH200YJ3680M
1000	**50 x 105**	**K**	**6.7**	**32.7**	**23.6**	**60**	**29**	**16**	**PEH200YK4100M**
1500	65 x 105	O	9.3	39.2	28.2	43	22	16	PEH200YO4150M
1500	75 x 78	L	9.6	42.3	28.5	43	22	17	PEH200YL4150M
1800	65 x 105	O	10.6	47.8	34.0	43	22	17	PEH200YO418AM
2200	**75 x 105**	**T**	**12.1**	**50.1**	**35.6**	**29**	**15**	**17**	**PEH200YT4220M**
2200	90 x 78	M	12.7	52.4	35.8	30	16	16	PEH200YM4220M
3300	75 x 115	U	14.2	52.5	37.7	30	16	17	PEH200YU433CM
3300	75 x 145	V	14.7	57.3	43.7	20	10	17	PEH200YV4330M
3300	90 x 98	N	16.1	61.9	43.9	21	11	16	PEH200YN4330M
4700	75 x 145	V	17.9	68.3	50.4	14	7	17	PEH200YV447BM
4700	75 x 220	X	16.8	59.3	47.6	14	8	17	PEH200YX4470M
4700	90 x 145	Y	18.9	61.4	46.9	16	9	16	PEH200YY4470M
6000	75 x 220	X	18.5	60.5	47.8	12	7	17	PEH200YX460BQ
8200	90 x 220	Z	24.9	77.7	63.4	10	5	16	PEH200YZ4820M
500 VDC (U_R)									
100	35 x 51	A	1.5	6.1	3.9	1000	590	12	PEH200ZA3100M
150	35 x 60	B	1.9	7.5	4.9	670	390	12	PEH200ZB3150M
220	35 x 75	C	2.3	8.4	5.8	505	310	12	PEH200ZC3220M
220	50 x 49	G	2.5	10.1	6.1	520	320	12	PEH200ZG3220M
330	35 x 95	D	2.9	10.7	7.7	300	180	12	PEH200ZD3330M
470	50 x 75	H	4.2	15.8	10.5	220	130	16	PEH200ZH3470M
680	50 x 95	J	5.1	18.4	12.8	150	90	16	PEH200ZJ3680M
1000	65 x 105	O	6.8	21.4	15.5	130	79	16	PEH200ZO4100M
1500	75 x 105	T	9.2	29.8	21.0	82	52	17	PEH200ZT4150M
1800	65 x 105	O	10.6	40.9	28.2	94	29	16	PEH200ZO418HM
2200	75 x 145	V	11.1	33.7	25.1	58	38	17	PEH200ZV4220M
3300	75 x 220	X	12.8	36.5	29.0	38	25	17	PEH200ZX4330M

* Maximum values. ** 2 m/s forced air, studmounted on 3°C/W aluminium chassis. Items marked in **bold**, are available on short lead-times

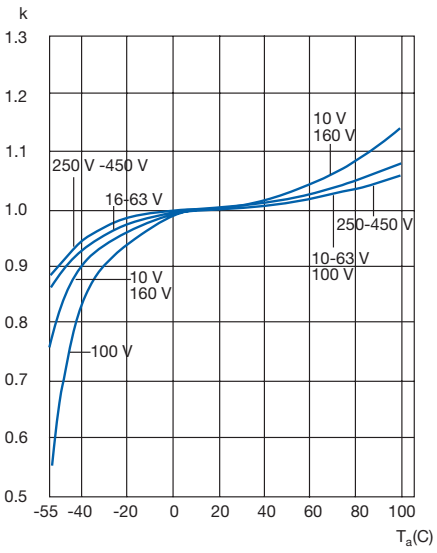
ARTICLE TABLE PEH 200 (85°C)

