



RA12-240HL

(12V240Ah)
(780w/cell)

HRL is high rate series with 15 years floating design life, especially designed for high rate load discharge applications . By using strong grid and specific paste plate to insure high performance during big current discharge requirement when electricity is off .High Rate series offering extra-durable stable performance under high rate discharge.



Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	780W@15min-rate to 1.67V per cell @25°C
Weight	Approx. 74.5 Kg (Tolerance ± 1.5%)
Max. Discharge Current	2400A (5 sec)
Internal Resistance	Approx. 3 mΩ
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C ± 5°C
Float charging Voltage	13.6 to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging Current	70.0 A
Equalization and Cycle Service	14.6 to 14.8 VDC/unit Average at 25°C
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.
Terminal	Faston tab F10
Constainer Material	A.B.S. UL94-HB, UL94-V0 Optional.



MH28539



G4M20206-0910-E-16



THE INTERNATIONAL CERTIFICATION NETWORK

CERTIFICATE

Postcode: 421001

is in conformity with

ISO 14001:2004 Standard



THE INTERNATIONAL CERTIFICATION NETWORK

CERTIFICATE

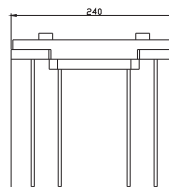
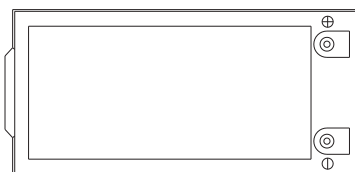
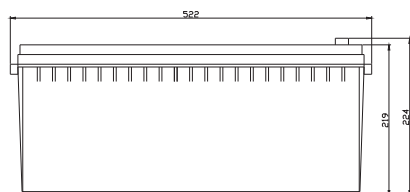
Postcode: 421001

is in conformity with

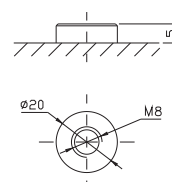
OHSAS 18001:1999 Standard

Dimensions

Unit: mm Dimension: 522(L) × 240(W) × 224(H)



Terminal F10



Constant Current Discharge Characteristics : A(25°C)

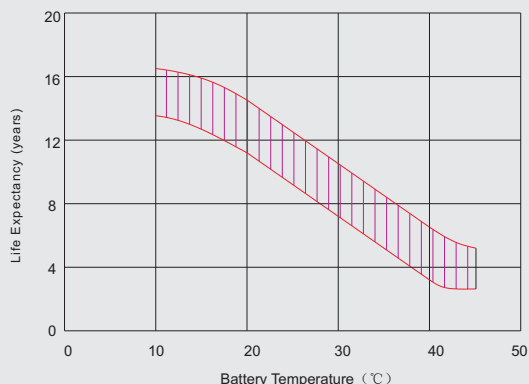
F.V /Time	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
9.60V	799.5	655.9	592.9	435.2	357.1	269.3	154.0	122.8
10.0V	776.4	621.4	589.9	425.0	336.3	259.4	151.0	118.6
10.2V	753.4	606.5	558.6	408.4	327.3	255.0	148.4	116.4
10.5V	676.5	583.8	510.4	387.6	311.6	245.6	144.9	114.3
10.8V	610.6	560.8	457.0	370.1	301.7	235.4	141.5	112.3
11.1V	521.4	516.3	420.5	352.7	290.9	227.5	137.1	107.8

Constant Power Discharge Characteristics : W(25°C)

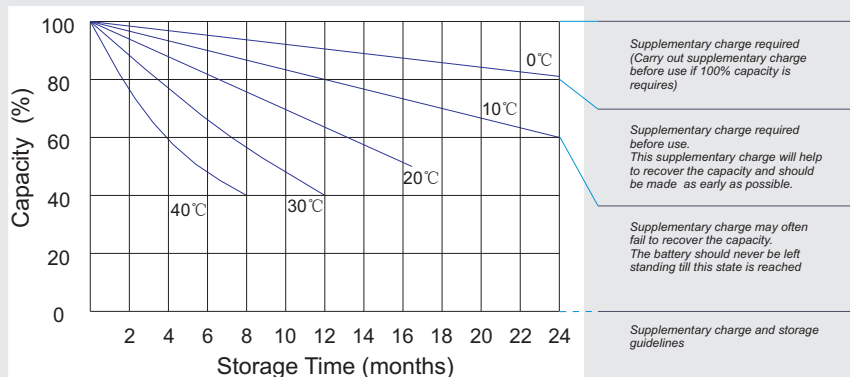
F.V /Time	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
9.60V	8435	6961	6591	5068	3943	3005	1722	1374
10.0V	8269	6683	6541	4980	3751	2922	1685	1334
10.2V	8175	6505	6243	4833	3678	2878	1672	1320
10.5V	7442	6360	5809	4682	3546	2810	1663	1312
10.8V	6778	6106	5696	4486	3437	2716	1635	1302
11.1V	5953	5782	5584	4289	3360	2634	1605	1264

