

# LC-P1224PG/APG

FOR STANDBY POWER SUPPLIES.  
 EXPECTED TRICKLE DESIGN LIFE: 10 – 12 YEARS  
 AT 20°C ACCORDING TO EUROBAT.

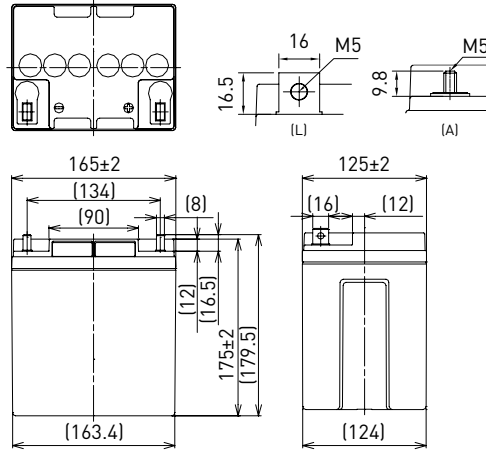


G198049

## DIMENSIONS (MM)



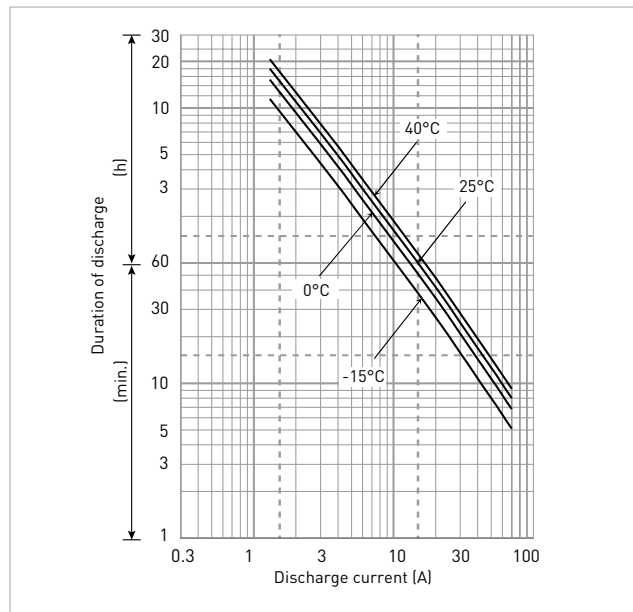
Terminal type (option)



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

Specifications		LC-P1224PG/APG
<b>Nominal voltage (V)</b>		12
<b>Nominal capacity</b>	<b>20 hours rate (Ah)</b>	24.0
<b>Dimensions</b>	<b>Length (mm)</b>	125
	<b>Width (mm)</b>	165
	<b>Total height (mm)</b>	179.5/175
<b>Approx. mass (kg)</b>		8.05
<b>Terminal type</b>	M5 bolt/nut & threaded post	
<b>Capacity (25°C)</b>	<b>20 hours rate (Ah)</b>	24.0
	<b>10 hours rate (Ah)</b>	22.0
	<b>3 hours rate (Ah)</b>	18.0
	<b>1 hour rate (Ah)</b>	14.0
<b>Impedance (mΩ)</b>	<b>Fully charged battery (25°C)</b>	11
<b>Temperature dependency of capacity (%) – 20 hours rate</b>	<b>40°C</b>	102
	<b>25°C</b>	100
	<b>0°C</b>	85
	<b>-15°C</b>	65
<b>Remaining capacity (25°C)</b>	<b>After 3 months (%)</b>	91
	<b>After 6 months (%)</b>	82
	<b>After 12 months (%)</b>	64

## DURATION OF DISCHARGE VS. DISCHARGE CURRENT



## WATT TABLE (25°C)

(Wattage/battery)

Cut-off	5min.	10min.	15min.	20min.	30min.	45min.	1h	1.5h	2h	3h	4h	5h	6h	10h	20h
9.6V	992	739	523	441	317	234	183	118	104	73.8	58.6	47.9	40.8	26.4	14.6
9.9V	931	724	520	434	314	232	181	116	103	73.4	58.2	47.5	40.6	26.3	14.6
10.2V	872	706	509	426	310	230	179	113	101	72.7	57.8	47.2	40.3	26.0	14.5
10.5V	782	654	474	405	303	226	175	111	97.2	71.6	57.4	46.8	39.8	25.9	14.4
10.8V	691	583	442	394	293	223	172	108	92.6	70.1	56.6	45.6	39.2	25.6	14.3

## AMPERE TABLE (25°C)

(Ampere/battery)

