



## Electric boosters are designed to fit under counters and deliver sanitizing rinse water for all stationary rack and conveyor type commercial dishwashers

### Features & Benefits

Our 10 gallon electric booster will raise preheated or cold water to 180° F rinse temperature for compliance with UL sanitation (NSF5) and all federal, state, county and local health department sanitation codes. In addition, these models can be used as circulating tank commercial electric water heaters for gravity or pump circulation to an auxiliary storage tank. They are available in 6 kW through 54 kW and in 208, 240, 277 and 480 voltages.

### System Sentinel

All electric booster models employ an element diagnostic panel, utilizing light emitting diodes (L.E.D.), corresponding to the number and location of each heating element. L.E.D.'s are energized when the electric elements are operating. An unlit L.E.D. pinpoints the exact location of a non-functioning element, making element operation diagnosis simple and positive.

### Long Life Tank Design

Proprietary steel formulation with a unique coat of high temperature porcelain enamel maximizes corrosion resistance resulting in a superior tank design.

### Long Life Heating Elements

Separate screw-in type elements feature a Nichrome wire filament, embedded in magnesium oxide sealed in a copper tube to resist water chemical corrosion...for long element life and a long life performance. Elements are directly immersed in the water for maximum recovery efficiency (98%) and are easily changed by simply screwing new ones into the tank.

### Integral Fusing

All models have integral fusing for each element.

### Anode rods

Two (2) magnesium anodes are installed in each tank for maximum corrosion resistance.

### CSA/ASME Rated T&P Valve

Factory installed relief valve

### Electrical Connections

Pre-wired, accessible control box with multiple knock-outs on side in size selections to match the National Electric Code. Sizes range from 1/2" to 2". A grounding screw is provided for attaching an equipment grounding conductor.

### Single Panel Control Box

It comes with hinged stainless steel door that provides immediate access to all electrical components and elements.

### Terminal Block

All models are equipped with UL Listed terminal blocks for simplicity of installation. The terminal block will accept either copper or aluminum field connect wire.

### 120 Volt Control Circuit

All units are furnished with a fused 120 volt control circuit. All controls (thermostats, high temperature limit, etc.) are operated off of this basic 120 volt control circuit. This circuit is created by an internal multi-tap transformer of unique design that has four (4) taps for the primary voltages, 208, 240, 277 and 480.

### Warranty

3-Year limited tank warranty

See Commercial Warranty Certificate for complete information.

**Safety and Construction** | Design certified by Underwriters Laboratories (UL) to meet UL standard 1453 as electric booster and commercial storage tank water heaters. All models are UL Sanitation (NSF5). **Certified for 150 PSI maximum working pressure.**



### Ruud Booster

10-Gallon Capacity

6 kW-54 kW

208, 240, 277 and 480 Voltages



**Complies with Buy American Act (BAA) and Build America Buy America Act (BABA) Requirements**

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Water Connections

Hot outlet and cold inlet are 1-1/4" NPT dielectric nipples which prevent excessive turbulence of heated water and results in optimum tank draw.

Heavy Insulation

an effective blanket of insulation completely surrounds tanks to limit heat loss and assure high operating efficiency.

Stainless steel legs

6" stainless steel legs are provided with each unit.

Factory Accessories from Ruud

Solid state low water cut-off: probe type cut-off for field installation (AP8408).

Fuse Type

The "G" in the model number represents Class G fuses.

