



Powerware

Powerware® 9390 UPS Integrated Battery Cabinets

Product Focus

40–160 kVA



IBC-L



IBC-S

Features

- ABM® (Advanced Battery Management) technology extends battery life and optimizes recharge time
- Top and bottom cabling entry provides installation flexibility
- DC-rated circuit breaker within each cabinet provides protection and servicing isolation
- Each circuit breaker includes:
 - Auxiliary switch for UPS sensing of circuit breaker closure
 - 48 Vdc UVR to interface with UPS for remote EPO function
- Variable battery bus enables battery capacity to be matched to exact run time requirements
- Optional remote configurations available
- Casters provided to enhance portability

Eaton offers two models of Powerware battery cabinets, the IBC-S and IBC-L, for its Powerware 9390 UPS series. These cabinets line-up and match with the 9390 UPS and offer a wide range of runtimes.

Flexibility

- A variable battery bus accommodates 384V to 480V configurations, so the battery capacity can be matched to your exact runtime requirements – either a specific runtime, an extension to an existing battery runtime, or legacy battery installations.
- Daisy chain up to four (4) cabinets together for extended battery runtimes
- Integral, line-up-and-match configurations are standard
- Remote configurations available

Serviceability

- Front access only design enhances servicing and installation
- Modular battery tray design optimizes periodic servicing

Dimensions

- IBC-S: 22.4" w x 31.6" d x 73.7" h
- IBC-L: 42.7" w x 31.6" d x 73.7" h

Reliability

- Battery cabinets are UL 1778 listed
- Flame retardant batteries meet UL94V2 for computer room installations

Features and Benefits

- Quick disconnects between battery tray assemblies reduce battery maintenance time

- Manufacturer-supplied wiring provides plug and play capability for line-up-and-match configurations
- Removable battery tray assemblies reduce battery maintenance time
- DC-rated circuit breaker in each battery cabinet allows multiple battery strings to be serviced independently of each other, assuring backup power is always available to the UPS
- Circuit breaker features UVR trip auxiliaries for system EPO and UPS sensing of battery breaker
- Located adjacent to the internal wireway, mechanical lugs reduce installation time for remote configurations



IBC-S is compatible with battery types B12 and B17

IBC-S with door opened



IBC-L is compatible with all battery types listed in this document except for B12 and B17

IBC-L with doors opened

POWERWARE 9390 40 TO 80 kVA RUNTIMES: 480 Vac SYSTEMS, 60 Hz (IN MINUTES)

kVA	40	50	60	80	40	50	60	80
kW	36	45	54	72	36	45	54	72
Battery Type	Width (in.)	No. of Strings	Weight (lb.) ²		Weight (lb.) ²		Weight (lb.) ²	
B12	22.4	1	9	5	-	-	-	-
B17	22.4	1	16	10	7	-	-	-
B27	42.7	1	33	25	19	13	12	6
C28	42.7	1	35	27	22	15	13	5
B31	42.7	1	39	30	24	16	16	8
C33	42.7	1	42	33	27	19	18	11
B37	42.7	1	48	36	29	20	26	13
C39	42.7	1	48	38	31	23	22	16
B47	42.7	1	66	51	40	26	29	18
C50	42.7	1	65	51	41	30	34	25
B12	44.8	2	26	19	16	10	14	5
B17	44.8	2	43	31	25	17	17	9
B27	85.4	2	78	60	50	34	36	25
C28	85.4	2	79	61	49	35	34	24
B31	85.4	2	90	68	57	40	43	29
C33	85.4	2	92	72	58	42	42	30
B37	85.4	2	100	80	65	50	51	35
C39	85.4	2	105	82	67	49	50	36
B47	85.4	2	149	114	92	67	76	54
C50	85.4	2	144	111	91	66	76	54
B12	67.2	3	45	32	26	18	20	13
B17	67.2	3	72	55	43	29	33	22
B27	128.1	3	125	95	78	57	61	44
C28	128.1	3	125	96	78	56	58	40
B31	128.1	3	141	110	91	65	71	51
C33	128.1	3	147	113	92	66	69	49
B37	128.1	3	157	122	100	75	83	58
C39	128.1	3	164	128	105	76	80	58
B47	128.1	3	251	188	150	107	127	89
C50	128.1	3	230	177	144	104	121	86
B12	89.6	4	63	50	39	27	30	20
B17	89.6	4	104	79	63	44	52	33
B27	170.8	4	175	135	110	80	89	62
C28	170.8	4	176	135	110	78	83	58
B31	170.8	4	200	153	125	92	104	73
C33	170.8	4	206	158	128	92	98	69
B37	170.8	4	222	170	140	101	115	84
C39	170.8	4	228	178	145	105	113	81
B47	170.8	4	360	280	212	152	185	128
C50	170.8	4	322	248	201	144	172	123
Nominal DC Link Voltage			480	480	480	480	432	432

