Transmisiones Ltda.
Un Mundo de Automatización y Servicio

fairford
Soft Start Technology

PFE

The cost effective starter for small AC induction motors

The choice for small to medium industrial applications

PFE

The PFE is an innovative development from Fairford, who have 30 years of experience producing innovative designs in the soft start market.

With ratings from 1.1kW to 15kW, the PFE is ideally placed to support any AC induction motors in use today. This makes the PFE the natural choice for distributors and customers alike.

Benefiting from Fairford's excellence in engineering, the PFE combines the quality and reliability you have come to expect. This is one product that ticks all the boxes.

Features and Benefits

Internally Bypassed
Reduces cost because the Soft Starter is out of circuit once it has done its job. This reduces cabinet size and the heat produced which again reduces cost.

Over Current Protected
Protects the Soft Starter against use above its duty rating.

45mm Wide (Size 1)
Same width as typical existing control gear for easy connectability and enables a more compact cabinet to be used.

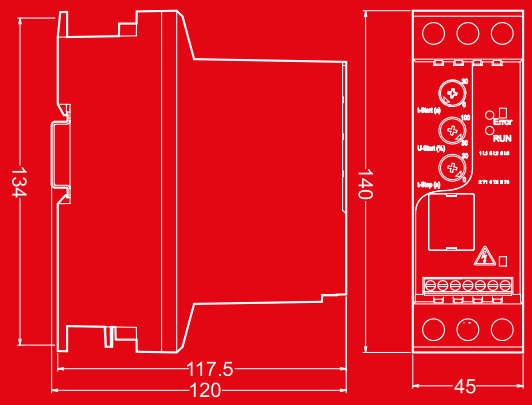
DIN Rail Mounted
For easy installation – it just clips on.

PFE – Technical data

For application specific sizing go to **www.fairford.com** and click product selector

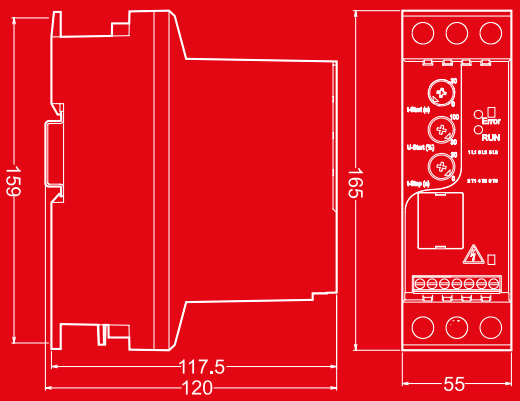
Operational Voltage (Ue)	230-460 VAC rms 3-Phase (-15% +10%)
Rated Frequency	50 - 60Hz +/- 2Hz
Index Rating	Class 10 AC53b: 3-23: 697
Control Supply	24V DC approx 4VA supplied externally to terminals 0 - 24.
Enable and Start/ Soft Stop	24V DC galvanically isolated terminals -A2, EN, +A1.
Indication	Multi function LEDs on front panel.
Start Time	1 to 30 seconds.
Stop Time	0 to 30 seconds.
Start Duty	3 x FLC for 23 seconds at Trip Class 10 rating.
Starts / Hour	Up to total of 5 starts / stops per hour.
Optimum Starts / Hour	Up to 30 Starts/Hr with Optional Fan.
Internally bypassed	
Power Terminals	Input 1/L1, 3/L2 & 5/L3 output 2/T1, 4/T2 6/T3. IP20 Rated wire clamping terminals (unit is IP20)
Ambient Temperature	0°C to 40°C. Above 40°C de-rate linearly by 2% of unit FLC per °C to a derate of 40% at 60°C
Transport and Storage	-25°C to +60°C
Altitude	1000m. Above 1000m de-rate linearly by 1% of unit FLC per 100m to a max altitude of 2000m.
Humidity	Max. 85% non-condensing, not exceeding 50% at 40°C
Protection/IP Rating	IP20, NEMA 1
Design Standards	IEC 60947-4-2; EN60947-4-2 “AC Semiconductor Motor Controllers and Starters”, UL, C-Tick & CE

Size 1 PFE-02 to PFE-10



Please note: All dimensions in mm

Size 2 PFE-12 to PFE-18



Please note: All dimensions in mm

Model	400V		460V	
	Current Ie (A)	Motor kW	Current Ie (A)	Motor HP
PFE-02	2.7	1.1	3	1.5
PFE-04	3.6	1.5	3.4	2
PFE-06	4.9	2.2	4.8	3
PFE-08	6.5	3	4.8	3
PFE-10	8.5	4	7.6	5
PFE-12	11.5	5.5	11	7.5
PFE-14	15.5	7.5	14	10
PFE-16	15.5	7.5	14	10
PFE-18	22	11	21	15
PFE-18 + FAN	29	15	27	20

Please Note: Based on Trip Class 10 Duty. 3-23: 697
Other trip classes are available

PFE – Case Study

The PFE range has been successfully used in many applications. A good example of its versatility is in the following case study of an unloading winch and davit in a large commercial port.

The winch is used for unloading 500Kg fish/scallop boxes from vessel to shore and a smoother start/stop was required to alleviate 'jarring' which was becoming a problem. A PFE-08 3kW soft start with fan was chosen to increase the number of start/stops per hour as the trawler can be 5/8 meters below dock level and jogging is used to position the lifting gear under the skippers instructions. Due to the success of the installation another four systems have been installed.

Dockside Davit designed and built by Spencer Carter Ltd, Falmouth, Cornwall. www.spencercarter.com

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

visit our website

www.fairford.com

PFE – Options

Auxiliary Fan

Increases performance to **30** starts per hour

Power supply

Can run up to **3** PFE's

fairford Soft Start Technology

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www.fairford.com

RoHS 2002/95/EC

BRO-PFE-001-V01