

HELLER INDUSTRIES, INC.

| Heller Reflow Oven Specifications | | |
|---|-----------------------------|-----------------------------|
| Model | 1707 MARKIII (Air) | 1707 MARKIII (Nitrogen) |
| Electric Supply | | |
| Power Input (3 Phase) Standard | 480 volts | 480 volts |
| Breaker Size | 100 amps @ 480v | 100 amps @ 480v |
| kW | 7.5 - 9.5 Continuous* | 7.5 - 9.5 Continuous* |
| Typical Run Current | 15 - 20 amps @ 480v | 15 - 20 amps @ 480v |
| Optional Power Inputs Available | 208/240/380/400/440/415 VAC | 208/240/380/400/440/415 VAC |
| Frequency | 50/60 Hz | 50/60 Hz |
| Sequential Zone Turn On | S | S |
| Single Phase Operation | Not Available | Not Available |
| Dimensions | | |
| Overall Length | 134" (340 cm) | 134" (340 cm) |
| Overall Width | 54" (137 cm) | 54" (137 cm) |
| Overall Height | 63" (160 cm) | 63" (160 cm) |
| Typical Net Weight | 3000 lbs. (1360 kg) | 3000 lbs. (1360 kg) |
| Typical Shipping Weight (Domestic) | 3500 lbs. (1587 kg) | 3500 lbs. (1587 kg) |
| Typical Shipping Weight (Export) | 4000 lbs. (1814 kg) | 4000 lbs. (1814 kg) |
| Computer Control | | |
| AMD or Intel Based Computer | S | S |
| Recipe Storage | > 500 | > 500 |
| Flat Screen Monitor | S | S |
| Windows Operating System | Windows 7 | Windows 7 |
| Monitor mount | S | S |
| Auto Start Software | S | S |
| Data Logging | S | S |
| Password Protection | S | S |
| LAN Networking | O | O |
| Inert Atmosphere | | |
| Minimum PPM Oxygen | - | 10-25 PPM |
| Nitrogen Cooling | - | S |
| Waterless Cooling w/ Flux Separation System | - | O |
| Nitrogen On/Off Valve | - | O |
| Oxygen Monitoring System | - | O |
| Nitrogen Standby System | - | O |
| Sample Port in Reflow | - | S |
| Typical Nitrogen Consumption | - | 500 – 700 SCFH ** |
| Additional Features | | |
| KIC / ECD Profiling Software | S | S |
| Signal Light Tower | S | S |
| Powered Hood Lift | S | S |
| Five (5) Thermocouple Profiling | S | S |
| 30" Heater Modules | O | O |
| Redundant Alarm Sensors | O | O |
| Independent Alarm Scanner | O | O |
| KIC Profiler / ECD Profiler | O | O |
| Center Board Support | O | O |
| Board Drop Sensor | O | O |
| Board Counter | O | O |
| Bar Code Reader | O | O |
| Custom Paint & Decal | O | O |
| Battery Backup for Conveyor and PC | O | O |
| GEM/SECS Interfacing | O | O |
| Custom Engineering and Software | Available | Available |

* Varies depending on Options included with the oven

** Tested at 500 PPM. Varies with PCB size and oven configuration

Specifications Continue on page 2

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Heller Reflow Oven Specifications (Continued)

| Model | 1707 MARKIII (Air) | 1707 MARKIII (Nitrogen) |
|---|---|---|
| Mesh Belt Conveyor | | |
| Height From Floor | 35.5" + 2.0" (90 cm + 5 cm) | 35.5" + 2.0" (90 cm + 5 cm) |
| Maximum PCB Width | 20" (50.8 cm) | 10" (25 cm) 15" (38 cm) 18" (46 cm) |
| ** Requires 30" Heater Modules | 24" (61 cm)** | 20" (50.8 cm) 24" (61 cm)** |
| Space Required Between PCB's | 0.0" (0.0 cm) | 0.0" (0.0 cm) |
| Conveyor Length On-Load | 18" (46 cm) * | 6" (15 cm) * |
| Conveyor Length Off-Load | 18" (46 cm) * | 6" (15 cm) * |
| Heated Tunnel Length | 72" (183 cm) | 72" (183 cm) |
| Process Clearance Above Mesh Belt | 2.3" (5.8 cm) | 2.3" (5.8 cm) |
| Mesh Belt Pitch | 0.5" (1.27 cm) | 0.5" (1.27 cm) |
| Maximum Conveyor Speed | 74"/Min (188 cm/min.) | 74"/Min (188 cm/min.) |
| Conveyor Direction Left to Right | S | S |
| Conveyor Direction Right to Left | O | O |
| Conveyor Speed Control Type | Closed Loop | Closed Loop |
| Edge Hold Conveyor System Option | | |
| Height from Floor – Standard | 37.0" + 2.0" (94 cm + 5 cm) | 37.0" + 2.0" (94 cm + 5 cm) |
| Height from Floor – Optional | 32.6" + 3.9" / - .4" (83 cm + 10 cm / -1 cm) | 32.6" + 3.9" / - .4" (83 cm + 10 cm / -1 cm) |
| Clearance Above Conveyor Pins | 1.15" (2.9 cm) | 1.15" (2.9 cm) |
| Clearance Below Conveyor Pins | 1.15" (2.9 cm) | 1.15" (2.9 cm) |
| Length of PCB Support Pins | .187" (4.75 mm) | .187" (4.75 mm) |
| 3 mm long support pins | O | O |
| Minimum/Maximum Board Width | 2.0" – 18" (5 – 45.7 cm) | 2.0" - 18" (5 – 45.7 cm) |
| ** Requires 30" Heater Modules | 22" (55.8 cm)** | 22" (55.8 cm)** |
| Edge Hold Rail Heaters | Not Required | Not Required |
| Power Width Adjustment | S | S |
| Computer Controlled Width Adjust | O | O |
| Auto Lubrication System | S | S |
| Forced Convection Zones | | |
| Top | 7 | 7 |
| Bottom | 7 | 7 |
| Heater Type | Instant response open coil | Instant response open coil |
| Heater Material | Nichrome | Nichrome |
| Profile Change Time | 5 – 15 minutes | 5 - 15 minutes |
| Temperature Control | | |
| Accuracy of Temperature Controller | + .1°C | + .1°C |
| Cross-Belt Temperature Tolerance | + 3.0°C | + 3.0°C |
| Heater Wattage Per Zone | 6000 w | 6000 w |
| Temperature Range Standard | 25-350°C | 25-350°C |
| High Temperature Up to 400°C | O | O |
| High Temperature Up to 450°C | O | O |
| Insulation Type | Calcium Silicate | Calcium Silicate |
| UV Cure | O | O |
| Cooling Systems | | |
| Number of Cooling Zones Standard | 1 | 1 |
| Additional Cooling Zones(External) | O | O |
| Water Cooling | - | O |
| Waterless Cooling | - | O |

Notes: S = Standard, O = Optional. * A 12" (30 cm) Conveyor extension is an available option
 A continuous program of product improvement may result in changes to specification and performance.
 The right is reserved to institute these improvements without notice or liability.

Specifications continue on reverse.

HELLER

INDUSTRIES, Inc.

At the leading edge of electronic assembly