



PERFORMANCE DATA

EnerSys[®]

Power/Full Solutions

RESERVE
POWER

Discharge Currents (Amperes) to 1.65Vpc at 20°C

	5 Min	10 Min	15 Min	20 Min	25 Min	30 Min	35 Min	40 Min	45 Min	1 Hr	2 Hrs	3 Hrs	4 Hrs	5 Hrs	6 Hrs	7 Hrs	8 Hrs	9 Hrs	10 Hrs	20 Hrs
SBS B14	267.0	183.0	141.0	115.0	97.9	85.3	75.7	68.2	62.0	46.0	26.9	18.7	14.4	11.8	9.95	8.64	7.64	6.85	6.22	3.31
SBS B14F	267.0	183.0	141.0	115.0	97.9	85.3	75.7	68.2	62.0	46.0	26.9	18.7	14.4	11.8	9.95	8.64	7.64	6.85	6.22	3.31
SBS C11	340.0	235.0	182.0	151.0	128.0	111.0	99.6	89.9	81.9	65.0	36.4	25.7	20.0	16.5	14.1	12.3	11.3	10.2	9.32	5.21
SBS C11F	340.0	235.0	182.0	151.0	128.0	111.0	99.6	89.9	81.9	65.0	36.4	25.7	20.0	16.5	14.1	12.3	11.3	10.2	9.32	5.21
SBS 100	386.7	271.2	211.9	175.2	148.5	131.3	117.9	106.4	96.5	76.8	43.0	30.3	23.5	19.3	16.5	14.4	12.7	11.4	10.4	5.65
SBS 100F	386.7	271.2	211.9	175.2	148.5	131.3	117.9	106.4	96.5	76.8	43.0	30.3	23.5	19.3	16.5	14.4	12.7	11.4	10.4	5.65
SBS 170F	398.1	398.1	327.6	275.5	237.1	208.5	186.7	169.2	155.0	124.6	71.4	50.6	39.4	32.4	27.7	24.1	21.4	19.3	17.6	9.52
SBS 190F	449.5	449.5	366.4	305.1	262.6	231.7	207.2	188.1	172.6	138.8	79.7	56.5	44.1	36.3	30.9	27.0	24.0	21.6	19.7	10.7
SBS 410	1105	800.0	633.0	532.0	449.0	395.0	354.0	318.0	290.0	300.8	176.9	126.0	97.9	80.1	68.0	59.2	51.8	47.8	41.8	21.2

Discharge Currents (Amperes) to 1.63Vpc at 20°C

	5 Min	10 Min	15 Min	20 Min	25 Min	30 Min	35 Min	40 Min	45 Min	1 Hr	2 Hrs	3 Hrs	4 Hrs	5 Hrs	6 Hrs	7 Hrs	8 Hrs	9 Hrs	10 Hrs	20 Hrs
SBS B14	274.0	186.0	143.0	116.0	98.8	86.0	76.3	68.6	62.4	46.2	27.0	18.8	14.5	11.8	9.97	8.65	7.65	6.87	6.23	3.32
SBS B14F	274.0	186.0	143.0	116.0	98.8	86.0	76.3	68.6	62.4	46.2	27.0	18.8	14.5	11.8	9.97	8.65	7.65	6.87	6.23	3.32
SBS C11	348.0	239.0	185.0	152.0	129.0	113.0	100.0	90.5	82.5	65.4	36.5	25.7	20.0	16.5	14.1	12.3	11.3	10.2	9.34	5.23
SBS C11F	348.0	239.0	185.0	152.0	129.0	113.0	100.0	90.5	82.5	65.4	36.5	25.7	20.0	16.5	14.1	12.3	11.3	10.2	9.34	5.23
SBS 100	398.6	276.4	214.9	177.2	150.4	132.4	117.2	106.1	97.1	77.2	43.2	30.4	23.6	19.3	16.5	14.4	12.7	11.5	10.4	5.66
SBS 100F	398.6	276.4	214.9	177.2	150.4	132.4	117.2	106.1	97.1	77.2	43.2	30.4	23.6	19.3	16.5	14.4	12.7	11.5	10.4	5.66
SBS 170F	403.0	403.0	331.5	278.3	239.3	210.1	187.9	170.2	155.9	125.2	71.5	50.6	39.5	32.5	27.7	24.2	21.5	19.3	17.6	9.55
SBS 190F	454.5	454.5	370.7	308.1	264.8	233.4	208.6	189.2	173.6	139.5	79.9	56.7	44.2	36.4	31.0	27.1	24.1	21.7	19.7	10.7
SBS 410	1123	800.0	640.0	539.0	450.0	396.0	354.0	318.0	290.0	305.9	178.0	126.2	97.9	80.1	68.1	59.3	51.8	47.9	41.8	21.4

