

# Eaton 91PS and 93PS UPS runtimes on battery

10 kW frame



15/20 kW frame



30/40 kW frame



Power range	91PS 93PS	8-10 kW 8-10 kW		91PS 93PS	8-15 kW 8-20 kW		91PS 93PS	8-30 kW 8-40 kW
Internal battery strings	0 - 1			0 - 2			0 - 4	
External Battery Cabinets (EBC)	H, A, B			A, B			A, B	

[Page 2](#) [Internal batteries for 15/20 kW frame + EBC-A or 10 kW frame with EBC-H or EBC-A](#)

[Page 3](#) [Internal batteries for 10/15/20 kW frame + EBC-B](#)

[Page 4](#) [Internal batteries for 30/40 kW frame](#)

[Page 5](#) [Internal batteries for 30/40 kW frame + EBC-B](#)



Powering Business Worldwide

## Internal batteries for 15/20 kW frame + EBC-A or 10 kW frame with EBC-H or EBC-A 9 Ah batteries (standard & long life)

Power Factor 1.0	UPS load																	
Strings:	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	kVA
1	27	20	16	14	11	10	8	7	6	5	5	4	4	4	3	-	-	min
2	64	49	40	33	28	24	21	18	17	15	14	13	11	10	10	9	8	min
3	105	82	66	54	45	40	35	31	28	26	23	21	19	18	17	15	14	min
4	151	114	92	79	66	56	50	44	40	37	33	30	28	26	25	23	21	min
5	191	153	120	102	86	76	66	58	52	47	43	40	38	35	32	30	28	min
6	234	184	154	126	108	93	83	74	66	59	54	50	46	43	41	38	36	min
7	283	222	179	155	130	112	99	88	81	73	66	60	56	52	48	45	43	min
8	341	258	212	176	155	133	115	104	93	85	79	73	67	60	57	54	50	min

Power Factor 0.9	UPS load																	
Strings:	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	kVA
1	30	24	19	15	13	11	9	8	7	7	6	5	5	4	4	4	3	min
2	74	56	44	38	32	28	24	21	19	17	15	14	13	12	11	10	10	min
3	117	91	76	61	52	45	40	36	32	29	27	24	22	20	19	18	17	min
4	168	131	106	88	76	65	56	50	45	41	38	35	32	29	28	26	25	min
5	217	170	140	114	98	85	76	67	59	54	49	45	42	40	37	35	32	min
6	267	211	171	146	121	106	92	84	76	69	61	57	53	49	45	43	41	min
7	327	249	205	172	150	128	112	100	89	83	76	70	64	59	55	52	48	min
8	399	293	236	201	172	153	133	117	107	96	88	82	77	71	65	60	57	min

Power Factor 0.8	UPS load																	
Strings:	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	kVA
1	36	28	22	18	15	13	11	10	9	8	7	6	6	5	5	4	4	min
2	84	65	52	43	37	32	28	25	22	20	18	17	15	14	13	12	11	min
3	139	107	86	73	60	52	45	41	37	34	30	28	26	24	22	20	19	min
4	191	153	120	102	86	76	66	58	52	47	43	40	38	35	32	30	28	min
5	245	195	161	134	113	98	86	78	70	62	57	53	48	45	42	40	38	min
6	308	237	196	166	144	120	108	96	86	80	73	66	60	56	53	49	46	min
7	390	288	232	197	170	150	130	115	105	94	87	81	75	70	64	59	56	min
8	463	348	274	229	198	172	154	137	121	111	102	93	87	82	77	72	67	min



15/20 kW frame  
0-2 strings of  
batteries



EBC-A  
2-3 strings of  
batteries / cabinet



10 kW frame  
0-1 strings of  
batteries



EBC-H  
2 strings of  
batteries /

OR



EBC-A  
2-3 strings of  
batteries / cabinet

**Battery cabinets:**

Reference	Description	Batteries
P-105000041-001	93P/E-BAT-S-EMPTY (63A)	Empty
P-105000041-002	93P/E-BAT-S-2x32-9Ah (63A)	2 x 9Ah
P-105000041-003	93P/E-BAT-S-3x32-9Ah (63A)	3 x 9Ah
P-105000090-001	EBC-H-0x64-EMPTY-BB-32A	Empty
P-105000090-002	EBC-H-2x32-9AH-BB-32A	2 x 9Ah

**Note!**

The specifications are subject to change without a notice.  
The battery backup tables are given with end voltage 1.67 VPC and temperature +25°C.  
The batteries are fully charged and measured after min. (5) full discharge cycles.

