

Technical Data Sheet

Wave-i



Advanced Voltage Stabilizer 145-285V

The Wave-i 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

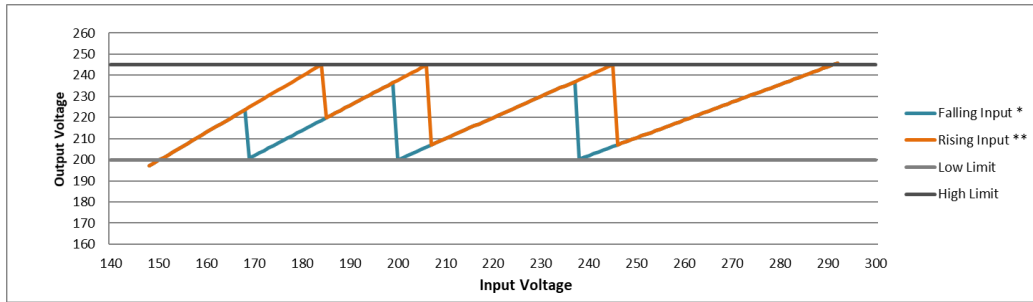
Features

- 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

Technical Data

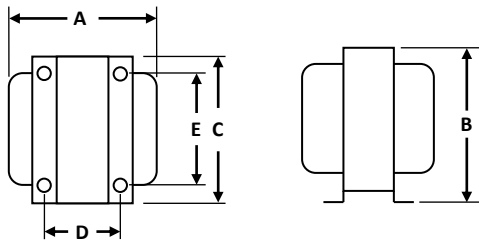
| Model of Series PPS WAVE- xxx i: [xxx: 045, 070, 090,120] | | 045 | 070 | 090 | 120 |
|---|--|---|-----|-----|-----|
| Operating conditions | Nominal Voltage | 220 - 240 VAC | | | |
| | Operation Voltage Bandwidth | 90 - 310 VAC | | | |
| | Ambient Temperature | T _{min} -40°C T _{max} +65°C | | | |
| | Humidity | 0 - 85 %RH | | | |
| Input <small>(Control for a.c. only)</small> | Low Voltage | 145VAC ±3% with hysteresis | | | |
| | High Voltage | 285 VAC ±3% with hysteresis | | | |
| | Lower Freq. Limit (50/60 Hz) | 47 Hz / 57 Hz ±0.2Hz | | | |
| | Upper Freq. Limit (50/60 Hz) | 53 Hz / 63 Hz ±0.2Hz | | | |
| Output | Voltage range | 200 - 245 VAC ±3% | | | |
| | Max. Current (A) | 2.0 | 3.0 | 4.0 | 5 |
| | Continuous Operation (45°C) Current (A) @ Low Voltage | 1.5 | 2.2 | 3.0 | 4.5 |
| Start Up Time, Time Delay | | - 3 minutes (2'30" +0"to30" random) - Zero on Production Line for first 30 minutes continuous operation of life cycle | | | |
| Thermal protection | | - Temperature limits +80 °C - Temperature differential 15 °C / 15 minutes | | | |
| Plastic Housing | | UL94 V-0 Flame Retardant | | | |
| Life time | | Relay lifetime cycles 100.000 | | | |
| Connections | | 6.3mm x 0.8mm flat, terminal | | | |
| Cable Harness - Lengths | | Available at 250, 550, 1000 versions | | | |
| Insulation Class, Transformer Windings | | F (155 °C) | | | |
| Total weight (Kg) (ECU, Trafo with cable 250mm) | | 1.9 | 2.0 | 2.5 | 3.2 |

Input vs Output Graph 145V-285V

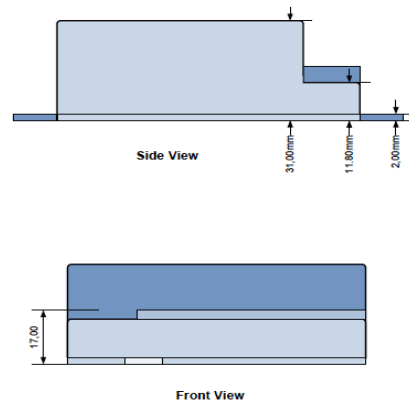
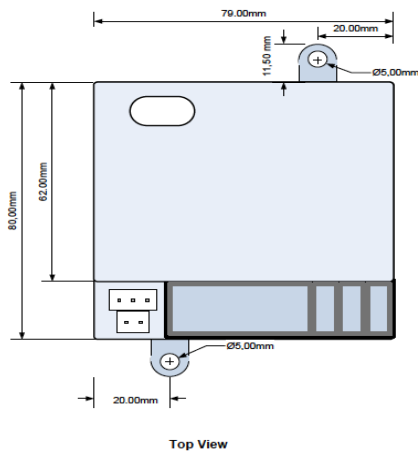


*Falling input: Output Voltage graph when the input voltage goes down
 **Rising input: Output Voltage graph when the input voltage goes up

Dimensions drawings and Weights



| Wave-i | 45 | 70 | 90 | 120 |
|-------------|-----|-----|-----|-----|
| A (mm) | 105 | 110 | 110 | 120 |
| B (mm) | 75 | 75 | 86 | 86 |
| C (mm) | 84 | 84 | 96 | 96 |
| D (mm) | 50 | 55 | 55 | 65 |
| E (mm) | 73 | 73 | 82 | 82 |
| Weight (Kg) | 1.8 | 1.9 | 2.4 | 3.1 |



| 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 Type of automatic action of Control: type 2 action |
| | 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 EMC testing under nominal values of current and voltage |
| RoHS III (EU Directive 2015/863) | |