Discharge Currents (Amperes) to 1.60Vpc at 20°C

	5 Min	10 Min	15 Min	20 Min	25 Min	30 Min	35 Min	40 Min	45 Min	1 Hr	2 Hrs	3 Hrs	4 Hrs	5 Hrs	6 Hrs	7 Hrs	8 Hrs	9 Hrs	10 Hrs	20 Hrs
SBS B14	283.0	190.0	145.0	118.0	100.0	86.9	77.0	69.2	62.8	46.5	27.1	18.8	14.5	11.8	10.0	8.68	7.68	6.89	6.25	3.33
SBS B14F	283.0	190.0	145.0	118.0	100.0	86.9	77.0	69.2	62.8	46.5	27.1	18.8	14.5	11.8	10.0	8.68	7.68	6.89	6.25	3.33
SBS C11	360.0	245.0	188.0	154.0	131.0	114.0	102.0	91.4	83.2	65.8	36.7	25.8	20.1	16.5	14.1	12.4	11.3	10.3	9.36	5.26
SBS C11F	360.0	245.0	188.0	154.0	131.0	114.0	102.0	91.4	83.2	65.8	36.7	25.8	20.1	16.5	14.1	12.4	11.3	10.3	9.36	5.26
SBS 100	415.4	283.1	218.5	179.4	152.6	133.6	119.5	107.1	97.7	77.6	43.4	30.5	23.7	19.4	16.6	14.6	12.8	11.6	10.5	5.68
SBS 100F	415.4	283.1	218.5	179.4	152.6	133.6	119.5	107.1	97.7	77.6	43.4	30.5	23.7	19.4	16.6	14.6	12.8	11.6	10.5	5.68
SBS 170F	408.4	408.4	335.8	281.3	241.4	211.9	189.1	171.2	156.7	125.5	71.7	50.8	39.6	32.6	27.8	24.2	21.5	19.4	17.6	9.55
SBS 190F	459.8	459.8	375.8	311.8	267.3	235.1	210.1	190.2	174.2	140.0	80.0	56.7	44.2	36.4	31.0	27.1	24.1	21.7	19.7	10.7
SBS 410	1148	806.0	650.0	547.0	453.0	397.0	351.0	320.0	290.0	310.7	178.5	126.2	97.9	80.1	68.1	59.3	51.8	47.9	41.8	21.7

