

Technical Data Sheet

MFS-iE Advanced Voltage Stabilizer 75V-140V

The MFS is an advanced voltage stabilizer system designed for OEM installation.

It has been designed for applications such as

- Glass Door Coolers
- Subzero Beer coolers
- Freezers
- Double Door Coolers
- Cake Coolers
- Vending Machines
- Post Mix Applications
- HVAC Applications

Its advanced design and control features are managed by the advanced microcontroller technology and patented algorithms



Features

- MFS is a Voltage and Frequency Supervisor
- MFS boosts the low voltage of the mains supply to maintain equipment operative
- MFS reduces the high voltage of the mains supply
- If voltage goes out of range the MFS will automatically disconnect the device
- Soft start to reduce electrical and mechanical strain
- Smart 3 Minute - When voltage is within range the MFS will wait for prior to reconnecting device to protect the asset
- Zero crossing to reduce current on switching
- Zero Current Changeover
- Monitoring of Condenser area temperature for thermal even

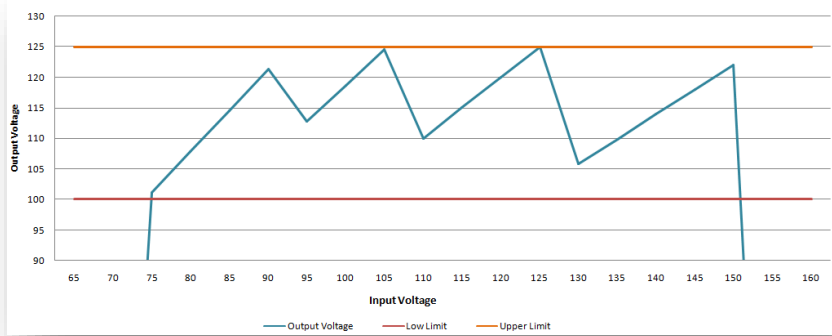
Approvals

Approvals				
CE	LVD European Directive 2014/35/EU		EMC European Directive 2014/30/EU	
		<ul style="list-style-type: none"> • EN 61558-1 • EN 61558-2-13 	<ul style="list-style-type: none"> • EN 61000-6-1 • EN 61000-6-2 	<ul style="list-style-type: none"> • EN 61000-6-3 • EN 61000-6-4

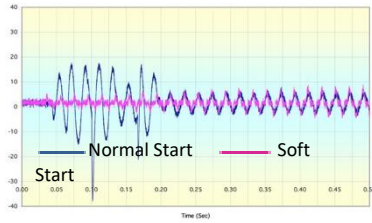
Technical Data

Product		MFS-050iE	MFS-070iE	MFS-100iE
Power Supply	Nominal Voltage	110 – 125VAC 60Hz		
	Operational Bandwidth	55 - 160VAC		
Input	Low Voltage	75 VAC± 3% with hysteresis		
	High Voltage	140 VAC± 2%		
Output	Voltage Range	100 - 125 VAC±2%		
Output Current	Maximum (Amp)	4	6	8
	Continuous Operation Current (Amp) @ Low limit	3	4,5	6.5
Frequency Supervisor	Lower Limit (50/60 Hz)	57 Hz (±0.2Hz)		
	Upper Limit (50/60 Hz)	63 Hz (±0.2Hz)		
Thermal protection	DT increase cutout	15°C per 15 minutes		
Environment	Ambient Temperature	-40 to 85°C		
	Humidity	85 %RH		
Lifetime	Relay lifetime Cycles	350,000		
Connections		6.3mm x 0.8mm flat, terminal		
Cable Harness	Lengths	Available at 300,600,1000,1250 mm versions		
IP Class		IP44		
Plastic Housing		UL94 V-0 Flame Retardant		
Insulation class	Transformer Windings	F (155°C)		
Start Up Time	Time Delay	3 minutes (2'30" +0 to 30" random) zero on Production Line		

Input/vs Output Graph 75V-140V

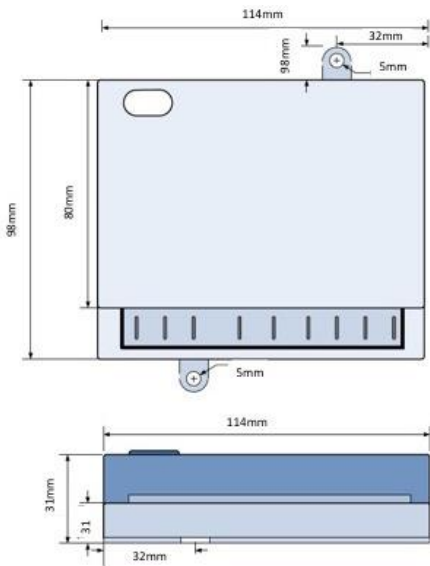


Soft Start



Reduces the load and Torque and electric current surge during startup. This reduces the mechanical stress on the motors and their components as well as electrical stresses on winding and cables, thus extending the lifespan of the system.

Dimensions and Weights



Transformer Dimensions (mm)			
	MFS-iE 50	MFS-iE 70	MFS-iE 100
A	112	112	131
B	75	75	85
C	84	84	96
D	66	66	80
E	75	75	87
Kg	2.38	2.38	3.67

