

# Runtime Charts

## Eaton 93PM 30-200 kVA UPS

### On-battery runtimes with different load ratings with

#### External batteries with Large EBC

#### CSB 280W

**Table 1.** External battery back-up table for UPS load rating of 20-200 kVA with **p.f. 0.8**

Battery	Qty	20kVA	30kVA	40kVA	50kVA	60kVA	70kVA	80kVA	kVA
280W	1x36	88	53	37	28	21	17	14	min
280W	1x40	101	60	42	32	25	20	16	min
280W	2x36	199	126	88	67	53	44	37	min
280W	2x40	226	145	101	78	60	50	42	min
280W	3x36	346	199	147	111	88	74	60	min
280W	3x40	393	226	164	126	102	84	71	min
Battery	Qty	100kVA	120kVA	140kVA	150kVA	160kVA	180kVA	200kVA	kVA
280W	1x36	9	7	-	-	-	-	-	min
280W	1x40	11	8	6	5	-	-	-	min
280W	2x36	27	21	17	15	14	11	9	min
280W	2x40	31	25	19	18	16	13	11	min
280W	3x36	46	37	30	27	25	21	18	min
280W	3x40	52	42	35	31	29	25	21	min

**Table 2.** External battery back-up table for UPS load rating of 20-200 kVA with **p.f. 0.9**

Battery	Qty	20kVA	30kVA	40kVA	50kVA	60kVA	70kVA	80kVA	kVA
280W	1x36	77	45	31	23	18	14	11	min
280W	1x40	86	51	36	27	20	16	13	min
280W	2x36	172	109	77	56	45	37	31	min
280W	2x40	193	121	86	65	51	42	36	min
280W	3x36	286	172	124	95	77	61	52	min
280W	3x40	334	193	143	109	86	72	59	min
Battery	Qty	100kVA	120kVA	140kVA	150kVA	160kVA	180kVA	200kVA	kVA
280W	1x36	8	5	-	-	-	-	-	min
280W	1x40	9	7	-	-	-	-	-	min
280W	2x36	23	18	14	13	11	9	8	min
280W	2x40	27	20	16	15	13	11	9	min
280W	3x36	39	31	26	23	21	18	15	min
280W	3x40	45	36	29	27	25	20	18	min

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## Eaton 93PM 30-200 kVA UPS

**Table 3.** External battery back-up table for UPS load rating of 20-200 kVA with **p.f. 1.0**

Battery	Qty	20kVA	30kVA	40kVA	50kVA	60kVA	70kVA	80kVA	kVA
280W	1x36	66	39	27	20	15	12	9	min
280W	1x40	77	45	31	23	18	14	11	min
280W	2x36	156	95	66	50	39	33	27	min
280W	2x40	172	109	77	56	45	37	31	min
280W	3x36	242	156	110	84	66	54	46	min
280W	3x40	286	172	124	95	77	61	52	min
Battery	Qty	100kVA	120kVA	140kVA	150kVA	160kVA	180kVA	200kVA	kVA
280W	1x36	6	-	-	-	-	-	-	min
280W	1x40	8	5	-	-	-	-	-	min
280W	2x36	20	15	12	10	9	8	6	min
280W	2x40	23	18	14	13	11	9	8	min
280W	3x36	35	27	22	20	18	15	13	min
280W	3x40	39	31	26	23	21	18	15	min

The battery backup table is given with end voltage 1.70 VPC and temperature +25°C.

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

**Note!**

The specifications are subject to change without a notice.

**CSB 330W**

**Table 4.** External battery back-up table for UPS load rating of 20-200 kVA with **p.f. 0.8**

Battery	Qty	20kVA	30kVA	40kVA	50kVA	60kVA	70kVA	80kVA	kVA
330W	1x36	107	64	44	34	27	21	17	min
330W	1x40	120	74	51	38	30	25	20	min
330W	2x36	234	152	107	82	64	53	44	min
330W	2x40	274	168	120	91	74	59	51	min
330W	3x36	410	234	170	134	107	87	76	min
330W	3x40	452	274	190	152	120	100	85	min
Battery	Qty	100kVA	120kVA	140kVA	150kVA	160kVA	180kVA	200kVA	kVA
330W	1x36	12	9	6	-	-	-	-	min
330W	1x40	14	10	8	7	6	-	-	min
330W	2x36	34	27	21	19	17	14	12	min
330W	2x40	38	30	25	22	20	16	14	min
330W	3x36	56	44	37	34	31	27	23	min
330W	3x40	64	51	42	38	36	30	27	min

