

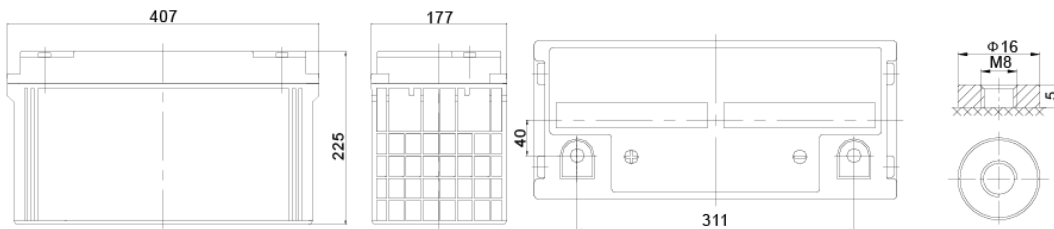


# SBL 135-12HR



Nominal voltage	12 V
Nominal capacity	3404 W / 10min to 1,67 V/cell 120 Ah @ C20 to 1,75 V/cell
Technology	AGM (Absorbent Glass Mat) VRLA (Valve Regulated Lead Acid)
Weight	~ 38 kg
Design life time	15 years (standby use) Very Long Life acc. Eurobat
Internal resistance	~ 4,5 mΩ (full charged)

Operating temperature range	Discharge -20°C ~ +60°C
	Charge 0°C ~ +50°C
	Storage -20°C ~ +60°C
Max. discharge current	1200 (5 sec)
Short circuit current	3000 A
Max. charging current	36 A
Charging voltage	Standby use 13,6 ~ 13,8 VDC
	Cycle use 14,6 ~ 14,8 VDC
Self discharge	Monthly is less than 3% at 25°C
Container material	ABS UL94HB (optional UL94-V0)



Length	407 ±2 mm
Width	177 ±2 mm
Height	225 ±2 mm
Total height	225 ±2 mm
Terminal	Internal thread M8 (breaking torque 10-12 Nm)

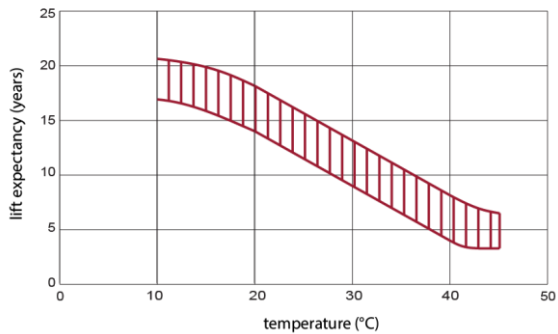
## CONSTANT CURRENT DISCHARGE CHARACTERISTICS (A at 25°C)

Voltage/Time	5 MIN	8 MIN	10 MIN	15 MIN	20 MIN	30 MIN	60 MIN	90 MIN
1.60 V	404,7	342,5	319,7	248,9	202,6	149,4	86,4	62,0
1.67 V	367,3	314,1	295,4	232,1	190,5	141,3	82,5	59,5
1.70 V	351,7	301,9	284,8	225,0	185,1	137,9	80,8	58,4
1.75 V	324,7	281,2	267,0	212,9	175,9	132,1	78,0	56,5
1.80 V	297,5	260,4	249,2	201,4	167,6	126,5	75,2	54,7
1.85 V	255,3	221,8	211,1	173,2	145,5	111,9	67,9	49,9

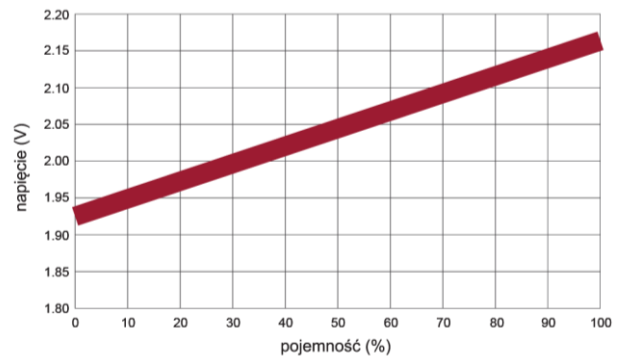
## CONSTANT POWER DISCHARGE CHARACTERISTICS (W/cell at 25°C)

