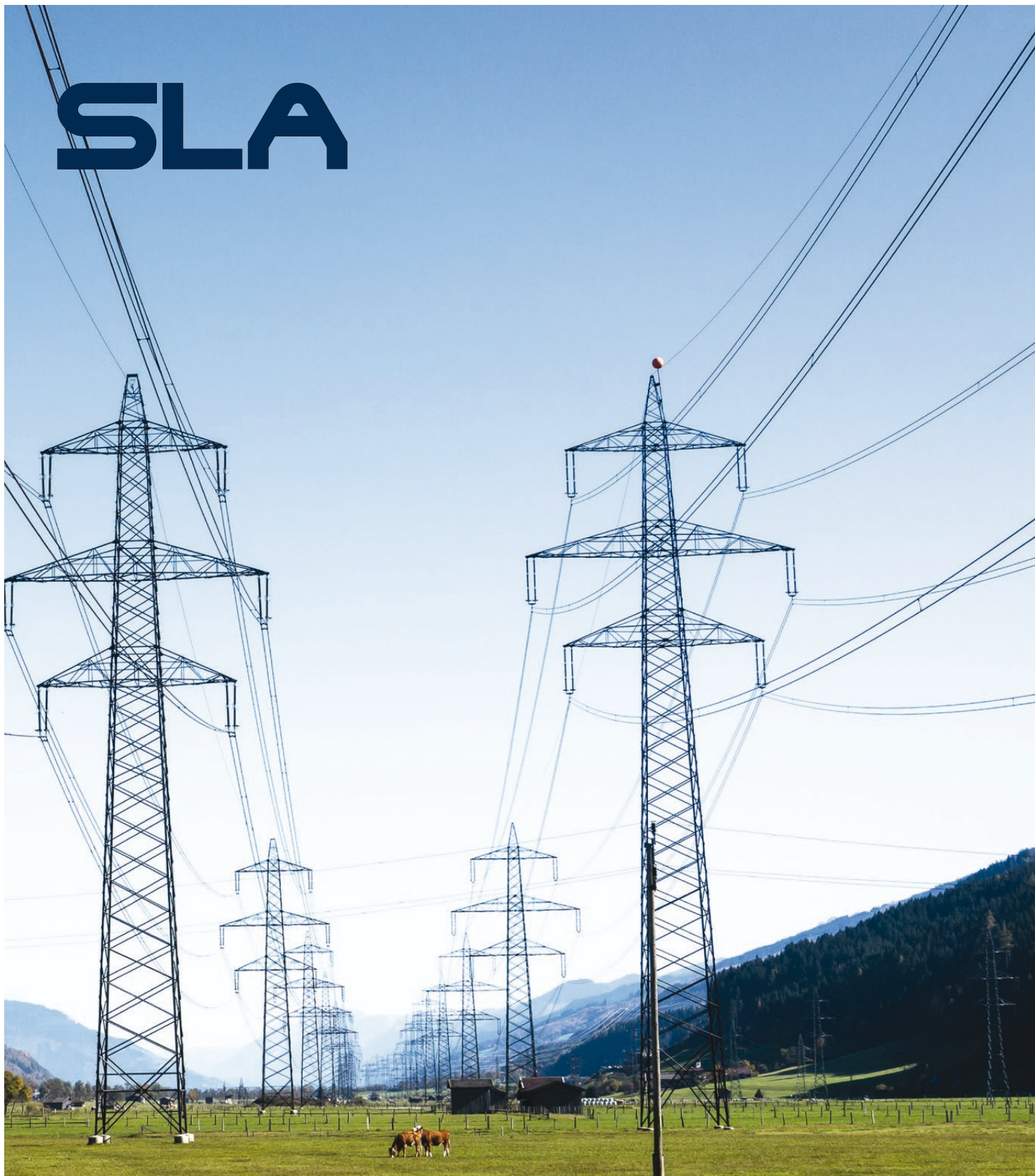


# SLA



SLA Battery Range

+  
FIAMM.COM

**FIAMM**  
+ -

**F** IAMM SLA RANGE OF VALVE REGULATED BATTERIES HAS BEEN DESIGNED FOR APPLICATIONS DEMANDING THE HIGHEST LEVEL OF RELIABILITY AND SECURITY.

