

PEH 200 85°C

RoHS
Compliant

- High CV-value
- Long Life
- Low ESR and ESL
- Compact size
- Optimized designs available on request

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.

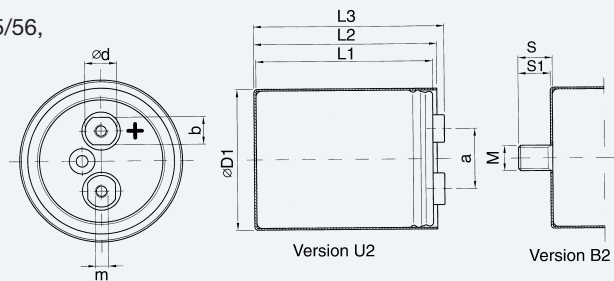
BASIC DESIGN

PEH 200 series has a polarized, all-welded design, heavy duty screw terminals, extended cathode construction, 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 60384-4 Long Life Grade 40/85/56, DIN 41240
Capacitance range	100–330000 µF
Capacitance tolerance	–20 to +20%
Rated voltage	25–500 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 Ø = 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	I_{RAC}^* 50°C **	I_{RAC}^* 40°C	ESR* 20°C	ESR* 20°C	L_{ESL} Approx.	Article code
μF	mm		100 Hz A	10 kHz A	10 kHz A	100 Hz m Ω	100 kHz m Ω	nH	U2 = Plain can B2 = Stud can
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.

ARTICLE TABLE PEH 200 (85°C)

C _R	D x L	Case code	I _{RAC} *	I _{RAC} *	I _{RAC} *	ESR*	ESR*	L _{ESL} Approx.	Article code
			85°C	50°C	40°C	20°C	20°C		
μF	mm		100 Hz A	10 kHz A	10 kHz A	100 Hz mΩ	100 kHz mΩ	nH	U2 = Plain can B2 = Stud can
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--

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

ARTICLE TABLE PEH 200 (85°C)

C _R	D x L	Case code	I _{RAC} *	I _{RAC} *	I _{RAC} *	ESR*	ESR*	L _{ESL} Approx.	Article code
			85°C	50°C	40°C	20°C	20°C		
μF	mm		100 Hz A	10 kHz A	10 kHz A	100 Hz mΩ	100 kHz mΩ	nH	U2 = Plain can B2 = Stud can
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 x 220	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--
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	44	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.

ARTICLE TABLE PEH 200 (85°C)

C _R	D x L	Case code	I _{RAC} *	I _{RAC} *	I _{RAC} *	ESR*	ESR*	L _{ESL} Approx.	Article code
			85°C	50°C **	40°C	20°C	20°C		
μF	mm		100 Hz A	10 kHz A	10 kHz A	100 Hz mΩ	100 kHz mΩ	nH	U2 = Plain can B2 = Stud can
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--

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

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