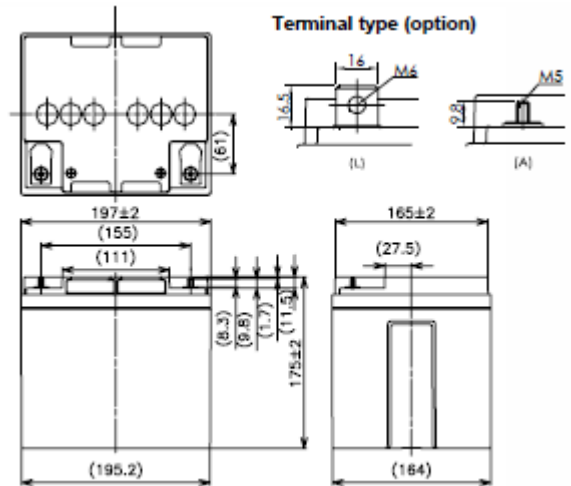


Panasonic LC-XC1238P

12V 38Ah Lead Acid Battery

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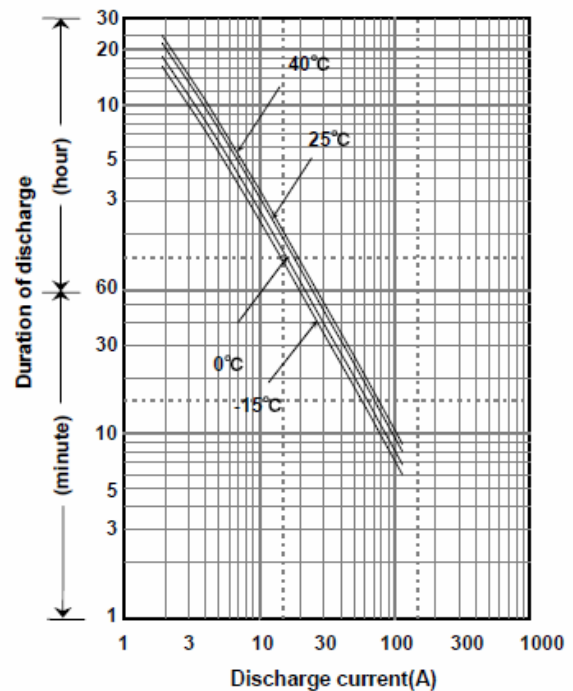
■ Specification

Nominal Voltage	12V	
Rated Capacity(20HR)	38Ah	
Dimensions	Length	197 mm
	Width	165 mm
	Height	175 mm
	Total height	175 mm/180 mm
Approx. Mass	15.0 kg	
Terminal	M5 threaded post Bolt and Nut type	

■ Characteristics

Capacity (25 °C)	20 hour rate	38Ah
	10 hour rate	36Ah
	5 hour rate	35Ah
	1 hour rate	23Ah
Internal Resistance	Fully charged battery (25 °C)	9 mΩ
	Temperature Dependency of Capacity (20 hour rate)	
	40 °C	102%
	25 °C	100%
	0 °C	85%
	-15 °C	65%
Self Discharge (25 °C)	After 3 months	91%
	After 6 months	82%
	After 12 months	64%

■ Duration of discharge vs. discharge current



■ Watt Table(25°C)

cut-off V	3min	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	10h	20h	24h
9.6V	1668	1349	1030	800	686	505	351	276	214	169	123	99.2	77.9	68.3	42.0	22.8	19.0
9.9V	1535	1271	1008	788	682	500	350	269	209	168	120	98.0	76.7	68.3	42.0	22.8	19.0
10.2V	1457	1204	980	768	672	489	349	267	185	167	119	96.8	75.5	68.3	42.0	22.8	19.0
10.5V	1446	1126	952	748	661	480	346	265	183	166	119	96.8	75.5	68.3	42.0	22.8	19.0
10.8V	1311	1098	874	716	640	468	308	247	175	155	114	94.4	74.3	67.1	42.0	22.8	18.7

■ Ampere Table(25°C)

cut-off V	3min	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	10h	20h	24h
9.6V	150	121	92.0	69.6	59.1	43.2	29.9	23.4	18.1	14.3	10.3	8.30	6.50	5.70	3.50	1.90	1.58
9.9V	138	114	90.0	68.5	58.8	42.7	29.8	22.8	17.7	14.2	10.1	8.20	6.40	5.70	3.50	1.90	1.58
10.2V	131	108	87.5	66.8	57.9	41.8	29.7	22.7	15.7	14.1	10.0	8.10	6.30	5.70	3.50	1.90	1.58
10.5V	130	101	85.0	65.0	57.0	41.0	29.5	22.5	15.5	14.0	10.0	8.10	6.30	5.70	3.50	1.90	1.58
10.8V	118	98.5	78.0	62.3	55.2	40.0	26.2	21.0	14.8	13.1	9.60	7.90	6.20	5.60	3.50	1.90	1.56

