



INDIVIDUAL DATA SHEETS

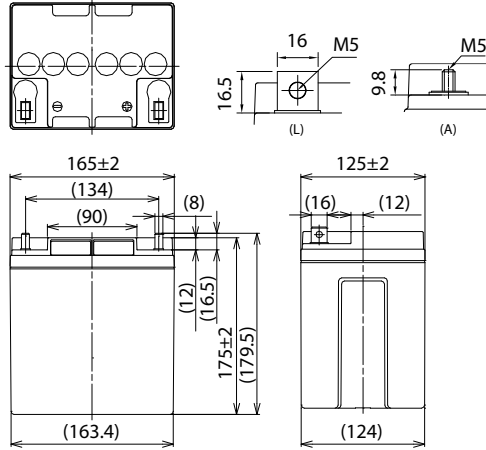
LC-QA1224P/AP

FOR STANDBY POWER SUPPLIES.
 EXPECTED TRICKLE DESIGN LIFE: 15 YEARS AT 20°C.

DIMENSIONS (MM)



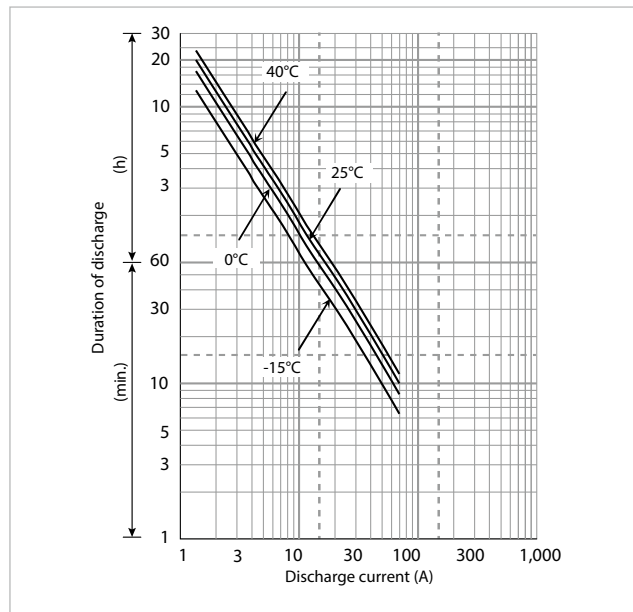
Terminal type (option)



Contents indicated (including the recycle marking, etc.) are subject to change without notice. Battery case resin: flame-retardant (UL94 V-0)

Specifications		LC-QA1224P/AP
Nominal voltage (V)		12
Nominal capacity	20 hours rate (Ah)	24.0
Dimensions	Length (mm)	125
	Width (mm)	165
	Total height (mm)	175
Approx. mass (kg)		9.9
Terminal type	M5 bolt/nut & threaded post	
Capacity (25°C)	20 hours rate (Ah)	27.0
	10 hours rate (Ah)	25.0
	3 hours rate (Ah)	20.0
	1 hour rate (Ah)	16.0
Impedance (mΩ)	Fully charged battery (25°C)	8
	40°C	102
Temperature dependency of capacity (%) – 20 hours rate	25°C	100
	0°C	85
	-15°C	65
	Remaining capacity (25°C)	After 3 months (%)
After 6 months (%)		82
After 12 months (%)		64

DURATION OF DISCHARGE VS. DISCHARGE CURRENT



WATT TABLE (25°C)

(Wattage/battery)

Cut-off	10min.	15min.	20min.	30min.	45min.	1h	1.5h	2h	3h	4h	5h	6h	10h	20h
9.6V	773	605	521	401	280	215	167	113	79.9	65.8	51.8	46.8	27.0	13.5
9.9V	760	600	512	396	274	210	163	112	79.7	65.3	50.9	46.0	26.8	13.5
10.2V	746	591	503	390	268	205	159	111	79.3	64.7	50.1	45.3	26.4	13.4
10.5V	724	575	479	372	261	200	155	107	78.2	64.0	49.7	44.8	26.1	13.3
10.8V	701	558	456	344	256	196	152	104	77.1	63.2	49.5	44.3	25.9	13.3

AMPERE TABLE (25°C)

(Ampere/battery)

Cut-off	10min.	15min.	20min.	30min.	45min.	1h	1.5h	2h	3h	4h	5h	6h	10h	20h
9.6V	72.6	51.2	42.8	30.5	22.4	17.4	11.3	9.90	6.98	5.51	4.50	3.83	2.48	1.35
9.9V	70.3	50.1	42.3	30.3	21.8	17.0	11.2	9.79	6.86	5.46	4.41	3.71	2.48	1.35
10.2V	67.7	49.2	41.3	30.0	21.4	16.7	11.1	9.68	6.75	5.40	4.36	3.69	2.48	1.35
10.5V	64.9	47.3	39.5	29.3	20.3	15.8	11.0	9.56	6.64	5.29	4.32	3.65	2.48	1.35
10.8V	63.8	46.4	38.8	28.2	18.0	13.8	10.3	9.00	6.41	5.18	4.28	3.60	2.48	1.35