Discharge Currents (Amperes) to 1.50Vpc at 20°C

	5 Min	10 Min	15 Min	20 Min	25 Min	30 Min	35 Min	40 Min	45 Min	1 Hr	2 Hrs	3 Hrs	4 Hrs	5 Hrs	6 Hrs	7 Hrs	8 Hrs	9 Hrs	10 Hrs	20 Hrs
SBS B14	308.0	198.0	149.0	121.0	102.0	88.1	77.9	69.9	63.4	46.8	27.3	19.0	14.7	12.0	10.1	8.80	7.79	6.99	6.35	3.37
SBS B14F	308.0	198.0	149.0	121.0	102.0	88.1	77.9	69.9	63.4	46.8	27.3	19.0	14.7	12.0	10.1	8.80	7.79	6.99	6.35	3.37
SBS C11	391.0	258.0	196.0	158.0	134.0	117.0	103.0	92.9	84.4	66.6	36.9	26.0	20.2	16.6	14.2	12.4	11.4	10.3	9.43	5.30
SBS C11F	391.0	258.0	196.0	158.0	134.0	117.0	103.0	92.9	84.4	66.6	36.9	26.0	20.2	16.6	14.2	12.4	11.4	10.3	9.43	5.30
SBS 100	459.5	294.3	222.1	181.2	153.6	134.1	118.1	106.5	97.9	77.6	43.4	30.6	23.8	19.6	16.7	14.6	12.9	11.6	10.5	5.64
SBS 100F	459.5	294.3	222.1	181.2	153.6	134.1	118.1	106.5	97.9	77.6	43.4	30.6	23.8	19.6	16.7	14.6	12.9	11.6	10.5	5.64
SBS 170F	408.4	408.4	335.8	281.3	241.4	211.9	189.1	171.2	156.7	125.5	71.7	50.8	39.6	32.6	27.8	24.2	21.5	19.4	17.6	9.55
SBS 190F	491.6	491.6	382.2	315.4	267.3	235.1	210.1	190.2	174.2	140.0	80.0	56.7	44.2	36.4	31.0	27.1	24.1	21.7	19.7	10.7
SBS 410	1201	818.0	648.0	547.0	452.0	397.0	352.0	317.0	290.0	301.8	178.5	126.2	97.9	80.1	68.1	59.3	51.8	47.9	41.8	22.1

Constant Power Discharge (Watts per cell) to 1.65Vpc at 20°C

	5 Min	10 Min	15 Min	20 Min	25 Min	30 Min	35 Min	40 Min	45 Min	1 Hr	2 Hrs	3 Hrs	4 Hrs	5 Hrs	6 Hrs	7 Hrs	8 Hrs	9 Hrs	10 Hrs	20 Hrs
SBS B14	473.0	333.0	261.0	216.0	185.0	162.0	145.0	131.0	120.0	89.4	53.2	37.3	28.8	23.6	20.0	17.4	15.4	13.8	12.5	6.69
SBS B14F	473.0	333.0	261.0	216.0	185.0	162.0	145.0	131.0	120.0	89.4	53.2	37.3	28.8	23.6	20.0	17.4	15.4	13.8	12.5	6.69
SBS C11	601.0	428.0	337.0	280.0	241.0	212.0	190.0	172.0	157.0	126.0	71.9	51.1	40.0	33.0	28.3	24.8	22.8	20.5	18.8	10.5
SBS C11F	601.0	428.0	337.0	280.0	241.0	212.0	190.0	172.0	157.0	126.0	71.9	51.1	40.0	33.0	28.3	24.8	22.8	20.5	18.8	10.5
SBS 100	670.2	487.7	388.3	324.9	279.6	246.0	220.4	199.6	184.4	147.9	84.3	59.7	46.5	38.3	32.8	28.8	25.3	22.7	20.7	11.3
SBS 100F	670.2	487.7	388.3	324.9	279.6	246.0	220.4	199.6	184.4	147.9	84.3	59.7	46.5	38.3	32.8	28.8	25.3	22.7	20.7	11.3
SBS 170F	745.5	745.5	600.0	512.8	447.1	396.3	356.0	323.7	297.4	239.6	140.2	100.1	78.2	64.4	54.9	48.1	42.7	38.4	34.9	19.0
SBS 190F	869.1	869.1	702.3	593.5	506.7	457.9	402.9	366.5	345.1	278.9	160.9	114.4	89.2	73.3	62.8	54.8	48.2	43.9	39.4	21.0
SBS 410	1745	1344	1111	946.0	810.0	709.0	629.0	567.0	523.0	559.6	335.1	240.8	188.3	154.8	132.4	115.6	101.0	91.5	81.9	42.1