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■ Charging Method

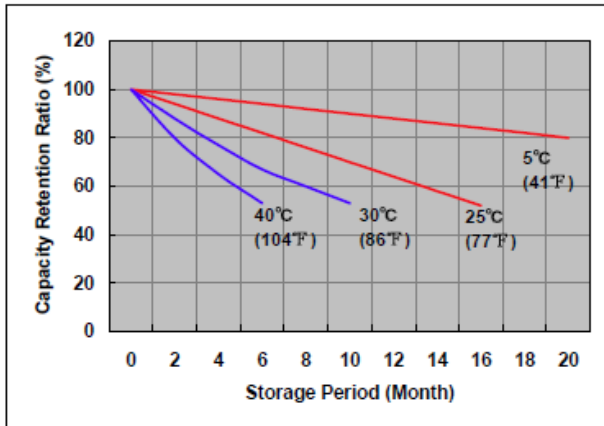
(25°C)

Cycle use	Control voltage 14.5-14.9V; Initial current 15.2A or smaller
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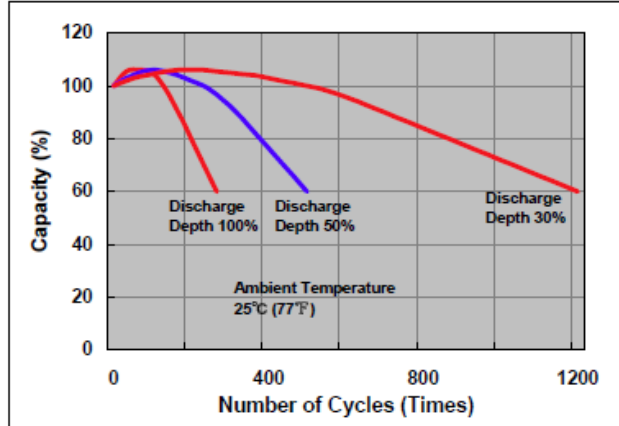
■ Cut off voltage

Discharge current	1.9A-7.6A	7.6A-19A	19A-38A	38A-76A	76A-114A
Cut off voltage(V)	10.5	10.2	9.9	9.3	8.7

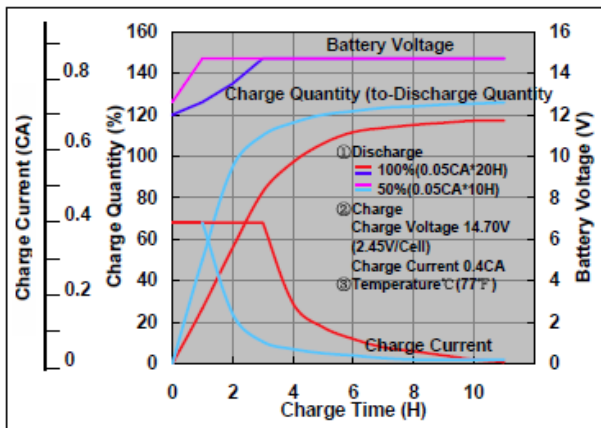
■ Residual capacity test result



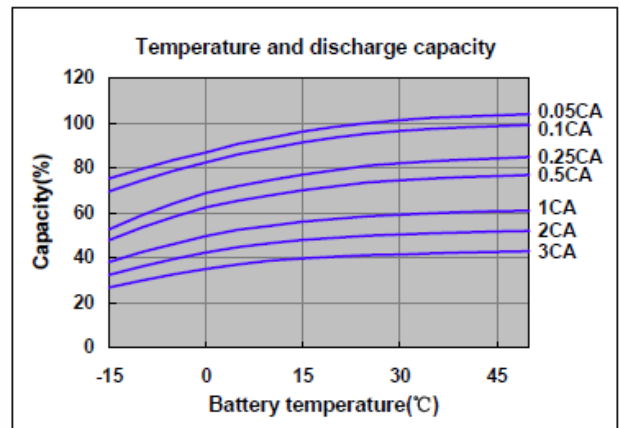
■ Cycle life vs. Depth of discharge



■ Constant-voltage and constant-current charge characteristics



■ Discharge capacity by temperature and by discharge current



■ Discharge characteristics(25°C)