1. All battery cabinets are 73.5" H x 31.5" D. 2. Maximum installed weight with largest breaker.

POWERWARE 9390 100 TO 160 kVA RUNTIMES: 480 Vac SYSTEMS, 60 Hz (IN MINUTES)

kVA kW			100 90	120 108	160 144		100 90	120 108	160 144	
Battery Type	Width (in.) ¹	No. of Strings	Weight (lb.) ²			Weight (lb.) ²			Weight (lb.) ²	
B27	42.7	1	9	7	-	3150	-	-	-	2897
C28	42.7	1	10	6	-	3250	-	-	-	2987
B31	42.7	1	11	8	-	3495	-	-	-	3202
C33	42.7	1	14	10	-	3595	-	-	-	3292
B37	42.7	1	15	11	7	3765	-	-	-	3444
C39	42.7	1	17	13	7	3925	-	-	-	3588
B47	42.7	1	18	13	8	4800	-	-	-	4375
C50	42.7	1	22	17	10	4840	-	-	-	4411
B27	85.4	2	25	19	13	6300	17	12	6	5804
C28	85.4	2	27	22	15	6500	18	13	5	5984
B31	85.4	2	30	24	16	6990	21	16	8	6414
C33	85.4	2	33	27	19	7190	23	18	11	6594
B37	85.4	2	36	29	20	7530	27	21	13	6898
C39	85.4	2	38	31	23	7850	28	22	16	7186
B47	85.4	2	51	40	27	9600	38	29	18	8760
C50	85.4	2	51	41	30	9680	42	34	25	8832
B27	128.1	3	43	34	23	9450	32	25	16	8706
C28	128.1	3	43	35	26	9750	30	24	16	8976
B31	128.1	3	52	40	28	10485	36	29	19	9621
C33	128.1	3	51	42	31	10785	37	30	21	9891
B37	128.1	3	59	49	34	11295	45	35	25	10347
C39	128.1	3	59	48	35	11775	44	36	26	10779
B47	128.1	3	83	67	48	14400	66	54	35	13140
C50	128.1	3	80	65	47	14520	67	54	39	13248
B27	170.8	4	60	50	34	12600	47	36	25	11608
C28	170.8	4	60	49	35	13000	43	34	24	11968
B31	170.8	4	69	58	40	13980	54	43	29	12828
C33	170.8	4	71	57	42	14380	52	42	30	13188
B37	170.8	4	80	65	50	15060	62	52	35	13796
C39	170.8	4	81	66	49	15700	62	50	36	14372
B47	170.8	4	115	92	66	19200	94	77	54	17520
C50	170.8	4	110	90	65	19360	94	76	54	17664
Nominal DC Link Voltage			480	480	480		432	432	432	