Fuseless Constructions

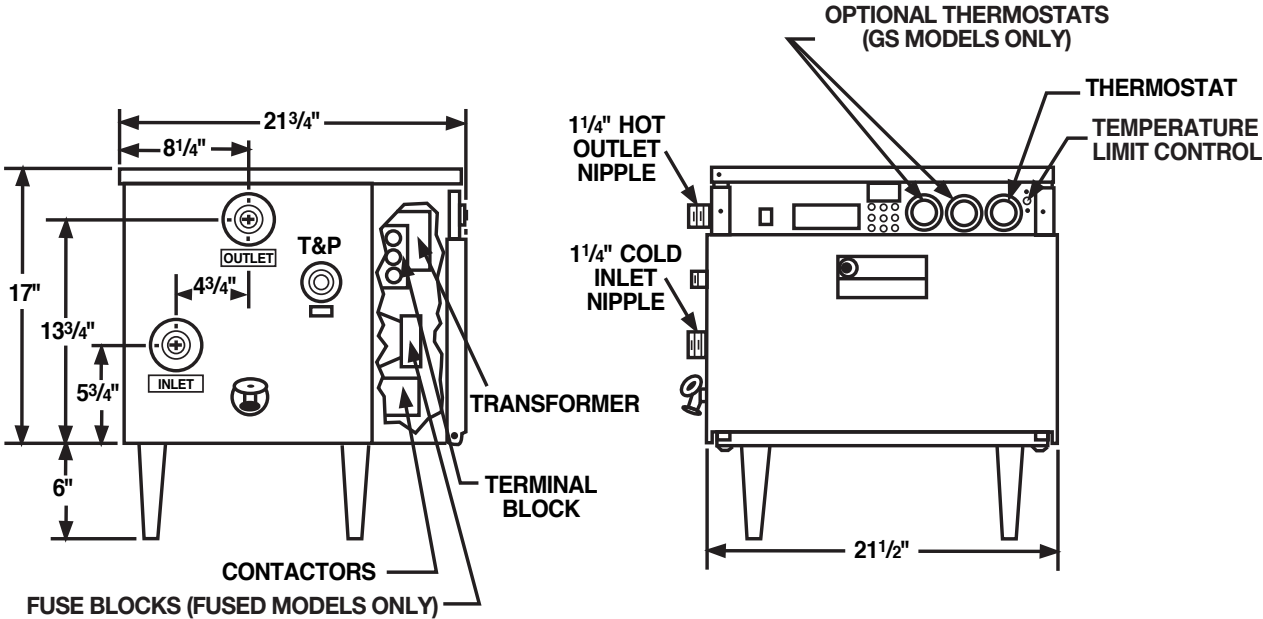
Any standard model not exceeding 48 Amps (See "Electrical Characteristics" Table) may be ordered without element fuses. Add "N" after the fuse type designation.  
Example: E10-9-G becomes E10-9-GN

Approximate Shipping Weight

110 lbs./50 kgs.

| MODEL NUMBERS | INPUT KW |
|---------------|----------|
| E10-6-G       | 6        |
| E10-9-G       | 9        |
| E10-12-G      | 12       |
| E10-15-G      | 15       |
| E10-18-G      | 18       |
| E10-24-G      | 24       |
| E10-27-G      | 27       |
| E10-30-G      | 30       |
| E10-36-G      | 36       |
| E10-45-G      | 45       |
| E10-54-G      | 54       |

| WATER TEMPERATURE RATINGS |               |                 |                               |                               |                        |
|---------------------------|---------------|-----------------|-------------------------------|-------------------------------|------------------------|
| MODEL NUMBER              | TANK CAPACITY | THERMOSTAT TYPE | MINIMUM DELIVERED TEMPERATURE | MAXIMUM DELIVERED TEMPERATURE | HIGH TEMPERATURE LIMIT |
| E10                       | 10 Gal./38L   | Immersion       | 90°F/32.2°C                   | 190°F/87.8°C                  | 200°F/93.3°C           |



