

240v  
CLASS

400v  
CLASS

690v  
CLASS

## Low Voltage Products

Advanced Motor Control, Protection and Monitoring

# MOTORTRONICS™

# *VMX/VMX-SGY*

# *VMX-AGY/VMX-PFE/VMX-HFE*

## LOW VOLTAGE SOLID STATE SOFT STARTER



**MOTORTRONICS™**  
Solid State AC Motor Control

# VMX-PFE Series

The VMX-PFE is an innovative development from Motortronics, who have 30 years of experience producing innovative designs in the soft starter market.

With ratings from 1.1kW to 15kW, the VMX-PFE is ideally placed to support any AC induction motors in use today. This makes the VMX-PFE the natural choice for distributors and customers alike. Benefiting from Motortronics's excellence in engineering, the VMX-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 connectivity and enables a more compact cabinet to be used.

### DIN Rail Mounted

For easy installation, it just clips on.





# Ratings & Specification

## 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 (BOLD)  
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

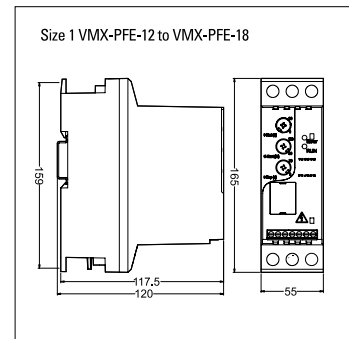
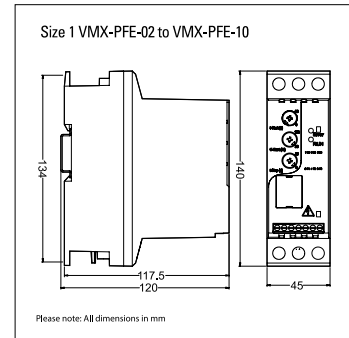
Max. 85% non-condensing, not exceeding 50% at 40°C

## 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



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