1. All battery cabinets are 73.5" H x 31.5" D. 2. Maximum installed weight with largest breaker.

POWERWARE 9390 100 TO 160 kVA RUNTIMES: 208 Vac SYSTEMS, 60 Hz (IN MINUTES)

kVA kW			100 90	120 108	160 144		100 90	120 108	160 144		100 90	120 108	160 144	
Battery Type	Width (in.) ¹	No. of Strings	Weight (lb.) ²			Weight (lb.) ²			Weight (lb.) ²					
B27	42.7	1	9	7	-	3150	-	-	-	2897	-	-	-	2649
C28	42.7	1	10	6	-	3250	-	-	-	2987	-	-	-	2729
B31	42.7	1	11	8	-	3495	-	-	-	3202	-	-	-	2914
C33	42.7	1	14	10	-	3595	-	-	-	3292	-	-	-	2994
B37	42.7	1	15	11	7	3765	-	-	-	3444	-	-	-	3128
C39	42.7	1	17	13	7	3925	-	-	-	3588	-	-	-	3256
B47	42.7	1	18	13	8	4800	-	-	-	4375	-	-	-	3955
C50	42.7	1	22	17	10	4840	-	-	-	4411	-	-	-	3987
B27	85.4	2	25	19	13	6300	22	17	11	5794	18	14	9	5308
C28	85.4	2	27	22	15	6500	24	20	13	5974	21	17	10	5468
B31	85.4	2	30	24	16	6990	27	21	13	6404	23	17	11	5838
C33	85.4	2	33	27	19	7190	29	24	17	6584	25	21	14	5998
B37	85.4	2	36	29	20	7530	32	26	17	6888	28	22	15	6266
C39	85.4	2	38	31	23	7850	34	28	20	7176	29	24	18	6522
B47	85.4	2	51	40	27	9600	46	34	22	8750	37	29	18	7920
C50	85.4	2	51	41	30	9680	45	37	27	8822	39	32	24	7984
B27	128.1	3	43	34	23	9450	37	30	20	8691	32	25	17	7962
C28	128.1	3	43	35	26	9750	38	31	23	8961	33	27	20	8202
B31	128.1	3	52	40	28	10485	45	35	24	9606	38	30	21	8757
C33	128.1	3	51	42	31	10785	46	37	27	9876	40	33	24	8997
B37	128.1	3	59	49	34	11295	54	42	29	10332	47	36	25	9399
C39	128.1	3	59	48	35	11775	53	43	31	10764	46	38	28	9783
B47	128.1	3	83	67	48	14400	74	60	41	13125	64	51	34	11880
C50	128.1	3	80	65	47	14520	71	58	42	13233	62	51	37	11976
B27	170.8	4	60	50	34	12600	55	43	30	11588	47	37	25	10616
C28	170.8	4	60	49	35	13000	52	43	31	11948	47	38	27	10936
B31	170.8	4	69	58	40	13980	61	52	35	12808	55	44	30	11676
C33	170.8	4	71	57	42	14380	63	51	37	13168	55	45	33	11996
B37	170.8	4	80	65	50	15060	71	59	41	13776	62	53	36	12532
C39	170.8	4	81	66	49	15700	72	59	43	14352	63	52	38	13044
B47	170.8	4	115	92	66	19200	100	84	59	17500	90	72	51	15840
C50	170.8	4	110	90	65	19360	98	80	58	17644	86	70	51	15968
Nominal DC Link Voltage			480	480	480		432	432	432		384	384	384	

1. All battery cabinets are 73.5" H x 31.5" D. 2. Maximum installed weight with largest breaker.

POWERWARE 9390 40 TO 80 kVA RUNTIMES: 208 Vac SYSTEMS, 60 Hz (IN MINUTES)