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## Eaton 93PM 30-200 kVA UPS

**Table 5.** External battery back-up table for UPS load rating of 20-200 kVA with **p.f. 0.9**

Battery	Qty	20kVA	30kVA	40kVA	50kVA	60kVA	70kVA	80kVA	kVA
330W	1x36	91	55	38	29	22	17	14	min
330W	1x40	105	62	44	33	26	21	16	min
330W	2x36	207	132	91	70	55	45	38	min
330W	2x40	232	150	105	80	62	52	44	min
330W	3x36	358	207	152	115	91	77	64	min
330W	3x40	405	232	168	132	105	86	74	min
Battery	Qty	100kVA	120kVA	140kVA	150kVA	160kVA	180kVA	200kVA	kVA
330W	1x36	10	7	-	-	-	-	-	min
330W	1x40	11	9	6	-	-	-	-	min
330W	2x36	29	22	17	15	14	11	10	min
330W	2x40	33	26	21	18	16	14	11	min
330W	3x36	48	38	31	29	27	22	19	min
330W	3x40	55	44	36	33	30	26	22	min

**Table 6.** External battery back-up table for UPS load rating of 20-200 kVA with **p.f. 1.0**

Battery	Qty	20kVA	30kVA	40kVA	50kVA	60kVA	70kVA	80kVA	kVA
330W	1x36	82	48	34	25	19	14	12	min
330W	1x40	91	55	38	29	22	17	14	min
330W	2x36	179	115	82	60	48	39	34	min
330W	2x40	207	132	91	70	55	45	38	min
330W	3x36	306	179	134	101	82	67	56	min
330W	3x40	358	207	152	115	91	77	64	min
Battery	Qty	100kVA	120kVA	140kVA	150kVA	160kVA	180kVA	200kVA	kVA
330W	1x36	8	-	-	-	-	-	-	min
330W	1x40	10	7	-	-	-	-	-	min
330W	2x36	25	19	14	13	12	10	8	min
330W	2x40	29	22	17	15	14	11	10	min
330W	3x36	42	34	28	25	23	19	15	min
330W	3x40	48	38	31	29	27	22	19	min

The battery backup table is given with end voltage 1.70 VPC and temperature +25°C.

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

**Note!**

Author: Kärkkäinen, Joel

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## Eaton 93PM 30-200 kVA UPS

The specifications are subject to change without a notice.

### CSB 500W

**Table 7.** External battery back-up table for UPS load rating of 20-80 kVA with **p.f. 0.8**

Battery	Qty	20kVA	30kVA	40kVA	50kVA	60kVA	70kVA	80kVA	kVA
500W	1x36	157	100	74	55	44	36	29	min
500W	1x40	172	111	83	63	50	41	34	min
500W	2x36	335	211	157	119	100	85	74	min
500W	2x40	384	235	172	137	111	94	83	min
500W	3x36	513	335	237	185	157	131	113	min
500W	3x40	578	384	269	211	172	149	126	min
Battery	Qty	100kVA	120kVA	140kVA	150kVA	160kVA	180kVA	200kVA	kVA
500W	1x36	21	16	12	11	9	7	-	min
500W	1x40	25	19	15	13	12	9	7	min
500W	2x36	55	44	36	32	29	25	21	min
500W	2x40	63	50	41	38	34	29	25	min
500W	3x36	88	74	60	55	51	44	38	min
500W	3x40	100	83	69	63	58	50	44	min