## Internal batteries for 10/15/20 kW frame + EBC-B

### CSB HRL12200W and 9Ah (standard & long life) battery

Power Factor 1.0		UPS load																	
Strings		UPS load																	
CSB200W	9Ah	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	kVA
1	0	257	203	167	142	118	106	93	84	77	70	62	57	53	49	45	43	41	min
1	1	303	237	195	166	144	121	109	98	89	82	76	69	63	58	55	51	48	min
1	2	366	277	225	188	165	145	125	113	103	93	86	80	75	69	63	59	56	min
2	0	569	479	386	309	266	231	205	181	168	155	142	130	119	113	106	100	94	min
2	1	598	514	428	345	289	251	223	200	179	167	155	143	132	120	114	109	103	min
2	2	681	544	464	383	316	273	239	217	196	177	166	155	144	133	123	116	110	min
3	0	957	740	577	515	453	388	332	292	266	240	223	207	190	177	169	160	152	min

Power Factor 0.9		UPS load																	
Strings		UPS load																	
CSB200W	9Ah	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	kVA
1	0	290	228	184	160	137	117	105	94	86	79	73	66	60	56	53	49	45	min
1	1	354	270	221	183	162	141	121	111	101	91	85	79	73	67	62	58	55	min
1	2	425	314	254	215	181	163	144	127	115	106	97	89	84	79	74	69	64	min
2	0	630	527	443	360	298	261	230	208	186	172	160	149	138	126	118	112	107	min
2	1	722	558	481	403	334	284	250	226	206	185	172	161	151	140	130	120	114	min
2	2	802	586	513	441	368	309	273	242	222	203	184	172	162	152	143	133	123	min
3	0	1050	855	654	559	503	446	387	338	298	274	250	232	217	202	188	176	169	min

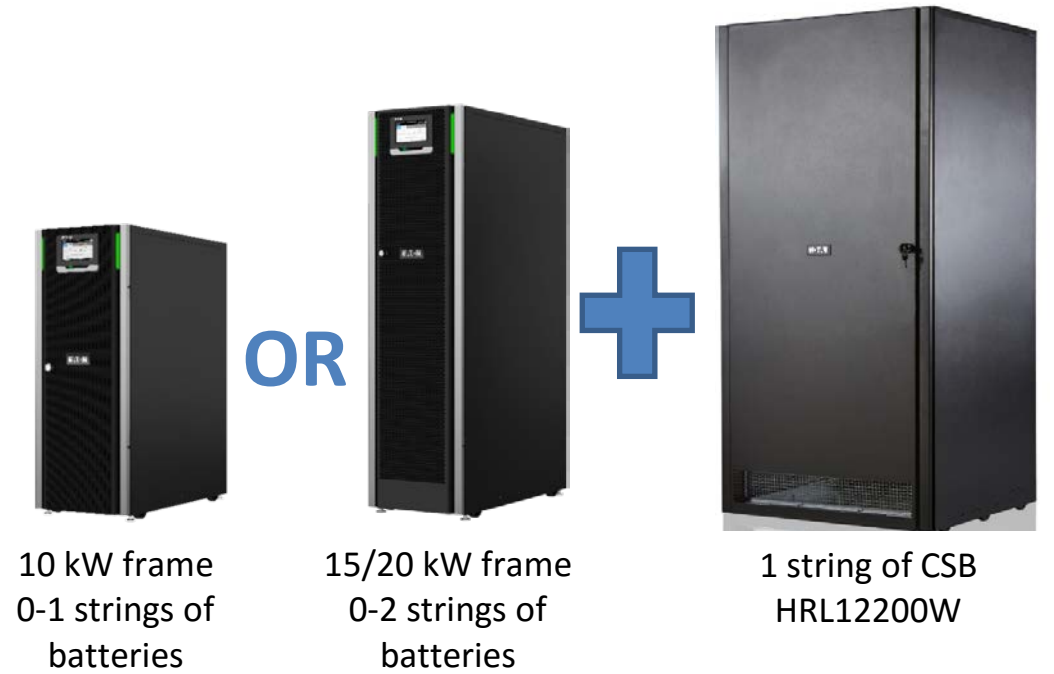
Power Factor 0.8		UPS load																	
Strings		UPS load																	
CSB200W	9Ah	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	kVA
1	0	342	262	215	178	158	137	118	108	98	89	83	77	71	65	60	57	53	min
1	1	420	310	251	213	180	161	143	126	114	105	97	89	84	79	73	68	63	min
1	2	485	374	291	242	212	181	164	149	133	119	111	103	96	89	84	80	75	min
2	0	770	575	501	426	354	297	264	236	216	196	178	168	158	148	138	128	119	min
2	1	852	611	534	465	396	333	288	258	233	215	197	179	170	160	151	142	132	min
2	2	922	698	563	498	434	367	314	280	253	231	214	197	180	171	163	154	145	min
3	0	1143	970	792	613	554	503	451	401	354	315	287	266	246	230	217	204	191	min

**Note!**

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The battery backup tables are given with end voltage 1.67 VPC and temperature +25°C.

The batteries are fully charged and measured after min. (5) full discharge cycles.



