



# HFE



## Single Phase Energy Optimizing Soft Starter

The HFE is the ideal 'retrofit' energy optimizing solution for Soft Starting single phase compressors and motors such as those used in Supermarket refrigerators and chillers etc., and can yield between 10 - 32% energy savings.



The HFE has a rugged tin lid construction and can be mounted easily next to the machine or control panel. Installation of the unit is quick and simple due to the 'two wires in, two wires out' design. The unit is 'fit and forget' and there is no maintenance for the user.

## Main Features

**Retrofit, quick fit, simple wiring**  
 Quick and simple two wire in/out implementation means low cost install in existing equipment and rapid return on investment through energy and maintenance cost reduction.

### LED Indication

Two LED's showing power and energy saving.

### Energy Optimizing

Reduces required energy consumption when the motor is not under load -10 - 32% saving

in energy and related cost and carbon emissions.

### Torque Reduction

Mechanical and electrical stress reduction or elimination means

compressors and motors last longer and require less maintenance.

### 'Fit and Forget'

No maintenance time or associated cost.

Model	Current (I)	Motor kW (230V)	Motor HP (230V)
HFE 1	10A	1.1kW	1.5HP
HFE 2	30A	4kW	5.5HP
		Motor kW (110V)	Motor HP (110V)
HFE 1	10A	0.56kW	0.75HP
HFE 2	30A	1.5kW	2HP

## Technical Data

**Operational Voltage (Ue)** 110 – 230 VAC or (-15% to +10%)  
 Single Phase

**Frequency** 50/60 Hz +/- 2Hz

**Operational Current (Ie)** HFE 1 – 10A  
 HFE 2 – 30A

**Start Duty** Please refer to Basic Guides –  
 FD1945 and FD2025

**Ingress Protection** IP30 with standard cover

**Start Time** Approx 0.5 to 5 Seconds  
 continuously variable

**Pedestal Voltage** Fixed at approx 15%

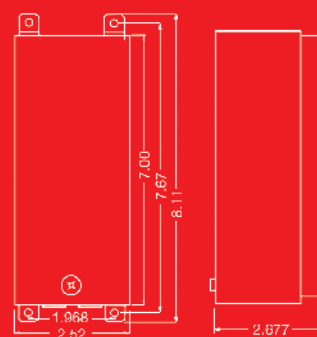
**Ambient Temperature** 0°C to 40°C without de rating

**Design Standards** IEC 60947-4-2, EN 60947 –  
 4- 2 "AC Semiconductor Motor  
 Controllers and Starters"

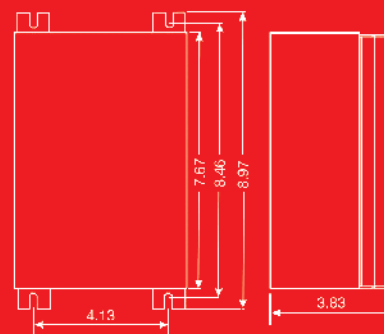
**Ideal Applications**

- Refrigeration Systems
- Conveyors
- Oven Fans
- Chillers
- Coolers
- Air Conditioners

## HFE 1



## HFE 2



Please note: All  
 dimensions in inches

For more information on how the HFE from Fairford Electronics can reduce your running costs and lower maintenance bills contact your local distributor.

tel: +44 (0) 1752 894554 or visit our website  
[www.fairford.com](http://www.fairford.com)