



Advantage of HRL Batteries over SMF VRLA Batteries

<u>DESCRIPTION</u>	<u>HRL</u>	<u>STANDARD SMF VRLA</u>	<u>BENEFIT OF HRL</u>
TECHNOLOGY	SEALED MAINTENANCE FREE, FRONT TERMINAL DESIGN	SEALED MAINTENANCE FREE, TOP TERMINAL DESIGN	SAFE & EASY TO INSTALL, USE BUS BAR
PICTURE			HRL IS HAVING ½ FOOTPRINT IN COMPARISON TO ESC SERIES.
DESIGN RATING	C10 (BEST SUITED FOR HEAVY DISCHARGE APPLICATION)- 10 HRS RATED	C20 RATED- 20 HRS RATED	DESIGNED FOR HIGH DISCHARGE, HELPS IN REDUCING THE NO.OF BATTERIES IN COMPARISON TO STD VRLA.
DISCHARGE PERFORMANCE	DESIGNED FOR HEAVY DISCHARGE PERFORMANCE	NOT DESIGNED FOR HEAVY DISCHARGE PERFORMANCE	IT IS DESIGNED TO DELIVER HEAVY DISCHARGE EVEN FOR SHORT DURATION
WORKING TEMPERATURE	25 DEG	25 DEG	IT IS THE RECOMMENDED TEMPERATURE FOR AGM VRLA TECHNOLOGY
DoD vs Cyclic life	20% DOD- 1500+ CYCLES 50% DOD- 1100+ CYCLES 80% DOD- 450+ CYCLES	20% DOD- 1200 CYCLES 50% DOD- 800-900 CYCLES 80% DOD- 300+ CYCLES	APPROX 30% MORE CYCLIC LIFE AT VARIOUS DOD.
PSOC PERFORMANCE	GOOD	NOT AS C10 RATED BATTERIES	CHARGE ACCEPTANCE OF C10 BATTERY IS HIGH. IT IS DESIGNED ON 10 HR RATING INSTEAD OF C20 (20 HR RATING)
INTERNAL TEMPERATURE EFFECT	GREAT STABILISATION ON HIGH TEMPERATURE	EVAPORATION INCREASES DUE TO HIGH TEMPERATURE	DESIGN IS MADE IN SUCH A WAY TO STABILISE AT HEAVY DISCHARGE PERFORMANCE.
DEEP CYCLE USAGE	WORKS WELL IN DEEP CYCLE, DESIGNED @ 1.67ECV	NEED BOOST CHARGE FOR RECOVERY	DESIGNED @ 1.67 ECV INSTEAD TO 1.75 AS STD. CAN HANDLE DEEP DISCHARGE PERFORMANCE

INTERCONNECTION	INCLUDES Cu BUS BAR FOR HEAVY DISCHARGE	NO INTERCONNECTION INCLUDED	Cu BUS IS DESIGNED TO PERFORM FOR HEAVY DISCHARGE
TERMINAL INSULATION	COMES WITH FRONT TERMINAL CAP	TERMINAL IS NOT THE STANDARD ACCESSORY. TO SUPPLIED SEPERATELY	BETTER SAFETY IN HRL.

Abbreviation-

- PSOC- PARTIAL STATE OF CHARGE
- DoD- DEPTH OF DISCHARGE
- CYCLE- 1 DISCHARGE + 1 CHARGE COMBINED MAKES 1 CYCLE.
- ECV- END CELL VOLTAGE (end voltage beyond which we don't recommend further discharge from battery)
- C10- DESIGNED ON 10 HR RATING
- C20- DESIGNED ON 20 HR RATING.
- DEEP CYCLE- WHEN WE DISCHARGE THE BATTERY TILL ITS LOWEST RECOMMENDED VOLTAGE
- BUS BAR- INTERCONNECTION Cu LINKS.