FIAMM
MOTIVE POWER

Low cost HF charge solution

Smart chargers
Fiamm Motive Power
Premium ES

EnerSys
Power/Full Solutions™

Efficient and low cost high frequency solution

Fiamm Motive Power Premium ES

The new Premium ES series covers single phase and three phase chargers, 24 V to 80 V. It has been developed to meet the needs for a cost effective and efficient charger for standard applications with flooded and VRLA motive power batteries, type Fiamm Motive Power energy plus and Fiamm Motive Power energy dry. These multicapacity chargers offer key features incorporating the cost saving benefits of the HF technology. The design is optimised in terms of weight and size. The high value polymer ABS flame retardant enclosure reflects the innovative energy converting technology.

The ionic mixing by pulse currents offers a perfect homogenisation of theelectrolyte. The standard ionic charging profile permits a charging time range of 7 to 14 hours. The charger can be equipped with a pump for pneumatic electrolyte mixing (from 24 V 50 A) to further reduce charging time and to support opportunity charge. As an additional option a control to stear a magnetic valve for automatic water topping up is available (from 24 V 50 A). This new range is the further extension in the wide portfolio of HF chargers and a result of the EnerSys long term experience and development capability.

Main technical features

- Precise recharge according to DOD
- Temperature adjustation by switch (only from 24 V 50 A)
- Use for flooded lead acid batteries with ionic mixing charging profile (pneumatic electrolyte mixing charging profile as an option from 24 V 50 A) and VRLA batteries
- HIgh power factor and efficiency reducing energy consumption and water consumption of the battery

Options:

- Pneumatic electrolyte mixing pump kit (from 24 V 50 A)
- Automatic water topping up kit (from 24 V 50 A)
- Remote display (green/red) (from 24 V 50 A), (not available for chargers in cabinets)
- Serial link for charger memory download (from 24 V 50 A)

Front panels

LED display :
Models 1, 2, 3 - Indicating the evolution of the state of charge

LCD display :
Model 4 - Showing all charging parameters : total voltage, cell voltage, current, capacity restored, charging time, % of charge, time remaining ... .
Memorization of parameters.

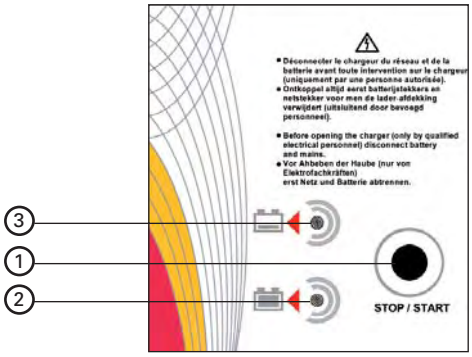
Definition of application fields

1. Low duty
- Single shift with light operation and discharge lower than 60 % C_5, electrolyte T °C about 30 °C

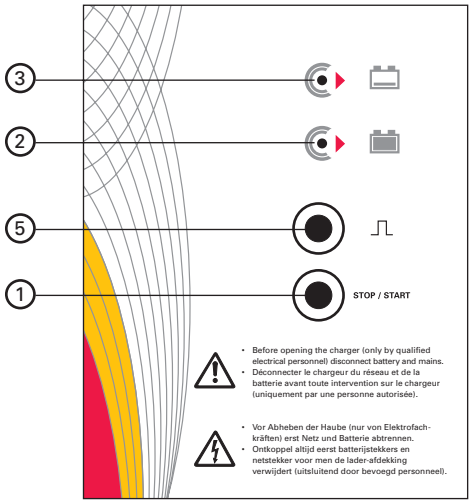
2. Normal duty
- Single shift with discharge up to 80 % C_5, electrolyte T °C 30 °C

3. Heavy duty
- Single shift with discharges of 80 % C_5 and high discharging currents
- Opportunity charging to augment the useable capacity
- Multi-shift operation with or without battery changes
- High ambient temperature

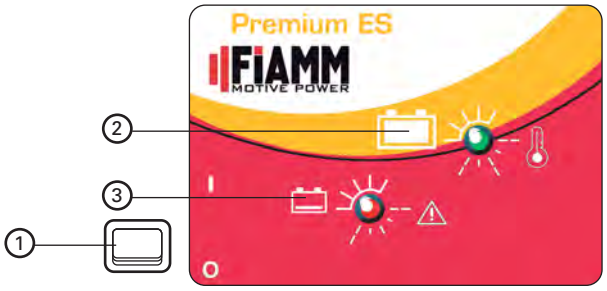
Fiamm Motive Power energy dry		
Fiamm Motive Power energy plus		
Fiamm Motive Power energy plus with electrolyte mixing		
Low duty	**Normal duty**	**Heavy duty**



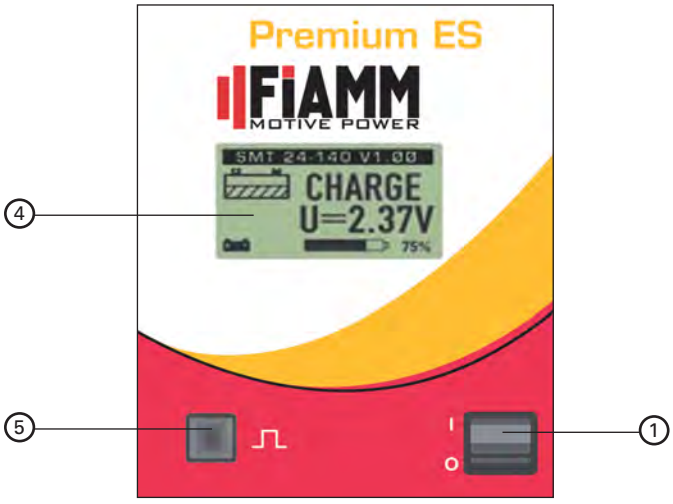
Model 1



Model 2



Model 3



Model 4

Ref.	Function	Ref.	Function
①	Start-Stop or Stop/Start switch	③	Red 'Fault' light Unlit: charger stopped or battery not charging Flashing: charger fault Permanently lit: 'Charging in progress'
②	Green light : state of charge Unlit: charger stopped or battery not available Flashing: thermal fault Permanently lit: battery available	④	LCD display
		⑤	Button for exiting the menu, initiating equalisation and initiating desulphation charging

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