

Technical Data Sheet

PPS_MFS-Lw v1.6 Advanced Voltage Stabilizer 110-285V 50-60Hz

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

It has been designed for applications such as

- Glass Door Coolers
- Freezers
- Double Door Coolers
- Vaccine/Medicine Coolers
- Vaccine/Medicine freezers
- Vending Machines
- HVAC Applications



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

Features

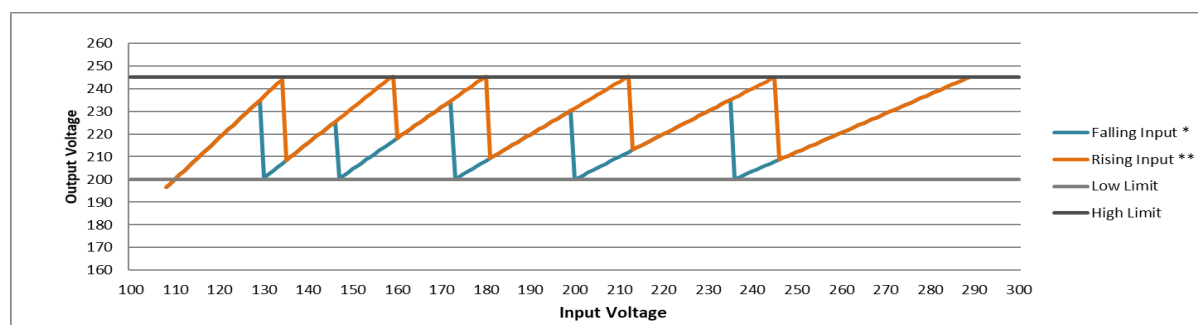
- Voltage stabilizer
- Voltage, Frequency, and Current supervisor
- Intelligent ambient temperature protection
- Intelligent Time delay 4'30" + 0"to30" random
- Surge protection
- Reconnecting Voltage Hysteresis
- Zero crossing
- Zero Current Changeover

Approvals

Approvals				
CE	LVD European Directive 2014/35/EU		EMC European Directive 2014/30/EU	
	• EN 61558-1 • EN 61558-2-13		• EN 61000-6-1 • EN 61000-6-2	• EN 61000-6-3 • EN 61000-6-4 • EN 62041
WHO*	• WHO/PQS/E007/VS01-VP.6			

*World Health Organization

Input/vs Output Graph 110V-285V

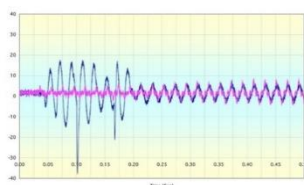


*Falling input: Output Voltage graph, when the input voltage goes down

**Rising input: Output Voltage graph, when the input voltage goes up

Specifications

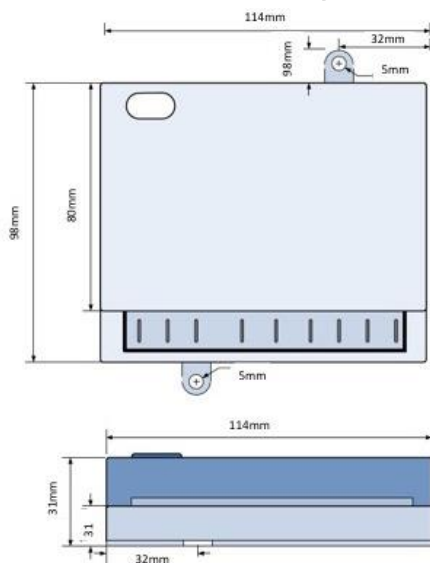
PPS_MFS-Lw Series[v1.6]:			PPS_MFS-1Lw[v1.6]			PPS_MFS-2Lw [v1.6]		
PPS MFS-xxxLwSeries(XXX: 070, 085, 100, 150, 200)			070	085	100	150	200	
Input	Continuous Voltage withstand range(@ 25°C)		60 - 500 VAC					
	Nominal Input Voltage		230VAC					
	Voltage regulation range	Low / High	110 / 285 VAC					
	Nominal Frequency / Frequency limits		50 or 60 Hz / 47 - 63Hz					
Output	Nominal Output Voltage		230VAC					
	Voltage range	Low / High	200VAC±1%(195.5 VAC @ Lowest Input Voltage)/ 245VAC ±1%					
	Nominal Frequency / Frequency limits		50 - 60 Hz / 47 - 63Hz					
	Current Capacity I _{rated} (A) (Continuous Operation (43°C) @ Low Voltage)			3.2				
	Overcurrent Protection		1.5 x I _{rated} < 120 Sec / 7.2 x I _{rated} < 10 Sec / 10 x I _{rated} <100 mSec					
	Automatically Reconnection Time Delay / Start-Up Time		4'30'' + 0'' to 30'' random / Zero Time on Production Line for first 30 minutes continuous operation of life cycle					
	IP Class		IP4X					
Insulation Class (transformer windings)			Class H (180°C)					
Ambient Temperature range(use/transport, storage)			t _{amin} -5 to t _a +43°C during use/-30°C to +70°C when the device is inactive					
Ambient Humidity range(transport, storage, use)			5 - 95% RH, non-condensin					
Overvoltage Category and Pollution Degree			OVG: III, P3					
Plastic Housing			UL94 V-0 Flame Retardant, GWT 850°C					
Relays			Relay lifetime cycles 350,000, Explosive Atmospheres Certified (IEC 60079-15 type of protection "n")					
Connections			Fully Insulated Fast On 6.3mm x 0.8mm					
Cable Harness - Lengths			250 mm/550mm/1000mm					
Overall Dimension / Total weight	ECU		114 x 121 x 32.5±1.0mm /0.267 ±0,1kg					
	Trafo	- Standard installation - Vertical installation			108.5x94.5 x131±1.0mm 4.02±0.1kg			



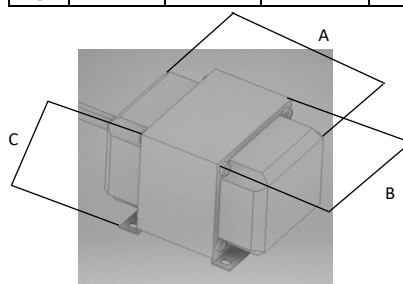
— Normal Start
— Soft Start

Soft start reduces the mechanical stress on the motors and their components and electrical stresses on winding and cables, thus extending the system's lifespan.

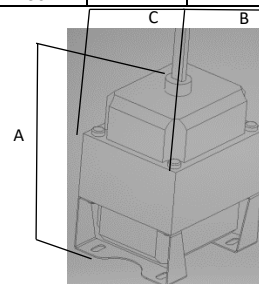
Dimensions and Weights



Transformer Dimensions (mm)							
Standard Installation							
	MFSLw 40	MFSLw 60	MFSLw 70	MFSLw 85	MFSLw 100	MFSLw 150	MFSLw 200
A					130		
B					110		
C					95		
Vertical Installation							
A					140		
B					110		
C					90		



Standard Installation



Vertical Installation