| ELECTRICAL CHARACTERISTICS |                    |                 |                              |     |       |     |       |     |       |                       |                      |                 |
|----------------------------|--------------------|-----------------|------------------------------|-----|-------|-----|-------|-----|-------|-----------------------|----------------------|-----------------|
| INPUT KW                   | NUMBER OF ELEMENTS | ELEMENT WATTAGE | FULL LOAD CURRENT IN AMPERES |     |       |     |       |     |       | IMMERSION THERMOSTATS |                      |                 |
|                            |                    |                 | 208V                         |     | 240V  |     | 277V  |     | 480V  |                       | NUMBER OF CONTACTORS | NUMBER OF FUSES |
|                            |                    |                 | PHASE                        |     | Phase |     | PHASE |     | PHASE |                       |                      |                 |
|                            |                    |                 | 1                            | 3   | 1     | 3   | 1     |     | 1     | 3                     |                      |                 |
| 6                          | 3                  | 2000            | 29                           | 17  | 25    | 14  | 22    | 13  | 7     | 2                     | 6                    |                 |
| 9                          | 3                  | 3000            | 43                           | 25  | 38    | 22  | 33    | 19  | 11    | 2                     | 6                    |                 |
| 12                         | 3                  | 4000            | 58                           | 33  | 50    | 29  | 43    | 25  | 15    | 2                     | 6                    |                 |
| 15                         | 3                  | 5000            | 72                           | 42  | 63    | 36  | 54    | 31  | 18    | 2                     | 6                    |                 |
| 18                         | 3                  | 6000            | –                            | –   | 75    | 43  | 65    | 38  | 22    | 2                     | 6                    |                 |
| 18                         | 6                  | 3000            | 87                           | 50  | –     | –   | –     | –   | –     | 4                     | 12                   |                 |
| 24                         | 6                  | 4000            | 116                          | 67  | 100   | 58  | 87    | 50  | 29    | 4                     | 12                   |                 |
| 27                         | 6                  | 4500            | 130                          | 75  | 113   | 65  | 98    | 56  | 33    | 4                     | 12                   |                 |
| 30                         | 6                  | 5000            | 144                          | 84  | 125   | 73  | 108   | 63  | 36    | 4                     | 12                   |                 |
| 36                         | 6                  | 6000            | –                            | –   | 150   | 87  | 130   | 75  | 43    | 4                     | 12                   |                 |
| 36                         | 9                  | 4000            | 173                          | 100 | –     | –   | –     | –   | –     | 6                     | 18                   |                 |
| 45                         | 9                  | 5000            | 217                          | 125 | 188   | 109 | 163   | 94  | 54    | 6                     | 18                   |                 |
| 54                         | 9                  | 6000            | 260                          | 150 | 225   | 130 | 195   | 113 | 65    | 6                     | 18                   |                 |