C_R	D x L	Case code	I_{RAC} * 85°C	I_{RAC}* 50°C **	I_{RAC}* 40°C	ESR* 20°C	ESR* 20°C	L_{ESL} Approx.	Article code 1st block
µF	mm		100 Hz A	10 kHz A	10 kHz A	100 Hz mΩ	100 kHz mΩ	nH	
500 VDC (U_R)									
3300	90 x 145	Y	15.7	46.9	35.4	38	24	16	PEH200ZY4330M
5600	90 X 220	Z	19.6	53.4	42.6	25	17	16	PEH200ZZ4560M
550 VDC (U_R)									
680	65 x 105	O	6.6	21.1	15.4	160	110	16	PEH200TO3680M
1000	65 x 105	O	8.0	25.2	17.9	120	76	16	PEH200TO4100M
1200	90 x 78	M	10.2	33.7	22.6	97	63	16	PEH200TM412AM
1200	75 x 105	T	9.5	30.5	21.6	96	62	17	PEH200TT4120M
1500	75 x 145	V	10.6	32.3	24.4	77	49	17	PEH200TV4150M
1800	75 x 145	V	11.6	35.3	26.3	66	42	17	PEH200TV4180M
2200	75 x 220	X	11.1	29.4	24.1	65	45	17	PEH200TX4220M
2700	75 x 220	X	13.4	37.8	30.1	45	29	17	PEH200TX4270M
2700	90 x 145	Y	15.7	44.4	33.7	47	30	16	PEH200TY4270M

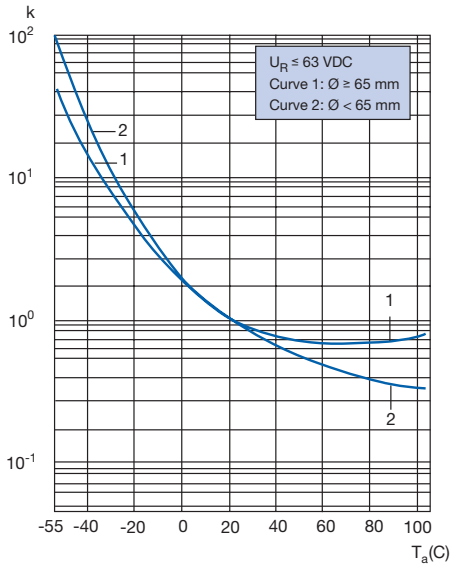
* Maximum values. ** 2 m/s forced air, studmounted on 3°C/W aluminium chassis.

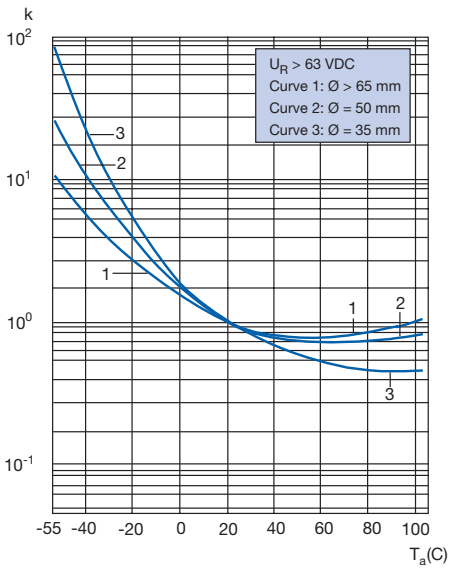
TECHNICAL DATA PEH 200 (85°C)

The capacitance vs ambient temperature
(T_a) at f = 100 Hz



ESR as a function of ambient temperature
(T_a) at f = 100 kHz. k = R_{ESR} (T_a)/R_{ESR} (20°C)

