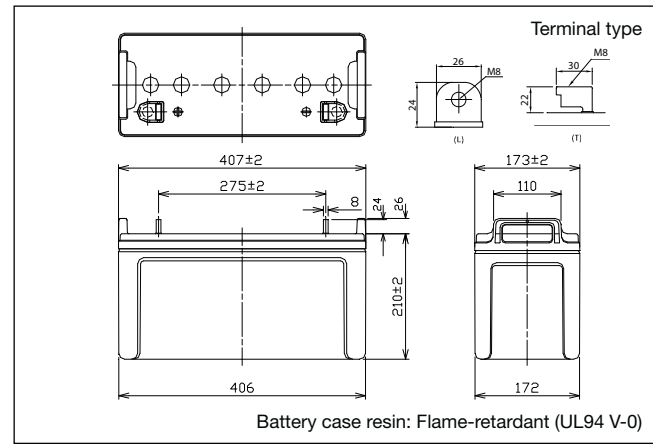


**LC-QA12110TP**



For standby power supplies.  
Expected trickle design life: 15 years at 20°C according to Eurobat.

**Dimensions (mm)**



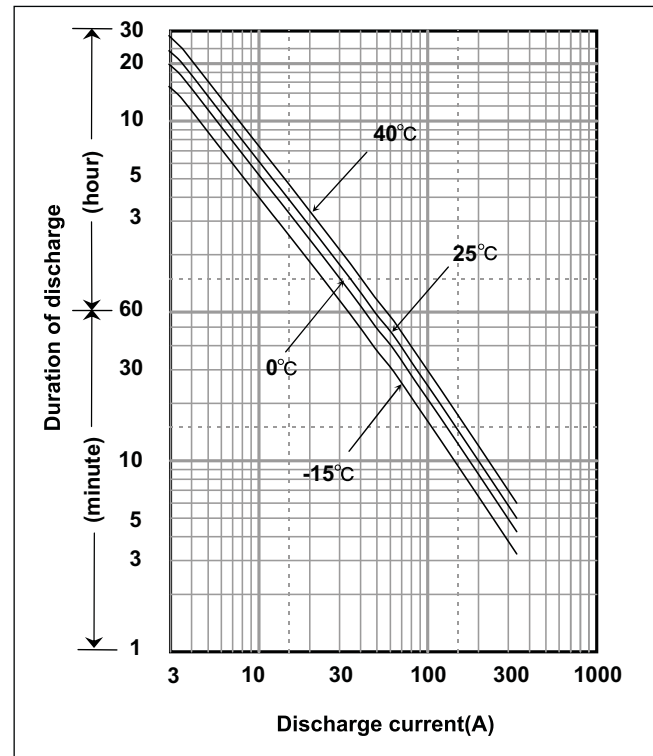
**Specifications**

Nominal voltage	12V	
Nominal capacity (20 hour rate)	110Ah	
Dimensions	Length	407mm
	Width	173mm
	Height	210mm
	Total Height	236mm
Approx. mass	36kg	
Terminal	M8 Bolt and Nut type	

**Characteristics**

Capacity (25°C)	20 hour rate 10 hour rate 5 hour rate 1 hour rate	110Ah 100Ah 95Ah 75Ah
Internal resistance	Fully charged battery (25°C)	4mΩ
Temperature dependency of capacity (20 hour rate)	40°C 25°C 0°C -15°C	102% 100% 85% 65%
Self discharge (25°C)	After 3 months After 6 months After 12 months	91% 82% 64%

**Duration of discharge vs Discharge current**



**Watt Table**

Cut-off V	(Wattage/Battery)														
	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	10h	20h	24h
9.6V	2987	2270	1872	1391	1017	793	578	482	353	279	232	197	124	63.7	54.4
9.9V	2920	2215	1827	1358	995	772	563	469	346	273	225	192	120	63.7	54.4
10.2V	2855	2136	1761	1314	984	751	548	463	340	267	218	186	118	63.0	53.7
10.5V	2764	2110	1748	1303	968	730	532	453	334	264	218	186	117	63.0	53.7
10.8V	2522	2010	1739	1261	933	720	525	442	328	258	212	183	116	61.6	52.6