**Table 8.** External battery back-up table for UPS load rating of 20-80 kVA with **p.f. 0.9**

Battery	Qty	20kVA	30kVA	40kVA	50kVA	60kVA	70kVA	80kVA	kVA
500W	1x36	137	88	63	48	38	30	25	min
500W	1x40	155	99	73	54	43	35	29	min
500W	2x36	287	182	137	107	88	75	63	min
500W	2x40	329	208	155	118	99	84	73	min
500W	3x36	456	287	211	166	137	114	100	min
500W	3x40	505	329	235	182	155	129	111	min
Battery	Qty	100kVA	120kVA	140kVA	150kVA	160kVA	180kVA	200kVA	kVA
500W	1x36	18	13	10	8	7	-	-	min
500W	1x40	21	16	12	10	9	7	-	min
500W	2x36	48	38	30	28	25	21	18	min
500W	2x40	54	43	35	32	29	25	21	min
500W	3x36	79	63	52	48	44	38	32	min
500W	3x40	88	73	59	54	50	43	38	min

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## Eaton 93PM 30-200 kVA UPS

**Table 9.** External battery back-up table for UPS load rating of 20-80 kVA with **p.f. 1.0**

Battery	Qty	20kVA	30kVA	40kVA	50kVA	60kVA	70kVA	80kVA	kVA
500W	1x36	119	79	55	42	32	26	21	min
500W	1x40	137	88	63	48	38	30	25	min
500W	2x36	256	166	119	95	79	66	55	min
500W	2x40	287	182	137	107	88	75	63	min
500W	3x36	416	256	185	150	119	103	88	min
500W	3x40	456	287	211	166	137	114	100	min
Battery	Qty	100kVA	120kVA	140kVA	150kVA	160kVA	180kVA	200kVA	kVA
500W	1x36	15	11	8	6	-	-	-	min
500W	1x40	18	13	10	8	7	-	-	min
500W	2x36	42	32	26	24	21	18	15	min
500W	2x40	48	38	30	28	25	21	18	min
500W	3x36	70	55	46	42	38	32	28	min
500W	3x40	79	63	52	48	44	38	32	min

The battery backup table is given with end voltage 1.70 VPC and temperature +25°C.

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

**Note!**

The specifications are subject to change without a notice.

### FIAMM 12FLB400

**Table 10.** External battery back-up table for UPS load rating of 20-80 kVA with **p.f. 0.8**

Battery	Qty	20kVA	30kVA	40kVA	50kVA	60kVA	70kVA	80kVA	kVA
400W	1x36	116	74	52	40	31	26	22	min
400W	1x40	134	82	59	44	36	29	25	min
400W	2x36	247	163	116	88	74	60	52	min
400W	2x40	282	177	134	100	82	70	59	min
400W	3x36	399	247	179	147	116	95	83	min
400W	3x40	452	282	217	163	134	110	91	min
Battery	Qty	100kVA	120kVA	140kVA	150kVA	160kVA	180kVA	200kVA	kVA
400W	1x36	16	12	9	8	7	-	-	min
400W	1x40	18	14	11	9	8	7	-	min
400W	2x36	40	31	26	24	22	18	16	min
400W	2x40	44	36	29	27	25	21	18	min
400W	3x36	65	52	43	40	37	31	28	min
400W	3x40	74	59	49	44	42	36	31	min

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## Eaton 93PM 30-200 kVA UPS

**Table 11.** External battery back-up table for UPS load rating of 20-80 kVA with **p.f. 0.9**

Battery	Qty	20kVA	30kVA	40kVA	50kVA	60kVA	70kVA	80kVA	kVA
400W	1x36	100	64	44	34	27	22	18	min
400W	1x40	115	73	51	39	30	26	21	min
400W	2x36	226	145	100	79	64	53	44	min
400W	2x40	243	161	115	87	73	60	51	min
400W	3x36	344	226	163	126	100	84	74	min
400W	3x40	392	243	177	145	115	93	82	min
Battery	Qty	100kVA	120kVA	140kVA	150kVA	160kVA	180kVA	200kVA	kVA
400W	1x36	13	9	7	6	-	-	-	min
400W	1x40	15	11	9	8	7	-	-	min
400W	2x36	34	27	22	20	18	15	13	min
400W	2x40	39	30	26	23	21	18	15	min
400W	3x36	56	44	38	34	31	27	24	min
400W	3x40	64	51	42	39	36	30	27	min