All mentioned values are average values

LC-QA1224P/AP

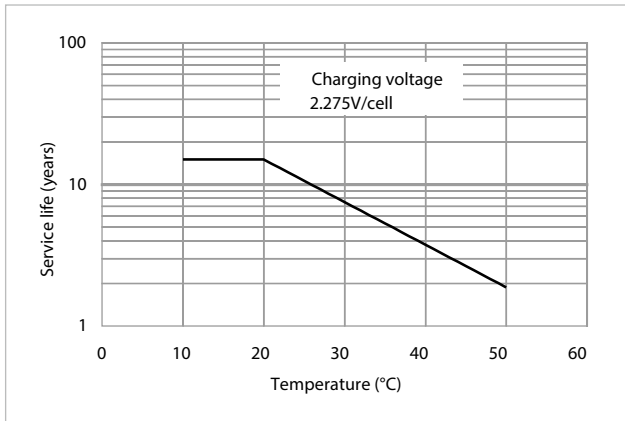
CHARGING METHOD (25°C)

Cycle use	Control voltage: 13.6V - 13.8V Initial current: 3.60A or smaller
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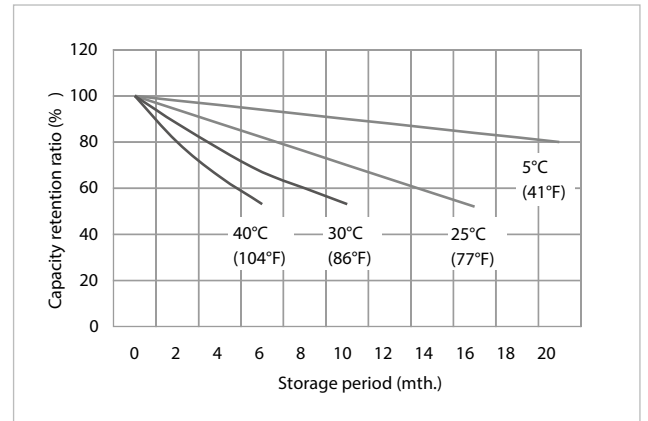
CUT-OFF VOLTAGE

Discharge current	1.20A - 4.80A	4.80A - 12.0A	12.0A - 24.0A	24.0A - 48.0A	48.0A - 72.0A
Cut-off voltage	10.5V	10.2V	9.9V	9.3V	8.7V

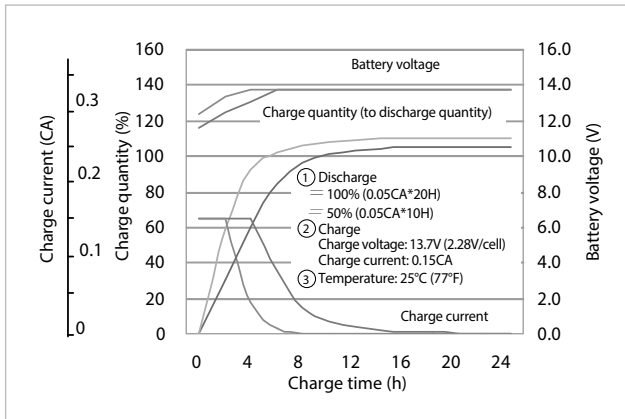
INFLUENCE OF TEMPERATURE ON TRICKLE LIFE



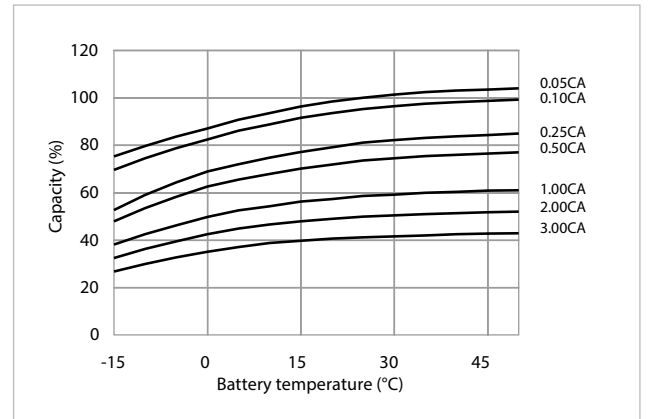
RESIDUAL CAPACITY TEST RESULT



CONSTANT-VOLTAGE CONSTANT-CURRENT CHARGE CHARACTERISTICS FOR TRICKLE USE



DISCHARGE CAPACITY BY TEMPERATURE AND BY DISCHARGE CURRENT



DISCHARGE CHARACTERISTICS