FIAMM HIGH INTEGRITY SLA RANGE HAS BEEN DESIGNED FOR THE MOST CRITICAL APPLICATIONS, OFFERING UNSURPASSED PROVEN RELIABILITY, COMPLIANT WITH THE HIGHEST RECOGNISED INTERNATIONAL STANDARDS. SLA USES VRLA TECHNOLOGY WITH 99% INTERNAL RECOMBINATION EFFICIENCY, IS NON-SPILLABLE AND MAINTENANCE FREE THEREFORE REQUIRES NO TOPPING UP OF ELECTROLYTE DURING ITS FLOAT- LIFE. SLA RANGE IS NON-HAZARDOUS FOR AIR/SEA/RAIL/ROAD TRANSPORTATION AND IS 100% RECYCLABLE. SLA HAS A SELF-DISCHARGE RATE LESS THAN 2% PER MONTH, GUARANTEEING LONG SHELF-LIFE.



#### MAIN APPLICATIONS:



TELECOMMUNICATION



UPS & DATA CENTER



UTILITIES & INDUSTRY



RAILWAYS



OIL & GAS

## SPECIFICATIONS

Special lead calcium tin alloy grid is designed to meet the demanding requirements of telecom and power generation markets

VRLA AGM technology using low resistance high microporous fiberglass separators

Leak resistant post seal, threaded female M6/M8/M10 terminals with high conductivity and maximum torque resistance

One-way safety relief valves allow gas to escape and prevent the ingress of oxygen.

Flame arrestors prevent sparks or flames entering the battery

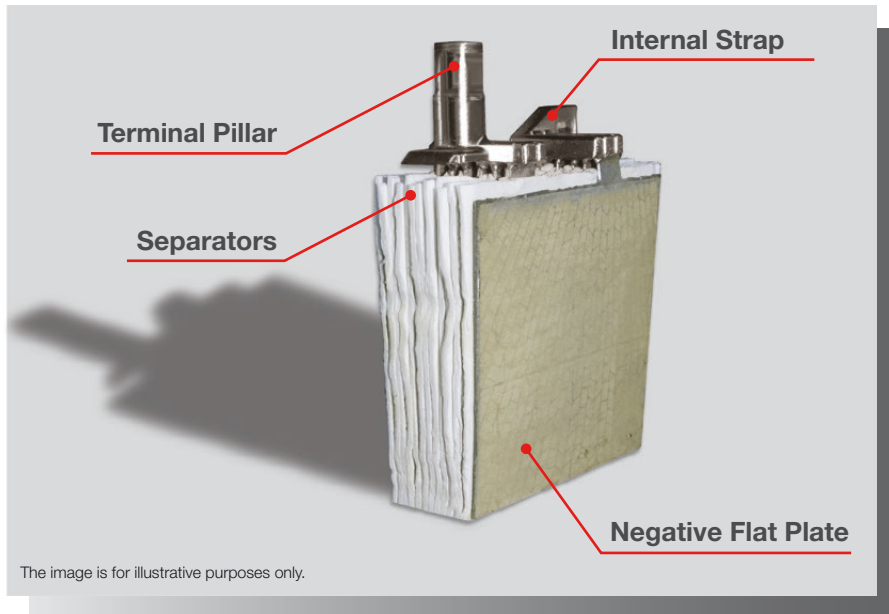
Flame retardant ABS plastic to IEC 707 FV0 and UL94 FV0 (LOI greater than 28%)

Thick walled plastics designed for superior mechanical strength

Heat sealed box to lid weld for superior integrity

Installation in any orientation (excluding permanently inverted)

## TECHNOLOGY



FIAMM SLA RANGE USE AGM (ABSORBED GLASS MAT) TECHNOLOGY. THE ELECTROLYTE IS ABSORBED IN FIBERGLASS SEPARATORS WITH 99% INTERNAL GAS RECOMBINATION EFFICIENCY. BLOCS ARE GRANTS NON-SPILLABLE AND MAINTENANCE FREE THEREFORE REQUIRES NO TOPPING UP OF ELECTROLYTE DURING ITS WHOLE LIFE. LOW SELF-DISCHARGE ALLOWS 6 MONTHS SHELF LIFE.