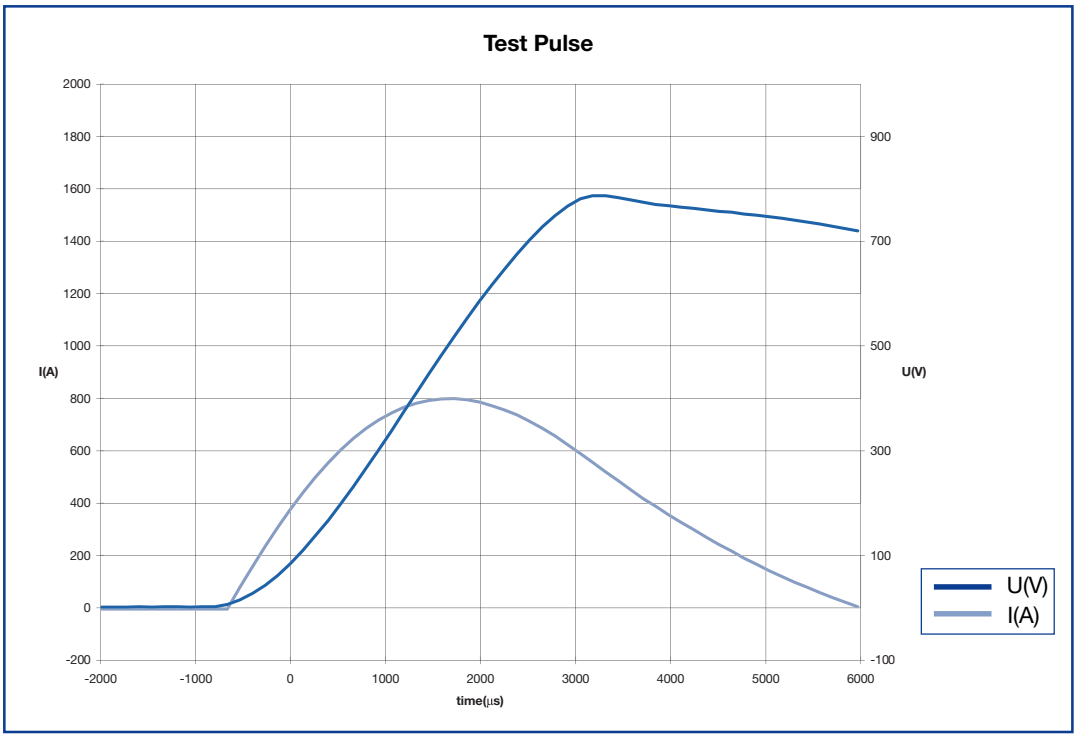




Increased over-voltage capability
Most power electronics applications of today will be exposed to over-voltages, like transients on the mains. Even when using a mains filter, the electrolytic capacitors could be exposed to current pulses that can over-charge the capacitors. The over-charging causes over-voltages and heat dissipation in the capacitors. This is why Evox Rifa has introduced a new method to define the capacitors capability to withstand a sequence of over-charging pulses.

Test Method
The capacitors are tested according to the multi-pulse test procedure. Each test pulse, every 90 seconds, consists of twice the charge of the capacitor, Q = 2xC_RxU_R. See example below for the PEH200, 550 VDC capacitors.

Example:
Article: PEH200TY4270M
U_R: 550 Volt
C_R: 2700μF
Case: 90 x 145 mm



LEAKAGE CURRENT

Rated leakage current, I_{RL} (µA).
Rated voltage, U_R (V).
Rated capacitance, C_R (µF) $I_{RL} = 0.003 \times C_R \times U_R + 4$