**Battery cabinets:**

Reference	Description	Batteries
P-105000084-001	EBC-B-0x32-EMPTY-BB-63A-M6	Empty
P-105000084-002	EBC-B-1x32-CSBHRL12200W-BB-63A-M6	1 x CSB HRL12200W

## Internal batteries for 30/40 kW frame

9 Ah batteries (standard & long life)

Power Factor 1.0	UPS load																				
Strings:	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	kVA	Comment
1	26	16	11	8	6	5	4	3	-	-	-	-	-	-	-	-	-	-	-	min	Only available for separate battery models
2	60	39	27	20	16	14	11	10	8	7	6	5	5	4	4	4	3	-	-	min	Only available for separate battery models
3	101	62	44	35	28	23	19	17	14	13	11	10	9	8	8	7	6	6	5	min	
4	145	89	64	49	40	33	28	24	21	18	17	15	14	13	11	10	10	9	8	min	

Power Factor 0.9	UPS load																				
Strings:	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	kVA	Comment
1	29	18	13	9	7	6	5	4	3	-	-	-	-	-	-	-	-	-	-	min	Only available for separate battery models
2	71	43	31	24	19	15	13	11	10	8	7	7	6	5	5	4	4	4	3	min	Only available for separate battery models
3	114	73	51	40	31	26	22	19	17	15	13	12	11	10	9	8	7	7	6	min	
4	163	102	75	56	44	38	32	28	24	21	19	17	15	14	13	12	11	10	10	min	

Power Factor 0.8	UPS load																				
Strings:	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	kVA	Comment
1	35	21	15	11	9	7	6	5	4	3	-	-	-	-	-	-	-	-	-	min	Only available for separate battery models
2	82	50	37	28	22	18	15	13	11	10	9	8	7	6	6	5	5	4	4	min	Only available for separate battery models
3	133	83	59	45	37	30	26	22	19	17	15	14	13	11	10	10	9	8	8	min	
4	182	116	85	65	52	43	38	32	28	25	22	20	18	17	15	14	13	12	11	min	

**Note!**

The specifications are subject to change without a notice.  
The battery backup tables are given with end voltage 1.67 VPC and temperature +25°C.  
The batteries are fully charged and measured after min. (5) full discharge cycles.

## Internal batteries for 30/40 kW frame + EBC-B

### CSB HRL12200W and 9Ah (standard & long life) battery

Power Factor 1.0		UPS load																			
Strings																					
CSB200	9Ah	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	kVA
W																					
1	0	266	168	119	94	77	62	53	45	40	36	31	28	26	23	21	19	17	16	15	min
1	3	444	259	184	147	116	98	84	74	63	56	51	45	42	39	36	32	30	28	26	min
1	4	494	290	209	163	131	110	93	83	73	64	57	52	47	43	40	38	35	32	29	min
2	0	580	391	266	207	168	143	119	106	94	85	77	70	62	57	53	49	45	43	40	min
2	3	789	499	349	262	213	176	155	134	117	106	96	87	81	75	69	63	58	55	52	min
2	4	855	527	382	281	227	189	165	145	126	113	103	93	86	80	75	69	63	59	56	min
3	0	982	580	454	335	266	223	190	168	151	134	119	110	102	94	87	82	77	72	67	min

Power Factor 0.9		UPS load																			
Strings																					
CSB200	9Ah	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	kVA
W																					
1	0	298	187	137	106	86	73	60	52	45	41	37	32	29	27	25	22	20	19	17	min
1	3	496	292	211	164	132	110	94	83	74	65	57	52	47	44	41	38	35	32	30	min
1	4	541	337	234	179	151	122	106	92	83	74	66	58	54	49	45	42	40	37	35	min
2	0	665	448	298	232	187	160	137	117	106	95	86	79	73	66	60	56	52	49	45	min
2	3	899	546	407	294	237	201	172	153	134	118	109	99	90	84	79	73	68	62	58	min
2	4	958	571	440	321	256	216	182	163	145	128	115	106	97	89	84	79	74	68	63	min
3	0	1073	665	504	391	298	250	217	187	168	153	137	122	114	106	99	91	86	82	77	min

Power Factor 0.8		UPS load																			
Strings																					
CSB200	9Ah	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	kVA
W																					
1	0	355	217	158	119	99	83	71	60	53	47	42	38	35	31	28	27	25	23	21	min
1	3	548	345	238	184	154	125	108	94	84	76	68	60	55	51	46	43	41	38	36	min
1	4	588	400	270	209	170	144	119	106	93	84	77	69	62	57	53	49	45	43	40	min
2	0	801	504	355	266	217	178	158	137	119	109	99	89	83	77	71	65	60	56	53	min
2	3	1008	592	469	349	275	229	197	172	155	139	122	113	104	96	89	84	79	74	69	min
2	4	1060	650	498	382	293	244	212	182	165	149	134	119	111	103	95	89	84	79	75	min
3	0	1164	801	555	454	355	288	245	217	190	172	158	144	131	119	112	105	99	92	87	min

**Note!**

The specifications are subject to change without a notice.

The battery backup tables are given with end voltage 1.67 VPC and temperature +25°C.

The batteries are fully charged and measured after min. (5) full discharge cycles.



30/40 kW frame  
3-4 strings of batteries

1 string of CSB HRL12200W  
batteries (10-year)

**Battery cabinets:**

Reference	Description	Batteries
P-105000042-001	93P/E-BAT-L-EMPTY (160A)	Empty
P-105000042-002	93P/E-BAT-L-1x32-200W (160A)	1 x CSB HRL12200W