Constant Power Discharge (Watts per cell) to 1.63Vpc at 20°C

	5 Min	10 Min	15 Min	20 Min	25 Min	30 Min	35 Min	40 Min	45 Min	1 Hr	2 Hrs	3 Hrs	4 Hrs	5 Hrs	6 Hrs	7 Hrs	8 Hrs	9 Hrs	10 Hrs	20 Hrs
SBS B14	478.0	336.0	263.0	218.0	187.0	163.0	146.0	132.0	120.0	89.7	53.3	37.3	28.9	23.6	20.0	17.4	15.4	13.8	12.5	6.69
SBS B14F	478.0	336.0	263.0	218.0	187.0	163.0	146.0	132.0	120.0	89.7	53.3	37.3	28.9	23.6	20.0	17.4	15.4	13.8	12.5	6.69
SBS C11	607.0	432.0	339.0	282.0	243.0	213.0	191.0	173.0	158.0	126.0	72.0	51.2	40.0	33.0	28.3	24.8	22.8	20.6	18.8	10.50
SBS C11F	607.0	432.0	339.0	282.0	243.0	213.0	191.0	173.0	158.0	126.0	72.0	51.2	40.0	33.0	28.3	24.8	22.8	20.6	18.8	10.50
SBS 100	686.1	495.0	392.6	327.8	282.5	247.6	222.0	201.1	185.3	148.6	84.6	59.9	46.7	38.4	32.9	28.8	25.3	22.9	20.8	11.31
SBS 100F	686.1	495.0	392.6	327.8	282.5	247.6	222.0	201.1	185.3	148.6	84.6	59.9	46.7	38.4	32.9	28.8	25.3	22.9	20.8	11.31
SBS 170F	754.6	754.6	604.1	514.0	447.8	396.6	356.0	323.7	297.4	239.6	140.2	100.1	78.2	64.4	54.9	48.1	42.7	38.4	35.0	19.01
SBS 190F	879.6	879.6	708.9	598.0	507.5	460.5	402.9	366.5	346.6	279.8	161.2	114.6	89.3	73.4	62.9	54.9	48.2	44.0	39.4	21.02
SBS 410	1753	1352	1116	951.0	817.0	714.0	634.0	572.0	527.0	568.1	337.0	241.1	188.3	154.8	132.6	115.7	101.0	91.6	81.9	42.5

Constant Power Discharge (Watts per cell) to 1.60Vpc at 20°C

	5 Min	10 Min	15 Min	20 Min	25 Min	30 Min	35 Min	40 Min	45 Min	1 Hr	2 Hrs	3 Hrs	4 Hrs	5 Hrs	6 Hrs	7 Hrs	8 Hrs	9 Hrs	10 Hrs	20 Hrs
SBS B14	495.0	344.0	268.0	221.0	189.0	165.0	147.0	133.0	121.0	90.2	53.5	37.5	28.9	23.7	20.0	17.4	15.4	13.9	12.6	6.72
SBS B14F	495.0	344.0	268.0	221.0	189.0	165.0	147.0	133.0	121.0	90.2	53.5	37.5	28.9	23.7	20.0	17.4	15.4	13.9	12.6	6.72
SBS C11	627.0	442.0	346.0	286.0	246.0	215.0	193.0	175.0	159.0	127.0	72.3	51.3	40.1	33.1	28.3	24.8	22.8	20.6	18.9	10.60
SBS C11F	627.0	442.0	346.0	286.0	246.0	215.0	193.0	175.0	159.0	127.0	72.3	51.3	40.1	33.1	28.3	24.8	22.8	20.6	18.9	10.60
SBS 100	707.8	504.0	397.6	331.0	284.7	248.8	223.4	202.5	186.2	149.1	84.8	60.1	46.8	38.5	32.9	28.9	25.4	23.0	20.9	11.33
SBS 100F	707.8	504.0	397.6	331.0	284.7	248.8	223.4	202.5	186.2	149.1	84.8	60.1	46.8	38.5	32.9	28.9	25.4	23.0	20.9	11.33
SBS 170F	765.3	765.3	605.4	514.0	447.8	396.6	356.0	323.7	297.4	239.6	140.2	100.1	78.2	64.4	54.9	48.1	42.7	38.5	35.0	19.02
SBS 190F	892.1	892.1	716.4	603.2	507.5	463.3	402.9	366.5	348.1	280.7	161.5	114.7	89.4	73.5	62.9	54.9	48.3	44.0	39.5	21.07
SBS 410	1790	1370	1129	953.0	821.0	717.0	647.0	580.0	527.0	576.2	338.1	241.1	188.3	154.8	132.6	115.7	101.0	91.6	81.9	42.9