**Table 12.** External battery back-up table for UPS load rating of 20-80 kVA with **p.f. 1.0**

Battery	Qty	20kVA	30kVA	40kVA	50kVA	60kVA	70kVA	80kVA	kVA
400W	1x36	88	56	40	29	24	19	16	min
400W	1x40	100	64	44	34	27	22	18	min
400W	2x36	210	126	88	71	56	46	40	min
400W	2x40	226	145	100	79	64	53	44	min
400W	3x36	306	210	147	111	88	76	65	min
400W	3x40	344	226	163	126	100	84	74	min
400W	Qty	100kVA	120kVA	140kVA	150kVA	160kVA	180kVA	200kVA	kVA
400W	1x36	11	8	5	-	-	-	-	min
400W	1x40	13	9	7	6	-	-	-	min
400W	2x36	29	24	19	17	16	13	11	min
400W	2x40	34	27	22	20	18	15	13	min
400W	3x36	49	40	33	29	28	24	20	min
400W	3x40	56	44	38	34	31	27	24	min

The battery backup table is given with end voltage 1.70 VPC and temperature +25°C.

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

**Note!**

The specifications are subject to change without a notice.

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## Eaton 93PM 30-200 kVA UPS

### FIAMM 12FLB540

**Table 13.** External battery back-up table for UPS load rating of 20-80 kVA with **p.f. 0.8**

Battery	Qty	20kVA	30kVA	40kVA	50kVA	60kVA	70kVA	80kVA	kVA
540W	1x36	166	99	73	56	44	37	30	min
540W	1x40	183	114	81	62	51	42	36	min
540W	2x36	358	227	166	127	99	83	73	min
540W	2x40	414	255	183	147	114	92	81	min
540W	3x36	593	358	259	203	166	140	116	min
540W	3x40	>600	414	292	227	183	158	135	min
Battery	Qty	100kVA	120kVA	140kVA	150kVA	160kVA	180kVA	200kVA	kVA
540W	1x36	22	16	12	11	9	7	5	min
540W	1x40	26	19	15	13	12	9	7	min
540W	2x36	56	44	37	34	30	26	22	min
540W	2x40	62	51	42	39	36	30	26	min
540W	3x36	87	73	59	56	52	44	40	min
540W	3x40	99	81	69	62	58	51	44	min

**Table 14.** External battery back-up table for UPS load rating of 20-80 kVA with **p.f. 0.9**

Battery	Qty	20kVA	30kVA	40kVA	50kVA	60kVA	70kVA	80kVA	kVA
540W	1x36	147	86	62	48	39	31	26	min
540W	1x40	164	97	72	55	44	37	30	min
540W	2x36	315	200	147	109	86	74	62	min
540W	2x40	354	224	164	125	97	82	72	min
540W	3x36	513	315	227	176	147	118	99	min
540W	3x40	585	354	255	200	164	138	114	min
Battery	Qty	100kVA	120kVA	140kVA	150kVA	160kVA	180kVA	200kVA	kVA
540W	1x36	18	13	10	8	7	-	-	min
540W	1x40	22	16	12	10	9	7	-	min
540W	2x36	48	39	31	28	26	22	18	min
540W	2x40	55	44	37	33	30	26	22	min
540W	3x36	78	62	53	48	44	39	34	min
540W	3x40	86	72	59	55	51	44	39	min

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### Eaton 93PM 30-200 kVA UPS

**Table 15.** External battery back-up table for UPS load rating of 20-80 kVA with **p.f. 1.0**

Battery	Qty	20kVA	30kVA	40kVA	50kVA	60kVA	70kVA	80kVA	kVA
540W	1x36	127	78	56	43	34	27	22	min
540W	1x40	147	86	62	48	39	31	26	min
540W	2x36	280	176	127	93	78	65	56	min
540W	2x40	315	200	147	109	86	74	62	min
540W	3x36	452	280	203	160	127	103	87	min
540W	3x40	513	315	227	176	147	118	99	min
Battery	Qty	100kVA	120kVA	140kVA	150kVA	160kVA	180kVA	200kVA	kVA
540W	1x36	15	11	8	7	5	-	-	min
540W	1x40	18	13	10	8	7	-	-	min
540W	2x36	43	34	27	25	22	18	15	min
540W	2x40	48	39	31	28	26	22	18	min
540W	3x36	69	56	46	43	40	34	29	min
540W	3x40	78	62	53	48	44	39	34	min

*The battery backup table is given with end voltage 1.70 VPC and temperature +25°C.*

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

**Note!**

The specifications are subject to change without a notice.