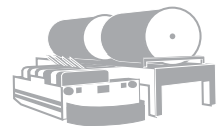
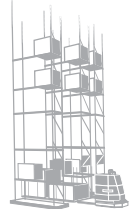
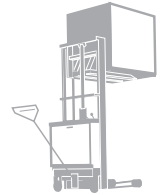

**Cost-effective HF
Charging Solution
Hawker Lifetech**



EnerSys

Power/Full Solutions



The new Lifetech 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 Hawker perfect plus and Hawker evolution. 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 the electrolyte. 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 circulation (from 24 V 50 A) to further reduce charging time and to support opportunity charge. As an additional option a control to steer 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.

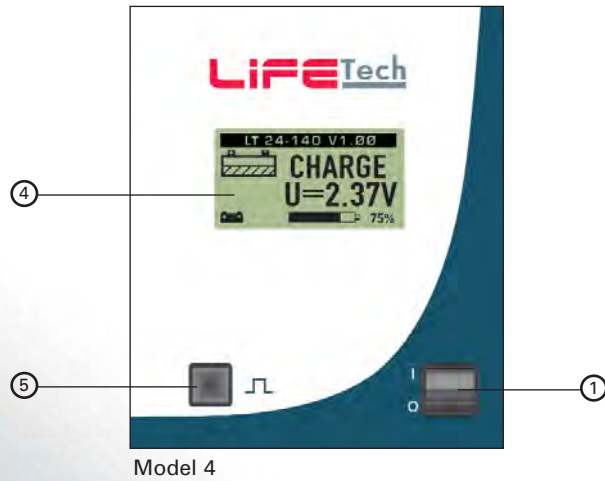
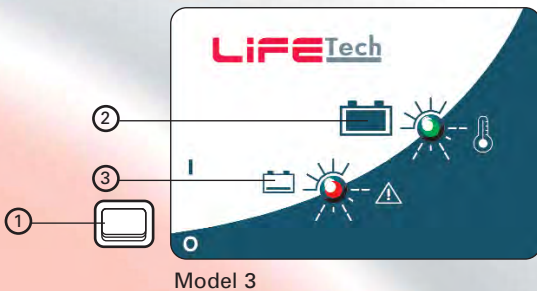
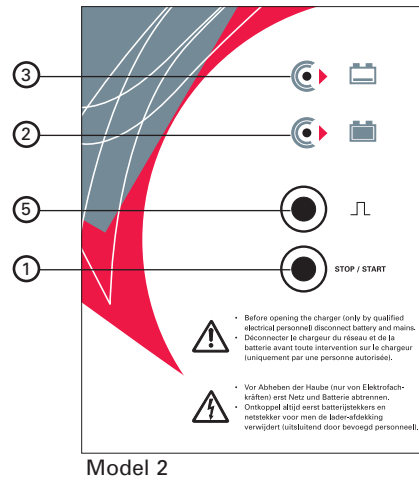
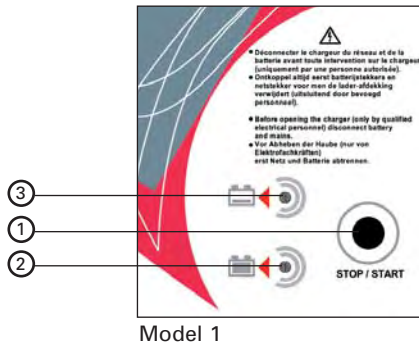
Main technical features

- Precise recharge according to DOD
 - Temperature adjustment by switch (only from 24 V 50 A)
 - Use for flooded lead acid batteries with ionic mixing charging profile (pneumatic electrolyte circulation 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 circulation 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.



Ref.	Function	Ref.	Function
①	Start-Stop or Stop/Start switch.	③	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.
③	Red 'Fault' light.	⑤	Button for exiting the menu, initiating equalisation and initiating desulphation charging.

Definition of application fields

1. Low Duty

- Single shift with light operation and discharge lower than 60% C₅
- Electrolyte T°C about 30°C


2. Normal Duty

- Single shift with discharge up to 80% C₅
- Electrolyte T°C about 30°C

3. Heavy Duty

- Single shift with discharges of 80% C₅ and high discharging currents
- Opportunity charging to augment the usable capacity
- Multi-shift operation with or without battery changes
- High ambient temperature

1. Low duty	2. Normal duty	3. Heavy duty
Hawker perfect plus		
Hawker perfect plus with electrolyte circulation		
Hawker Water Less®		
Hawker Water Less® with electrolyte circulation		
Hawker wf200 plus		
Hawker evolution		



Wherever you do business, EnerSys can support you with motive power energy. The Hawker branded battery range, matched chargers and systems provide trouble free performance under the most demanding service conditions. Our strategically located manufacturing plants are efficient and responsive with a culture of continuous improvement and added value for our business partners.

EnerSys has an enviable position in technology leadership and with significant investment in research and development we intend to stay at the leading edge in product innovation. The recently developed energy solutions: Water Less® and XFC FLEX batteries, Lifetech and Lifespeed HF chargers, have defined new benefits for our customers: faster recharge, more machine availability, lower operating and investment costs, reduced carbon footprint. Our team of development engineers is driven by the desire to build the best energy solutions and works closely with our customers and suppliers to identify development opportunities. Our bias for rapid innovation means we get new products to market fast.

EnerSys's integrated sales and service network is dedicated to providing our customers with the best solutions and after-sales support for their business. Whether you require 1 battery or a complete fleet of batteries, chargers, a battery handling system and a state of the art fleet management system, you can count on us. EnerSys is the world's largest industrial battery manufacturer and we are dedicated to being the best.



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