| RECOVERY CAPACITIES  |                  |       |             |             |             |             |             |             |              |              |              |              |              |  |
|--|------------------|-------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|--|
| Recovery in U.S. Gallons/Hr. (GPH) and Liters/Hr. (LPH) at Various Temperature Rises |                  |       |             |             |             |             |             |             |              |              |              |              |              |  |
| INPUT KW   | EQUIVALENT BTU/H | UNITS | 40°F (22°C) | 50°F (28°C) | 60°F (33°C) | 70°F (39°C) | 80°F (45°C) | 90°F (50°C) | 100°F (56°C) | 110°F (61°C) | 120°F (67°C) | 130°F (72°C) | 140°F (78°C) |  |
| 6  | 20,473           | GPH   | 62          | 50          | 41          | 35          | 31          | 28          | 25           | 23           | 21           | 19           | 18           |  |
|  |                  | LPH   | 235         | 188         | 157         | 134         | 117         | 104         | 94           | 85           | 78           | 72           | 67           |  |
| 9  | 30,710           | GPH   | 93          | 74          | 62          | 53          | 47          | 41          | 37           | 34           | 31           | 29           | 27           |  |
|  |                  | LPH   | 352         | 282         | 235         | 201         | 176         | 157         | 141          | 128          | 117          | 108          | 101          |  |
| 12   | 40,946           | GPH   | 124         | 99          | 83          | 71          | 62          | 55          | 50           | 45           | 41           | 38           | 35           |  |
|  |                  | LPH   | 470         | 376         | 313         | 268         | 235         | 209         | 188          | 171          | 157          | 145          | 134          |  |
| 15   | 51,183           | GPH   | 155         | 124         | 103         | 89          | 78          | 69          | 62           | 56           | 52           | 48           | 44           |  |
|  |                  | LPH   | 587         | 470         | 391         | 335         | 294         | 261         | 235          | 213          | 196          | 181          | 168          |  |
| 18   | 61,420           | GPH   | 186         | 149         | 124         | 106         | 93          | 83          | 74           | 68           | 62           | 57           | 53           |  |
|  |                  | LPH   | 705         | 564         | 470         | 403         | 352         | 313         | 282          | 256          | 235          | 217          | 201          |  |
| 24   | 81,893           | GPH   | 248         | 199         | 165         | 142         | 124         | 110         | 99           | 90           | 83           | 76           | 71           |  |
|  |                  | LPH   | 939         | 751         | 626         | 537         | 470         | 417         | 376          | 342          | 313          | 289          | 268          |  |
| 27   | 92,129           | GPH   | 279         | 223         | 186         | 160         | 140         | 124         | 112          | 102          | 93           | 86           | 80           |  |
|  |                  | LPH   | 1057        | 845         | 705         | 604         | 548         | 470         | 423          | 384          | 352          | 325          | 302          |  |
| 30   | 102,366          | GPH   | 310         | 248         | 207         | 177         | 155         | 138         | 124          | 113          | 103          | 95           | 89           |  |
|  |                  | LPH   | 1174        | 939         | 783         | 671         | 587         | 522         | 470          | 427          | 391          | 361          | 335          |  |
| 36   | 122,839          | GPH   | 372         | 298         | 248         | 213         | 186         | 165         | 149          | 135          | 124          | 115          | 106          |  |
|  |                  | LPH   | 1409        | 1127        | 939         | 805         | 705         | 626         | 564          | 512          | 470          | 434          | 403          |  |
| 45   | 153,549          | GPH   | 465         | 342         | 310         | 266         | 233         | 207         | 186          | 169          | 155          | 143          | 133          |  |
|  |                  | LPH   | 1761        | 1409        | 1174        | 1006        | 881         | 783         | 705          | 640          | 587          | 542          | 503          |  |
| 54   | 184,259          | GPH   | 558         | 447         | 372         | 319         | 279         | 248         | 223          | 203          | 186          | 172          | 160          |  |
|  |                  | LPH   | 2114        | 1691        | 1409        | 1208        | 1057        | 939         | 845          | 769          | 705          | 650          | 604          |  |



## Recommended Specifications

Water heater(s) shall be model \_\_\_\_\_, manufactured by Ruud, having electrical input of \_\_\_\_\_ kW and a recovery rate of \_\_\_\_\_ GPH at a 100°F temperature rise. Water heater(s) shall have a storage capacity of 10 gallons. Water heater(s) shall have the UL seal of certification and be factory equipped with an CSA/ASME rated temperature and pressure relief valve. Tank(s) shall have a unique coating of high temperature porcelain enamel and furnished with magnesium anode rods rigidly supported. Water heater(s) shall meet or exceed the efficiency requirements of ASHRAE. Tank(s) shall have a working pressure rating of 150 psi, and shall be completely

assembled. Water heater(s) shall be approve-listed and constructed in accordance with UL Sanitation (NSF5). Water heater(s) shall be equipped with "screw-in" type elements. Water heater(s) shall be constructed with a SYSTEM SENTINEL element diagnostic panel utilizing light emitting diodes. Each LED will correspond to the number and location of the heating elements and monitor their on-off function. Water heater(s) shall be provided with internal power circuit fusing, control circuit fusing, magnetic contactors, 120 volt control circuit transformer and immersion thermostat(s) with manual reset high limit control. 1-1/4" inlet and outlet water connections shall be provided. Water heater(s) shall be covered by a three year limited warranty against tank leaks.

*In keeping with its policy of continuous progress and product improvement, Ruud reserves the right to make changes without notice.*

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