BATTERY TYPE	NOMINAL VOLTAGE (V)	CAPACITY AT 20°C (Ah) 10 HRS TO 1.8 VPC	SHORT CIRCUIT CURRENT (A) IEC 60896 21-22	INTERNAL RESISTANCE (mOhm) IEC 60896 21-22	DIMENSIONS (mm)			WEIGHT (kg)
					Length	Width	Height	
12 SLA 26	12	24	884	14	166	175	125	9.5
12 SLA 50 L	12	50	1550	8.3	261	174	217	21
12 SLA 80 L	12	80	2144	6.0	302	174	217	29
12 SLA 110 L	12	110	3000	4.2	379	174	217	37
6 SLA 125	6	125	4300	1.40	268	172	230	24
4 SLA 150	4	150	5000	0.70	271	173	202	19
6 SLA 160	6	160	3050	1.96	298	202	226	32
6 SLA 180*	6	180	3400	1.75	388	173	236	35
6 SLA 200	6	200	3700	1.58	250	125	366	36
4 SLA 200	4	200	3800	1.00	250	202	226	26
2 SLA 250	2	250	5900	0.35	271	173	202	17
2 SLA 300	2	300	6300	0.32	271	173	202	19
2 SLA 330	2	330	7500	0.27	208	195	230	22
2 SLA 405/4*	2	405	7600	0.26	250	202	226	27
2 SLA 500*	2	500	9700	0.21	388	173	236	34
2 SLA 580*	2	580	10800	0.19	388	173	236	37
2 SLA 800**	2	820	9700	0.206	254	210	495	64
2 SLA 1000**	2	1025	12000	0.165	254	210	495	74
2 SLA 1500**	2	1500	16000	0.125	275	210	660	105
2 SLA 2000**	2	2000	20000	0.102	368	218	660	137

\* The front view is the short side

\*\* This cell must be installed horizontally

## ELECTRICAL CHARACTERISTICS

Float Voltage: 2.27 V/cell at 20°C

Boost Voltage: 2.35 V/cell

Float Voltage Compensation with Temperature: -2.5 mV/cell/°C

Self-Discharge at 20°C: <2%/month

## STANDARDS

IEC 60896 Part 21 - VRLA methods of testing

IEC 60896 Part 22 - VRLA requirements

BS 6290 Part 4 - specifications for VRLA classification

Telcordia GR-4228 - VRLA battery string certification

BS 6334 / UL 94 V0 / IEC 707 FV0

determination of materials flammability

Bellcore TR-NWT-000766 - VRLA battery generic requirements

UL 1778 - UPS equipment

Eurobat ">12 years VERY LONG LIFE"