Cut-off	5min.	10min.	15min.	20min.	30min.	45min.	1h	1.5h	2h	3h	4h	5h	6h	10h	20h
9.6V	89.0	66.0	45.5	38.0	27.1	19.9	14.6	10.0	8.80	6.20	4.90	3.89	3.40	2.27	1.23
9.9V	83.5	64.7	45.2	37.4	26.8	19.8	14.5	9.80	8.73	6.17	4.87	3.86	3.39	2.26	1.22
10.2V	78.2	63.0	44.3	36.8	26.5	19.6	14.3	9.60	8.51	6.11	4.84	3.83	3.36	2.23	1.21
10.5V	70.1	58.4	41.2	34.9	25.9	19.3	14.0	9.40	8.21	6.01	4.80	3.80	3.32	2.22	1.20
10.8V	62.0	52.1	38.4	34.0	25.0	19.0	13.7	9.14	7.82	5.89	4.74	3.71	3.27	2.20	1.19

All mentioned values are average values

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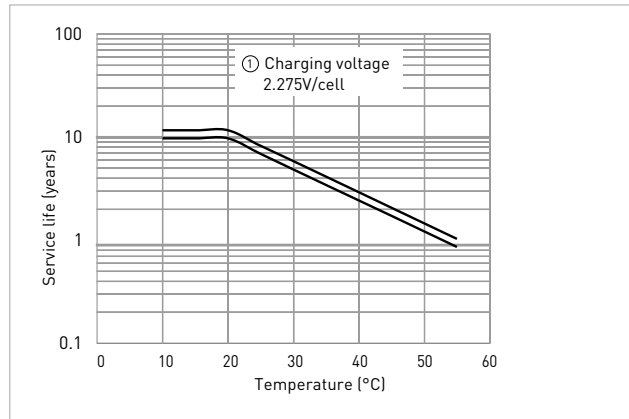
## CHARGING METHOD (25°C)

<b>Cycle use</b>	Control voltage: 13.6V - 13.8V Initial current: 3.6A or smaller
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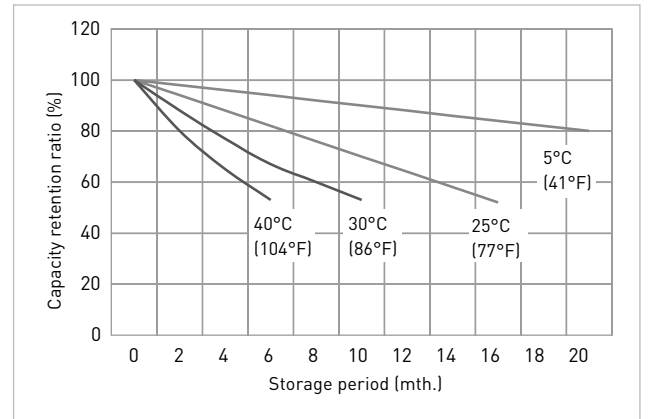
## CUT-OFF VOLTAGE

<b>Discharge current</b>	1.2A - 4.8A	4.8A - 12A	12A - 24A	24A - 48A	48A - 72A
<b>Cut-off voltage</b>	10.5V	10.2V	9.9V	9.3V	8.7V

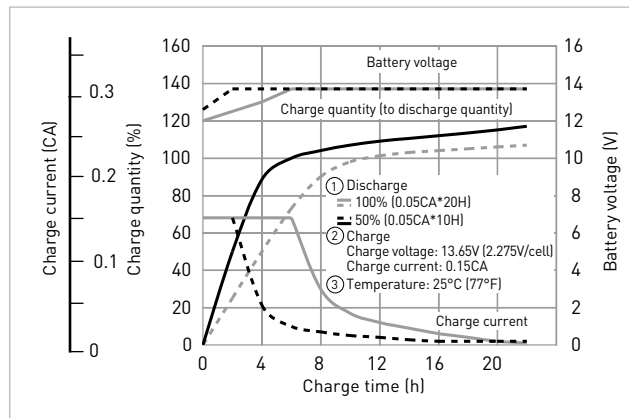
## INFLUENCE OF TEMPERATURE ON TRICKLE LIFE



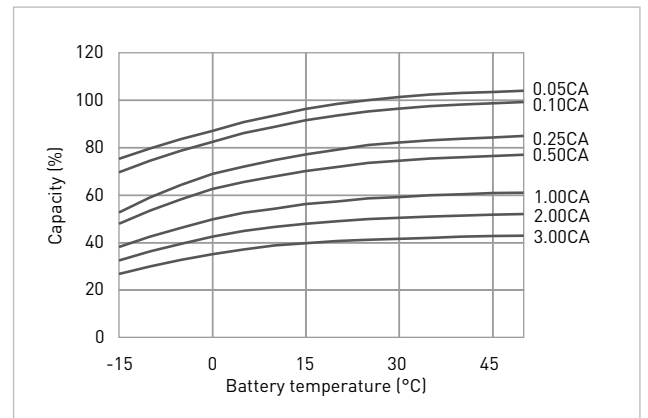
## RESIDUAL CAPACITY VS. STORAGE PERIOD



## CONSTANT-VOLTAGE CONSTANT-CURRENT CHARGE CHARACTERISTICS FOR TRICKLE USE



## DISCHARGE CAPACITY BY TEMPERATURE AND BY DISCHARGE CURRENT



## DISCHARGE CHARACTERISTICS