All mentioned values are average values (Tolerance ±2%).

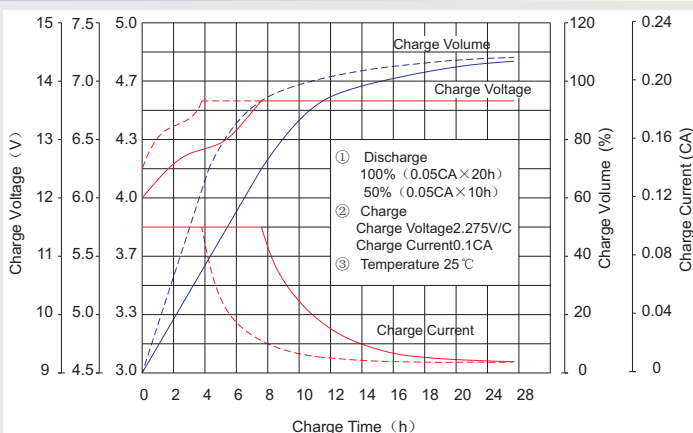
Effect of temperature on long term float life



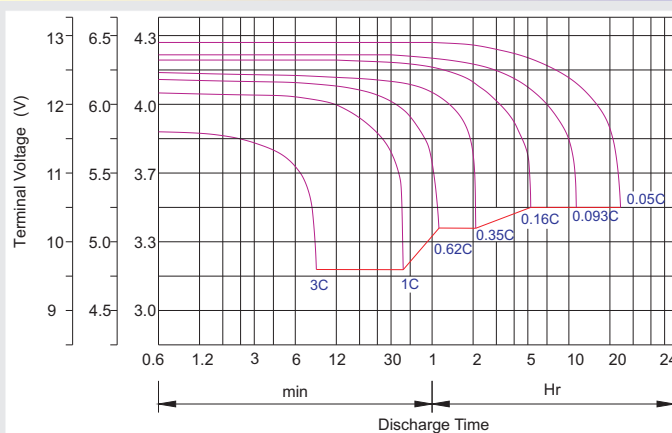
Storage characteristic



Charge characteristic Curve for standby use



Discharge characteristic Curve



Capacity Factors With Different Temperature

Battery Type		-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
GEL Battery	6V&12V	50%	70%	83%	85%	90%	98%	100%	102%	104%	105%
	2V	60%	75%	85%	88%	92%	99%	100%	103%	105%	106%
AGM Battery	6V&12V	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%
	2V	55%	70%	80%	85%	92%	99%	100%	104%	108%	110%

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge Current (A)	(A) ≤ 0.2C	0.2C < (A) < 1.0C	(A) ≥ 1.0C

Charge the batteries at least once every six months, if they are stored at 25°C.

Charging Method:

Constant Voltage	-0.2Cx2h+2.4-2.45V/cellx24h, Max. Current 0.3C
Constant Current	-0.2Cx2h+0.1Cx12h
Fast	-0.2Cx2h+0.3Cx4h

Bolt	M5	M6	M8
Terminal	F3 F4 F13 F18 T25 T26	F8 F11 F12-1 F15	F5 F9 F10 F12 F14 F16
Torque	6~7N·m	8~10N·m	10~12N·m

Maintenance & Cautions

Float Service:

- ※ Every month, recommend inspection every battery voltage.
- ※ Every three months, recommend equalization charge for one time.

Equalization charge method:

Discharge: 100% rate capacity discharge.

Charge: Max. current 0.3CA, constant voltage 2.4-2.45V/Cell charge 24h.

- ※ Effect of temperature on float charge voltage: -3mV/°C/Cell.
- ※ Length of service life will be directly affected by the number of discharge cycles, depth of discharge, ambient temperature and charging voltage.