## CERTIFICATIONS

ISO 9001  
Quality Management System

ISO 14001  
Environmental Management System

OHSAS 18001  
Workplace Safety & Health

## ACCESSORIES

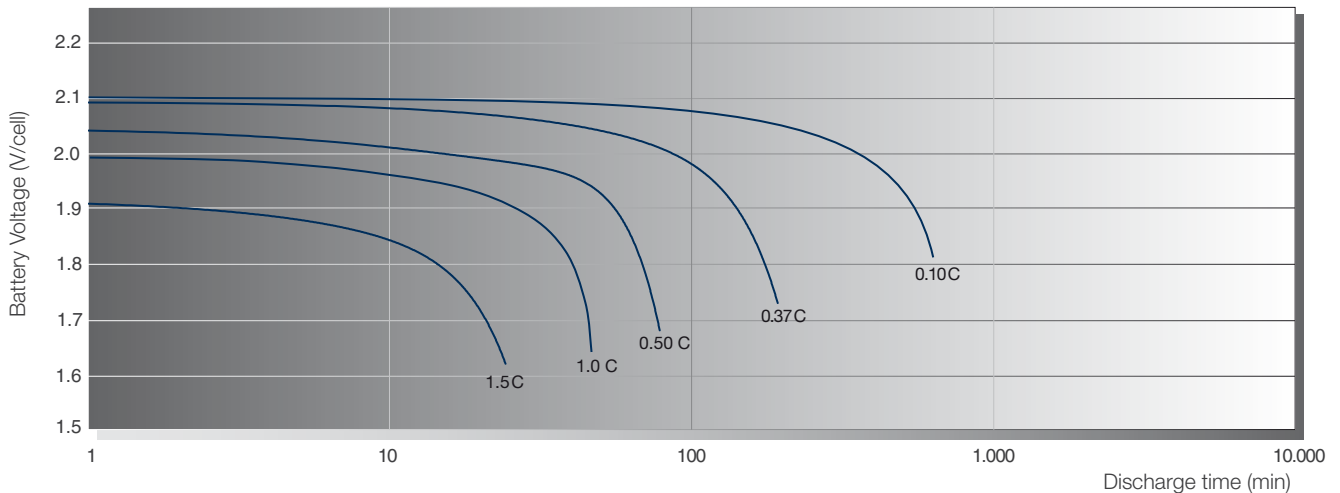
RVS  
(remote venting system) for IP rated applications which require remote gassing

Rack for battery installation  
(standard and seismic)

Cabinets for battery installation  
(including electrical protections and disconnection)

Battery monitoring systems

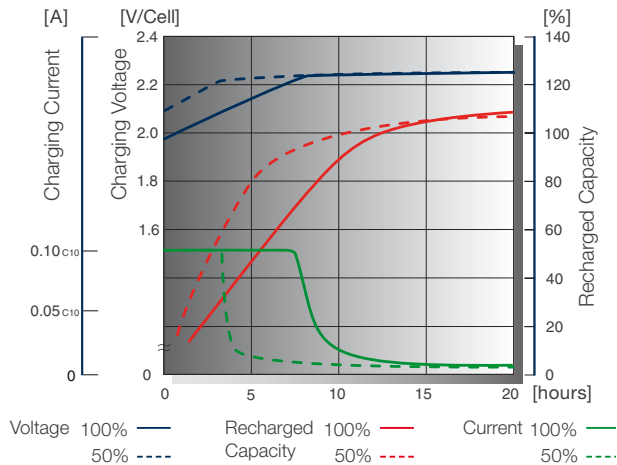
### DISCHARGE CURVES at different current / final voltage (at 20°C)



The above discharge curves are typical. For more detailed information please see the specific product sheets.

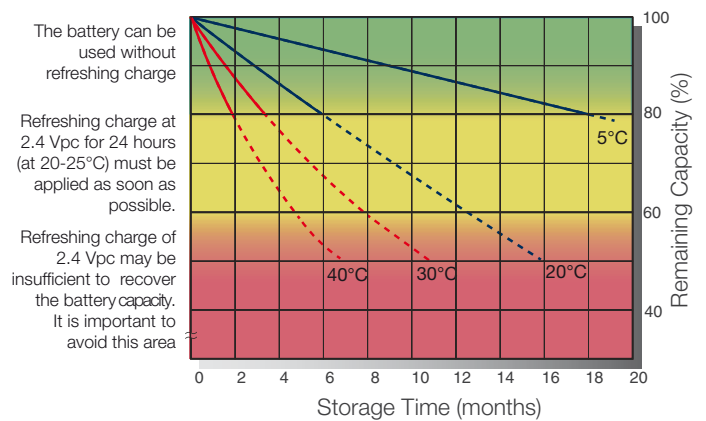
### TYPICAL CHARGE CURVES

Battery Voltage and Charge Time for Standby Use (at 20°C)



### STORAGE

Capacity loss during storage at various temperatures



Headquarters  
**FIAMM Energy Technology S.p.A.**  
Viale Europa, 75  
36075 Montecchio Maggiore (VI) - Italy  
Tel. +39 0444 709311  
Fax +39 0444 694178

**A Hitachi Group Company**

info.standby@fiamm.com  
www.fiamm.com

fiamm.batteries  
 fiambatteries  
 youtube.com/user/FIAMMvideo