Constant Power Discharge (Watts per cell) to 1.50Vpc at 20°C

	5 Min	10 Min	15 Min	20 Min	25 Min	30 Min	35 Min	40 Min	45 Min	1 Hr	2 Hrs	3 Hrs	4 Hrs	5 Hrs	6 Hrs	7 Hrs	8 Hrs	9 Hrs	10 Hrs	20 Hrs
SBS B14	524.0	355.0	274.0	225.0	192.0	167.0	149.0	134.0	122.0	91.8	54.0	37.8	29.2	23.9	20.2	17.6	15.5	14.0	12.7	6.74
SBS B14F	524.0	355.0	274.0	225.0	192.0	167.0	149.0	134.0	122.0	91.8	54.0	37.8	29.2	23.9	20.2	17.6	15.5	14.0	12.7	6.74
SBS C11	665.0	460.0	357.0	294.0	246.0	220.0	193.0	175.0	162.0	129.0	72.7	51.5	40.2	33.2	28.3	24.8	22.8	20.6	18.9	10.6
SBS C11F	665.0	460.0	357.0	294.0	246.0	220.0	193.0	175.0	162.0	129.0	72.7	51.5	40.2	33.2	28.3	24.8	22.8	20.6	18.9	10.6
SBS 100	757.6	515.9	401.8	330.8	276.8	247.6	217.2	196.9	186.2	147.8	84.9	60.2	47.0	38.7	33.0	28.9	25.6	23.1	21.0	11.3
SBS 100F	757.6	515.9	401.8	330.8	276.8	247.6	217.2	196.9	186.2	147.8	84.9	60.2	47.0	38.7	33.0	28.9	25.6	23.1	21.0	11.3
SBS 170F	775.0	775.0	605.4	514.0	447.8	396.6	356.0	323.7	297.4	239.6	140.2	100.1	78.2	64.4	54.9	48.1	42.7	38.5	35.0	19.0
SBS 190F	902.5	902.5	720.9	605.0	507.5	463.3	402.9	366.5	348.1	280.7	161.5	114.7	89.4	73.5	62.9	54.9	48.3	44.0	39.5	21.1
SBS 410	1846	1392	1129	956.0	826.0	721.0	651.0	583.0	532.0	576.4	338.1	241.1	188.3	154.8	132.6	115.7	101.0	91.6	81.9	43.7

Temperature Correction

The following table shows the effect of battery temperature on the electrical discharge performance at different discharge rates. Discharge performance is given as a percentage of performance at +20°C.

Discharge Rate (Duration)	Temperature								
	0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C
5 min	69	76	84	92	100	108	116	125	133
10 min	73	80	86	93	100	107	113	119	125
15 min	75	81	88	94	100	106	111	116	121
20 min	76	82	89	94	100	105	110	115	119
25 min	77	83	89	95	100	105	110	113	117
30 min	78	84	90	95	100	105	109	112	115
35 min	79	85	90	95	100	104	108	112	114
40 min	79	85	90	95	100	104	108	111	114
45 min	80	85	91	96	100	104	107	110	113
1 hr	81	86	91	96	100	104	107	109	111
2 hr	83	88	93	97	100	103	105	107	108
3 hr	85	89	93	97	100	102	105	106	107
4 hr	86	90	94	97	100	102	104	105	106
5 hr	86	90	94	97	100	102	104	105	106
6 hr	87	91	94	97	100	102	104	105	105
7 hr	87	91	95	98	100	102	104	105	105
8 hr	88	92	95	98	100	102	104	105	105
9 hr	89	92	95	98	100	102	103	104	105
10 hr	89	92	96	98	100	102	103	104	105
20 hr	92	95	97	99	100	102	103	104	105



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