Voltage/Time	5 MIN	8 MIN	10 MIN	15 MIN	20 MIN	30 MIN	60 MIN	90 MIN
1.60 V	743,7	637,8	601,2	474,4	389,5	290,2	162,3	117,4
1.67 V	692,2	598,4	567,4	450,0	371,7	278,3	156,2	113,5
1.70 V	669,4	580,4	551,6	439,6	363,7	272,7	153,7	111,9
1.75 V	628,2	548,5	523,9	420,6	349,1	263,7	149,5	108,9
1.80 V	584,7	514,9	494,7	401,9	335,9	254,4	145,0	105,9
1.85 V	509,3	444,7	424,7	349,3	294,3	227,0	131,9	97,4

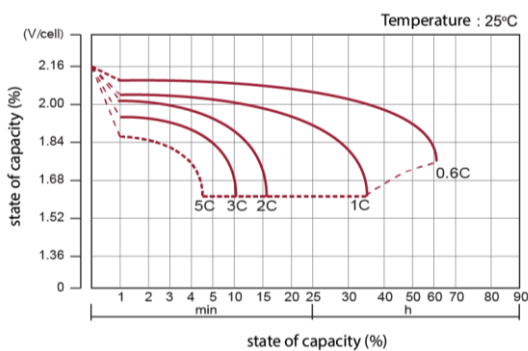
EFFECT OF TEMPERATURE ON LONG TERM LIFE



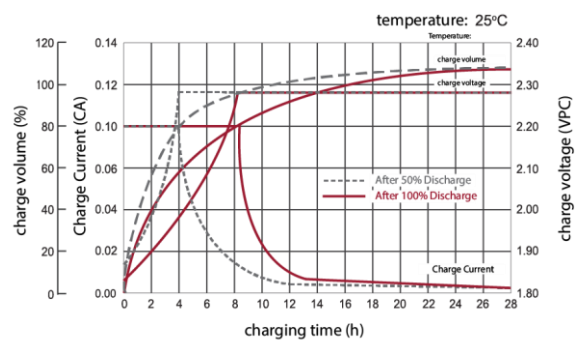
CHARGE CHARACTERISTIC CURVE FOR STANDBY USE



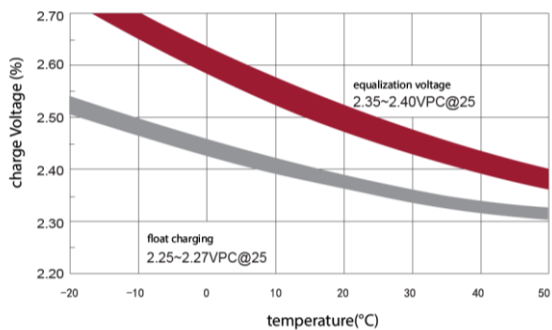
DISCHARGE CHARACTERISTICS CURVE



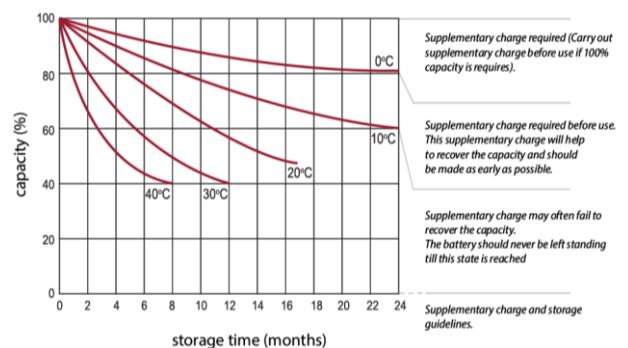
CHARGE CHARACTERISTIC CURVE FOR CYCLE USE



RELATIONSHIP BETWEEN CHARGING VOLTAGE AND TEMPERATURE



STORAGE CHARACTERISTICS



**Standards met:**

PN-EN 60896-21:2007 • PN-EN 60896-22:2007 • PN-EN 61056-1:2013 • PN-EN 61056-2:2013 • PN-E-83016:1999

Batteries manufactured in compliance with: ISO 9001 • ISO 14001



AGM Technology	VRLA	Standard Type	FOR INDUSTRIAL USE	Recyclable	> 12 Years
High Rate Type	UPS	Emergency Lighting	Security Systems	Energy Utilities	DC Power Supply

All data contained in this document, are subject to change. Wamtechnik Sp. z o.o. reserves the right to change them without prior notice.

**Wamtechnik Sp. z o.o.** ul. Techniczna 2 bud. H 05-500 Piaseczno  
Tel. +48 22 701 26 00, [office@wamtechnik.pl](mailto:office@wamtechnik.pl), [www.wamtechnik.pl](http://www.wamtechnik.pl)