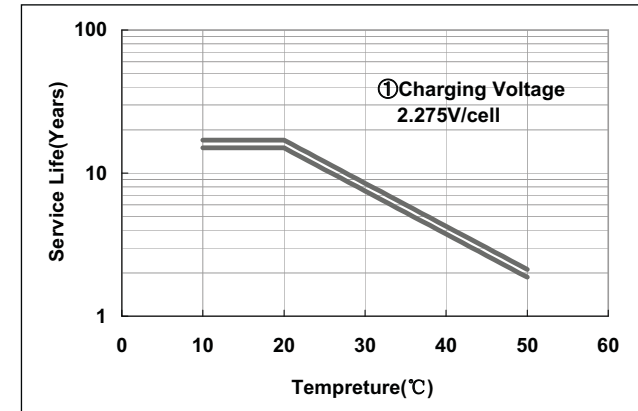
**Ampere Table**

Cut-off V	(Ampere/Battery)														
	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	10h	20h	24h
9.6V	272	212	175	133	96.7	76.7	53.6	43.2	30.2	23.3	19.7	16.1	10.2	5.50	4.51
9.9V	269	211	174	132	94.0	76.4	52.6	42.8	29.6	23.1	19.4	16.1	10.2	5.50	4.51
10.2V	268	210	172	130	93.5	75.9	52.1	42.3	29.4	22.9	19.1	16.0	10.1	5.50	4.51
10.5V	245	198	164	128	92.5	75.4	51.5	41.8	29.4	22.9	19.1	16.0	10.1	5.50	4.51
10.8V	232	192	160	126	79.9	65.4	46.4	39.7	28.1	22.3	18.9	15.5	9.99	5.39	4.51

**Charging Method**

Trickle Use	Control voltage: 13.6 - 13.8V; Initial current: 16.5A or smaller
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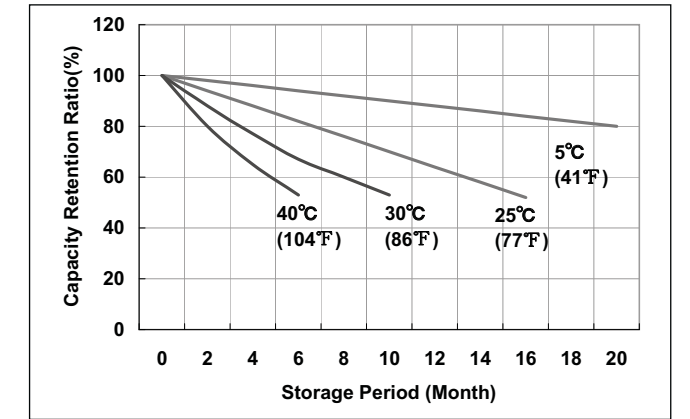
**Influence of Temperature on Trickle life**



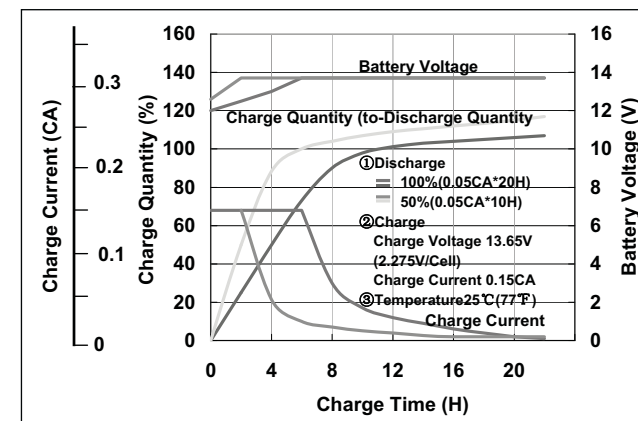
**Cut off voltage**

Discharge current	5.5A - 22A	22A - 55A	55A - 110A	110A - 220A	220A - 330A
Cut off voltage (V)	10.5	10.2	9.9	9.3	8.7

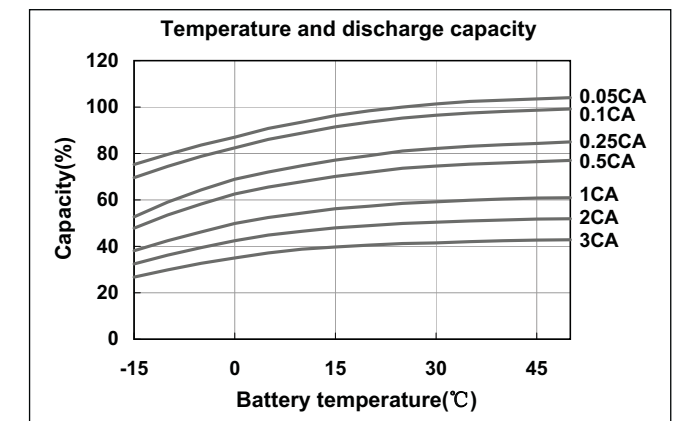
**Residual capacity test result**



**Constant-voltage and constant-current charge characteristics**



**Discharge capacity by temperature and by discharge current**



**Discharge characteristics**