THERMAL RESISTANCE

R_{th} – short form table versus chassis area and air speed

D x L	Case code	STUDMOUNTED R_{thhs} = 3°C/W (0.5 m/s)	STUDMOUNTED R_{thhs} = 2°C/W (0.5 m/s)	STUDMOUNTED R_{thhs} = 3°C/W (2.0 m/s)	STUDMOUNTED R_{thhs} = 2°C/W (2.0 m/s)	CLIPMOUNTED (0.5 m/s)	CLIPMOUNTED (2.0 m/s)
35 x 47	E	5.6	5.3	4.5	4.4	11.9	8.3
35 x 51	A	5.6	5.3	4.5	4.4	10.6	7.4
35 x 60	B	5.4	5.1	4.4	4.3	9.8	7.0
35 x 75	C	5.3	5.1	4.4	4.3	9.2	6.7
35 x 95	D	5.3	5.1	4.4	4.3	8.9	6.7
50 x 49	G	3.3	2.9	2.8	2.5	6.7	4.5
50 x 75	H	3.6	3.3	2.8	2.7	6.3	4.4
50 x 95	J	3.4	3.2	2.7	2.6	5.8	4.2
50 x 105	K	3.4	3.2	2.7	2.6	5.8	4.2
50 x 115	I	3.4	3.2	2.7	2.6	5.8	4.2
65 x 105	O	2.6	2.4	2.1	2.0	4.2	3.1
65 x 115	Q	2.6	2.4	2.1	2.0	4.2	3.1
65 x 130	S	2.6	2.4	2.1	2.0	4.2	3.1
65 x 140	R	2.6	2.4	2.1	2.0	4.2	3.1
75 x 78	L	2.3	2.0	1.8	1.7	4.1	2.7
75 x 98	P	2.3	2.0	1.8	1.7	4.0	2.7
75 x 105	T	2.3	2.1	1.7	1.6	3.7	2.6
75 x 115	U	2.2	2.0	1.6	1.5	3.5	2.5
75 x 145	V	2.2	2.0	1.6	1.5	3.4	2.5
75 x 220	X	2.3	2.1	2.0	1.9	3.4	2.6
90 x 78	M	1.9	1.7	1.6	1.4	3.4	2.2
90 x 98	N	1.9	1.7	1.5	1.4	3.1	2.1
90 x 145	Y	1.8	1.6	1.5	1.4	2.7	1.9
90 x 220	Z	1.9	1.7	1.6	1.5	2.7	2.0

OPERATIONAL DATA

Please see operational lifetime section, page 57.

RELIABILITY

The failure rate is derived from our periodic test results. The failure rate (λ_R) is therefore only given at test temperature for life tests. An estimation is also given at 60°C. The expected failure rate for this capacitor range is based on our periodic test results for capacitors with structural similarity.

T_a	Failure rate per hour
85°C	1×10^{-6}
60°C	1×10^{-7}

Failure rate per hour for catastrophic plus parametric failures.

MECHANICAL DATA

Mounting position
The capacitor can be mounted upright or inclined to a horizontal position.

Clamp fixing
Clips must be ordered seperately. See “Accessories”.

Stud fixing
Nylon cap nut must be ordered separately. For the stud fixing insulated version the outer insulation serves as lock washer.

See “Accessories”. Max tightening torque: M8: 3 Nm M12: 8 Nm. Max chassis thickness 5 mm. Mounting hole: See “Accessories”.

Screw terminals
M5 x 10 according to DIN 41.248. Max tightening torque: 2.5 Nm. Must be ordered separately: See “Accessories”. Recommended max connector thickness with delivered screw: 4 mm. M6 thread on request.

Insulation can
PEH200 is supplied with a polypropylene insulation can, thickness 0.8 mm. Voltage proof of the insulation sleeve:
≥ 4000 VDC.

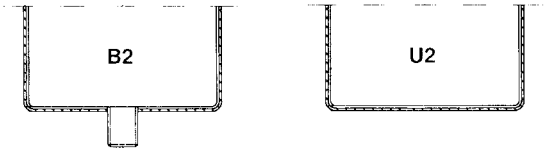
PVC shrink sleeve only on request.

ORDERING INFORMATION

1st block (pos 1–13)													**2nd block** (pos 14–20)						
P	**E**	**H**	**2**	**0**	**0**	**K**	**U**	**6**	**1**	**5**	**0**	**M**	**B**	**2**					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

Capacitance tolerances:
Pos. 13: M: -20 to +20%

Pos. 14-15: B2 = with bottom stud
U2 = without bottom stud



Quantities and weights

CASE CODE	A	B	C	D	E	G	H	I	J	K	L	M	N	O	P	R	Q	S	T	U	V	X	Y	Z
Weight approx (g)	70	85	105	130	60	150	180	300	240	265	430	750	950	415	530	650	460	520	585	640	800	1400	1400	1500
Standard box quantity	42	42	42	42	42	20	20	20	20	20	9	6	6	12	9	12	12	12	9	9	9	9	6	6