

Technical Data Sheet

Wave-c

Advanced Voltage Stabilizer 110-285V with integrated temperature control

The Wave-c is an advanced voltage stabilizer system designed for OEM installation. It has been designed for applications such as:

- Chest Freezers
- Chest Coolers
- Small display coolers

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

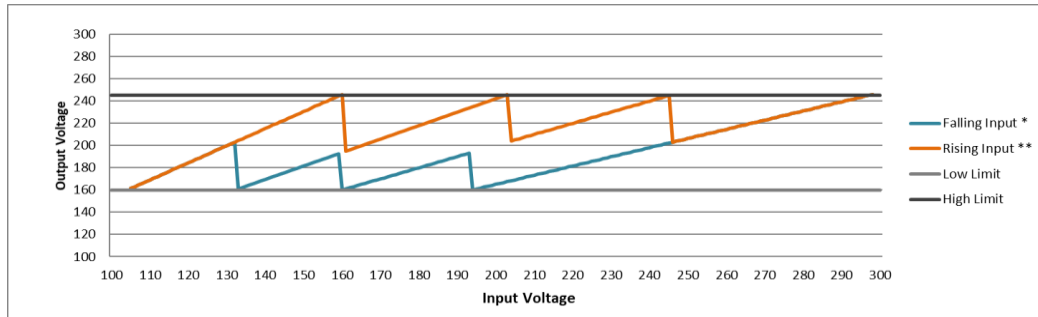
Features

- Wave-i is a Voltage and Frequency Supervisor
- Wave-i boosts the low voltage of the mains supply to maintain equipment operative
- Wave-i reduces the high voltage of the mains supply
- If voltage goes out of range the Wave-i will automatically disconnect the device
- Smart 3 Minute - When voltage is within range the Wave-i will wait for prior to reconnecting device to protect the asset
- Zero crossing (Zero voltage change over)
- Monitoring of Condenser area temperature for thermal events
- Electronic Thermostat

Technical Data

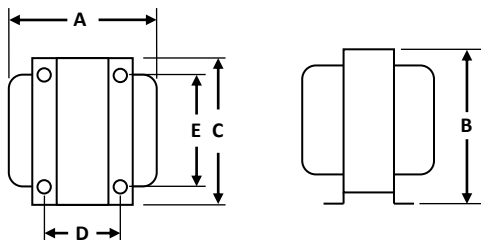
Model of Series PPS WAVE-xxx: <small>[xxx: 045, 070, 090]</small>		045	070	090
Operating conditions	Nominal Voltage	220 - 240 VAC		
	Operation Voltage Bandwidth	90 - 310 VAC		
	Ambient Temperature	$T_{min} -40^{\circ}C$ $T_{max} +65^{\circ}C$		
	Humidity	0 - 85 %RH		
Input <small>(Control for a.c. only)</small>	Low Voltage	110VAC $\pm 3\%$ with hysteresis		
	High Voltage	295 VAC $\pm 3\%$ with hysteresis		
	Lower Freq. Limit (50/60 Hz)	47 Hz / 57 Hz $\pm 0.2Hz$		
	Upper Freq. Limit (50/60 Hz)	53 Hz / 63 Hz $\pm 0.2Hz$		
Output	Voltage range	160 - 245 VAC $\pm 3\%$ (Low Voltage Reconnect 187 VAC)		
	Max. Current (A)	2.0	3.0	4.0
	Continuous Operation($45^{\circ}C$) Current (A) @ Low Voltage	1.5	2.2	3.0
Start Up Time, Time Delay		<ul style="list-style-type: none"> - 3 minutes (2'30" +0"to30"random) - Zero on Production Line for first 30 minutes continuous operation of life cycle 		
Thermal protection		<ul style="list-style-type: none"> - Temperature limits $+80^{\circ}C$ - Temperature differential $15^{\circ}C$ / 15 minutes 		
Plastic Housing		UL94 V-0 Flame Retardant		
Connections		6.3mm x 0.8mm flat, terminal		
Cable Harness - Lengths		Available at 250, 550, 1000 versions		
Insulation Class, Transformer Windings		F ($155^{\circ}C$)		
Total weight (Kg) (ECU, Trafo with cable 250mm)		2.1	2.5	3.3
Electronic thermostat	Accuracy	NTC Sensor	$\pm 0.5^{\circ}C$ (Operating Temp. Range: $-30^{\circ}C$ to $+80^{\circ}C$)	
		PPS WAVE-c	$\pm 0.5^{\circ}C$	
	Target Temperature		-28 to $+50^{\circ}C$	
	Thermal adjustable differential		$+1$ to $+10^{\circ}C$	
	Type of	automatic action	type 2.B	
		disconnection	micro-disconnection on operation	
	Maximum intended click rate		10 per 60 min	
	Pollution degree		3	
Overvoltage category		III (4000 V)		

Input vs Output Graph 110V-285V

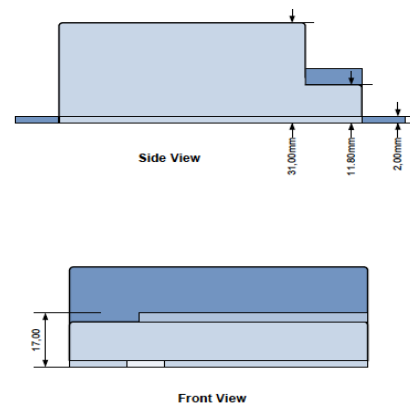
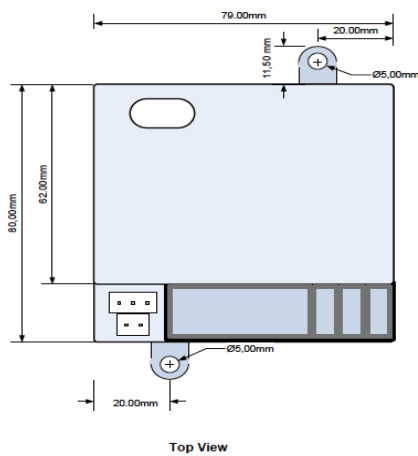


*Falling input: Output voltage graph, when input voltage goes down
 **Rising input: Output voltage graph when input voltage goes up

Dimensions drawings and Weights



Wave-c	45	70	90
A (mm)	105	110	120
B (mm)	75	75	86
C (mm)	84	84	96
D (mm)	56	65	65
E (mm)	73	73	88
Weight (Kg)	2.0	2.4	3.2



Approvals		
CE	LVD European Directive 2014/35/EU <ul style="list-style-type: none"> EN 61558-1:2005 +A1:2009 EN 61558-2-13:2009 EN 60730-1:2016 EN 60730-2-9:2010 <i>Type of automatic action of Control: type 2 action</i>	EMC European Directive 2014/30/EU <ul style="list-style-type: none"> EN 61000-6-1:2007 EN 61000-6-3:2007+A1:2011 EN 60730-1:2016 EN 60730-2-9:2010 EN 62041:2010 <i>EMC testing under nominal values of current and voltage</i>
	RoHS III (EU Directive 2015/863)	