kVA	40				50				60				80				
kW	36				45				54				72				
Battery Type	Width (in.) ¹	No. of Strings		Weight (lb.) ²				Weight (lb.) ²				Weight (lb.) ²					
B12	22.4	1	9	5	-	-	1665	7	-	-	-	1560	5.5	-	-	-	1455
B17	22.4	1	16	10	7	-	2445	13	8	5	-	2270	10	5	-	-	2095
B27	42.7	1	33	25	19	13	3150	30	22	17	11	2897	25	18	14	9	2649
C28	42.7	1	35	27	22	15	3250	31	24	20	13	2987	27	21	17	10	2729
B31	42.7	1	39	30	24	16	3495	35	26	21	14	3202	30	23	17	11	2914
C33	42.7	1	42	33	27	19	3595	37	29	24	17	3292	32	25	21	14	2994
B37	42.7	1	48	36	29	20	3765	42	32	26	17	3444	36	28	22	15	3128
C39	42.7	1	48	38	31	23	3925	43	33	28	20	3588	38	29	24	18	3256
B47	42.7	1	66	51	40	26	4800	59	45	34	23	4375	51	37	29	19	3955
C50	42.7	1	65	51	41	30	4840	57	45	37	27	4411	50	39	32	24	3987
B12	44.8	2	26	19	16	10	3330	23	17	14	7	3120	20	15	11	5	2910
B17	44.8	2	43	31	25	17	4890	37	28	22	13	4540	32	23	18	10	4190
B27	85.4	2	78	60	50	34	6300	69	54	43	30	5794	60	47	37	26	5308
C28	85.4	2	79	61	49	35	6500	69	53	42	31	5974	60	47	38	27	5468
B31	85.4	2	90	68	57	40	6990	81	61	52	35	6404	69	56	44	30	5838
C33	85.4	2	92	72	58	42	7190	81	62	51	37	6584	70	55	45	33	5998
B37	85.4	2	100	80	65	50	7530	91	71	59	42	6888	80	62	53	36	6266
C39	85.4	2	105	82	67	49	7850	91	72	59	43	7176	81	63	52	38	6522
B47	85.4	2	149	114	92	67	9600	134	100	84	60	8750	117	89	71	52	7920
C50	85.4	2	144	111	91	66	9680	126	96	80	58	8822	110	86	70	51	7984
B12	67.2	3	45	32	26	18	4995	40	29	23	16	4680	33	25	20	14	4365
B17	67.2	3	72	55	43	29	7335	65	48	37	26	6810	56	41	32	22	6285
B27	128.1	3	125	95	78	57	9450	113	87	69	51	8691	97	75	60	44	7962
C28	128.1	3	125	96	78	56	9750	109	85	69	50	8961	97	74	61	44	8202
B31	128.1	3	141	110	91	65	10485	130	98	80	59	9606	113	87	69	53	8757
C33	128.1	3	147	113	92	66	10785	128	99	81	59	9876	112	87	71	52	8997
B37	128.1	3	157	122	100	75	11295	143	111	90	66	10332	126	97	81	59	9399
C39	128.1	3	164	128	105	76	11775	145	113	91	68	10764	126	100	81	60	9783
B47	128.1	3	251	188	150	107	14400	220	164	132	95	13125	193	144	117	84	11880
C50	128.1	3	230	177	144	104	14520	200	155	126	91	13233	174	137	110	81	11976
B12	89.6	4	63	50	39	27	6660	58	43	33	23	6240	50	35	28	20	5820
B17	89.6	4	104	79	63	44	9780	92	69	56	37	9080	80	60	48	32	8380
B27	170.8	4	175	135	110	80	12600	156	121	95	69	11588	137	105	86	61	10616
C28	170.8	4	176	135	110	78	13000	154	119	96	70	11948	135	103	85	61	10936
B31	170.8	4	200	153	125	92	13980	181	139	111	81	12808	155	122	98	70	11676
C33	170.8	4	206	158	128	92	14380	180	136	113	82	13168	157	121	98	71	11996
B37	170.8	4	222	170	140	101	15060	200	151	125	92	13776	174	134	110	81	12532
C39	170.8	4	228	178	145	105	15700	202	157	128	93	14352	175	137	112	82	13044
B47	170.8	4	360	280	212	152	19200	328	238	191	134	17500	284	206	166	118	15840
C50	170.8	4	322	248	201	144	19360	280	217	177	127	17644	243	190	153	111	15968
Nominal DC Link Voltage			480	480	480	480		432	432	432	432		384	384	384	384	

1. All battery cabinets are 73.5" H x 31.5" D. 2. Maximum installed weight with largest breaker.

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