

HELLER INDUSTRIES, INC.

Heller Reflow Oven Specifications

| | | |
|-------|--------------|--------------------|
| Model | 1707EXL(Air) | 1707EXL (Nitrogen) |
|-------|--------------|--------------------|

Electric Supply

| | | |
|---------------------------------|-------------------------|-------------------------|
| Power Input (3 Phase) Standard | 208/240 volts | 208/240 volts |
| Breaker Size | 100 amps @ 480v | 100 amps @ 480v |
| kW | 10-12 Continuous* | 10-12 Continuous* |
| Typical Run Current | 20 - 25 amps @ 480v | 20 - 25 amps @ 480v |
| Optional Power Inputs Available | 380/400/440/415/480 VAC | 380/400/440/415/480 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 XP® | Windows XP® |
| 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* | - | 700 - 900 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 Reverse

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Heller Reflow Oven Specifications (Continued)

| Model | 1707EXL (Air) | 1707EXL (Nitrogen) |
|---|--|--|
| Mesh Belt Conveyor | | |
| Height From Floor | 35.5" \pm 2.0" (90 cm \pm 5 cm) | 35.5" \pm 2.0" (90 cm \pm 5 cm) |
| Maximum PCB Width | 22" (55.8 cm) | 10" (25 cm) 15" (38 cm) 18" (46 cm) |
| ** Requires 30" Heater Modules | 26" (66 cm)** | 22" (55.8 cm) 26" (66 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" \pm 2.0" (94 cm \pm 5 cm) | 37.0" \pm 2.0" (94 cm \pm 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" – 20" (5 – 50.8 cm) | 2.0" - 20" (5 –50.8 cm) |
| ** Requires 30" Heater Modules | 24" (61 cm)** | 24" (61 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 | \pm .1°C | \pm .1°C |
| Cross-Belt Temperature Tolerance | \pm 3.0°C | \pm 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

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At the leading edge of electronic assembly

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