BATTERY ISOLATORS
LOW DROP

Rev.20130603

The *low voltage drop* battery isolators (or *low drop*), or charge sharers, allow 2 or more batteries to recharge simultaneously using one or two generators, according to the following table:

Code	Type	N° batteries outputs	Current per battery	N° alternators inputs	Weight	Dimensions mm
HPR10003	2x50 A	2	50 A	1	0,54	65X127X136
HPR20003	3x50 A	3	50 A	1	0,59	65X127X136
HPR30003	4x50 A	4	50 A	2	1,00	65X127X236
HPR40003	6x50 A	6	50 A	2	1,08	65X127X236
HPR50003	2x100 A	2	100 A	2	1,01	65X127X236
HPR60003	3x100 A	3	100 A	2	1,05	65X127X236
HPR70003	2x150 A	2	150 A	2	1,07	65X127X236
HPR80003	3x150 A	3	150 A	3	1,50	65X127X336

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Table 1

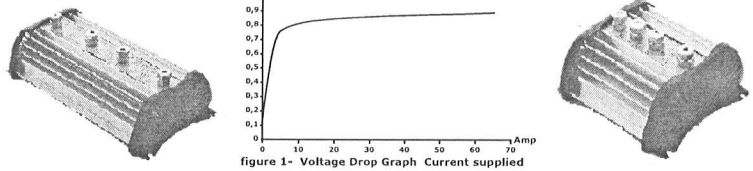

figure 1- Voltage Drop Graph Current supplied

Battery isolators separate electrically each battery to avoid that the battery with the highest charge drains into the one with the lower charge. During the charging phase, the isolator allows the preferential recharging of the battery bank most in need. The casing is made of aluminum, with wide cooling fins designed to disperse heat efficiently. They are supplied complete with nuts, washers and wire housings for connection, as well as directions for correct assembly.

Assembly diagram

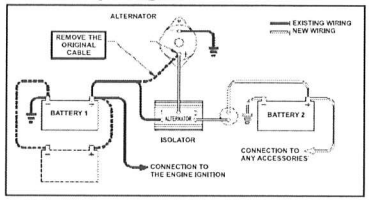

Figure 2

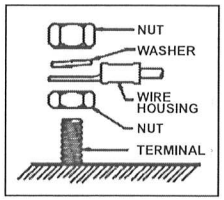

Figure 3

All our battery isolators have protection standard IP68.
They:
- Electrically isolate batteries
- Separate the current in one direction only
- Intrinsically provide more charge to the battery with lower charge
- Divide the charge among several batteries
- Have very low voltage drop between the alternator and the battery (Low drop).

Instructions for installation and use

The battery isolators are connected between the alternator and the batteries. The installation is very simple:
- Remove the negative terminals of all batteries before making any changes to the electrical system. Keep the engine off and follow the recommendations for disconnecting battery placed in the on-board assembly manual.
- Install the isolator in the upright position in a dry place, free from splashing water, away from heat sources and as close as possible to the alternator
- Connect the positive output of the alternator at the entrance of the isolator. Make sure the wires to be used for the connections are of suitable section (it is recommended to use the cables of not less than 25 mm2 and for long distances even of 50 mm2): see Table 2
- Connect the positive terminals of the battery to the terminals indicated on the isolator
- Tighten the connections as shown in Figure 3.

Maximum current tolerated	Recommended cable dimensions			
	< 5m	> 5m e < 6m	> 6m e < 8m	> 8m e < 10m
70 A	10 mmq / 50 A	10 mmq / 50 A	16 mmq / 50 A	25 mmq / 50A
95 A	10 mmq / 50 A	16 mmq / 50 A	25 mmq / 50 A	35 mmq / 50 A
130 A	16 mmq / 80 A	25 mmq / 80 A	35 mmq / 80 A	50 mmq / 80 A
150 A	25 mmq / 120 A	35 mmq / 120A	35 mmq / 120A	75 mmq / 120A

Table 2

DISPOSAL INFORMATION
Under Article 13 DL 151 25/07/2005 directive 2002/95/EC, 2002/96/EC, the crossed bin symbol indicates that the product at the end of its life must be collected separately from other waste. The equipment at the end of life should then be given to a suitable separate collection facility of electrical and electronic waste. Proper recycling will help prevent potential negative effects on the environment and on health and promotes the reuse of materials.