



Pennco SILVER makes Simple Comfort, Affordable.



Affordable Hydronic Heating

Pennco SILVER

While today's tough economy makes it harder than ever to meet basic needs — simple comfort shouldn't be a sacrifice. That's why Pennco now offers SILVER — a full line of affordable heating products. American made Pennco SILVER is designed, tested and assembled to ensure customers get the very best in home heating comfort and value. Financing is available to those who qualify through GE Money. Apply on-line today at: https://www.geonlineapply.com/servlet/MCSGenericApp

Added peace-of-mind is available in the form of five and ten year Comfort Plus Extended Parts & Labor Warranties which can be included in the financed cost.







Financing by GE Money

Efficiency

Pennco SILVER features economical, mostly mid-efficiency heating solutions. Pennco understands that no one really plans to replace their heating system and not everyone can afford to upgrade to high efficiency. If your home heating appliance is more than 15 years old, even a mid-efficiency upgrade could save you money on your utility bills.

Selection

Pennco SILVER features a wide range of heating equipment suitable for residential and light commercial applications.









Boiler Selection Guide

| Model | Application | Fuel | Efficiency | Capacity | Combustion | Venting |
|-------------|---|------|----------------|---|-------------|-------------------------|
| 15B | Residential Hot Water Boiler | Gas | Mid-Efficiency | 45 - 70 - 96 - 120 - 145 - 175 - 195 - 245 - 295 MBH | Atmospheric | Chimney |
| FSB | Residential Hot Water Boiler | Gas | Mid-Efficiency | 42.5 - 75 - 112.5 - 150 - 187.5 - 225 MBH | Fan Assist | Chimney or Side-Wall |
| KSW | Residential Hot Water Boiler | Oil | Mid-Efficiency | 84 - 105 - 140 - 126 - 175 - 210 - 168 - 245 - 280 MBH | Atmospheric | Chimney |
| 16 | Residential Steam Boiler | Gas | Mid-Efficiency | 75 - 112 - 150 - 187 - 225 - 262 - 299 MBH | Atmospheric | Chimney |
| кѕс | Residential Steam Boiler | Oil | Energy Star | 91 - 140 - 175 - 210 - 245 - 280 - 315 - 385 MBH | Atmospheric | Chimney |
| 41 J | Light Commercial Hot Water or Steam Boiler | Gas | Mid-Efficiency | 300 - 3,000 MBH | Atmospheric | Chimney |
| Hotline | Residential/Light Commercial Indirect Hot Water Heater | N/A | * | 30 - 40 - 50 - 80 - 119 Gal. | N/A | N/A |

^{*} Efficiency varies based on boiler efficiency and other factors.

15B Series

Gas-Fired Hot Water Boiler

The Pennco 15B Series Boiler has been designed with features making it the ideal home heating solution. With quality features such as an advanced heat exchanger design, greater BTU input per sectional size and optional electronic ignition, the 15B Series can achieve fuel efficiencies up to 82% AFUE.

System Features

Quality Heat Exchanger Design — The 15B Series featuresa robust cast iron heat exchanger with greater weight per section resulting in higher efficiencies and longer boiler life. The sections are connected with cast iron push nipples, which expand and contract at the same rate as the sections ensuring a water tight seal. Additional sizes are available and when utilized in a seven section configuration, the 15B Series can reach nearly 300 MBH input.

High Efficiency — The 15B Series provides annual fuel utilization efficiency up to 82% as certified by the US Department of Energy testing standards.

Hi-Limit Control — The Honeywell hi-limit control has been separated from the circulator relay for ease of serviceability and to reduce potential service parts costs.

Easy Installation and Maintenance — A compact design, low profile draft hood and top supply piping connections allow for easier installation. The pilot is mounted to the front of the burner base.

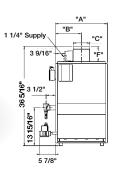
Standard Equipment:

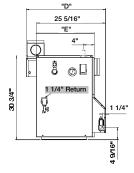
- Boiler Jacket
- Cast-Iran Boiler Battery
- High Limit Control
- Vent Damper Relay
- Combination Pressure Temperature Gauge
- Circulator
- Stainless Steel Burners
- Automatic Vent Damper
- Combination 24-Volt Gas Control includes: Automatic Gas Valve, Gas Pressure Regulator, Automatic Pilot, Safety Shut Off, Pilot Flow Adjustment, Pilot Filter
- A.S.M.E. Relief Valve
- Drain Valve

Optional Equipment:

- Intermittent Electric Ignition Pilot System
- Combustible Floor Kit
- Taco Circulator Pump. Note: Propane option available.









Specifications:

| Specific | ations: | | | | | | | | | | | | MEA# 39- | 86E Vol VIII |
|----------|-----------------|---------------------|---------------------|-----------------|------|------|-----------|------------|------|-----|----------------------|--------|--------------------|--------------------|
| Boiler | A.G.A. Input | Heating Capacity | I=B=R Net Output | Natural§ Gas | | | Dimension | s (Inches) | | | Pump Size Supply | Number | AFUE Elec. Ign. | AFUE Std. Pilot |
| Number | Btu/Hr.* | B tu/Hr.* | Btu/Hr.*† | Inlet | A | В | C | D | E | F | & Return Tappings | Bumers | & Damper | & Damper |
| 15045 | 45,000 | 37,000 | 32,000 | 1/2" | 11.3 | 5.6 | 4.0 | 27.1 | 20.5 | 5.0 | 11/4" | 1 | 82.0% | 80.0% |
| 15070 | 70,000 | 57,000 | 50,000 | 1/2" | 15.1 | 7.6 | 5.0 | 28.1 | 21.0 | 5.0 | 11/4" | 2 | 82.0% | 80.0% |
| 15096 | 96,000 | 79,000 | 69,000 | 1/2" | 15.1 | 7.6 | 5.0 | 28.1 | 21.0 | 5.0 | 11/4" | 2 | 82.0% | 80.0% |
| 15120 | 120,000 | 98,000 | 85,000 | 1/2" | 19.0 | 9.5 | 6.0 | 29.1 | 21.5 | 5.5 | 11/4" | 3 | 82.0% | 80.0% |
| 15145 | 145,000 | 119,000 | 103,000 | 1/2" | 19.0 | 9.5 | 6.0 | 29.1 | 21.5 | 5.5 | 11/4" | 3 | 82.0% | 80.0% |
| 15175 | 175,000 | 141,000 | 123,000 | 1/2" | 22.9 | 11.4 | 7.0 | 30.1 | 22.0 | 6.0 | 11/4" | 4 | 80.5% | 80.0% |
| 15195 | 195,000 | 157,000 | 137,000 | 1/2" | 22.9 | 11.4 | 7.0 | 30.1 | 22.0 | 6.0 | 11/4" | 4 | 80.5% | 80.0% |
| 15245 | 245,000 | 197,000 | 171,000 | 3/4" | 26.8 | 13.4 | 8.0 | 31.1 | 22.5 | 7.0 | 11/4" | 5 | 80.5% | 80.0% |
| 15295 | 295,000 | 237,000 | 206,000 | 3/4" | 30.6 | 15.3 | 9.0 | 32.1 | 23.0 | 9.0 | 11/4" | 6 | 80.5% | 80.0% |

- * For elevations above 2000 feet, ratings should be reduced at a rate of 4% for each 1000 feet above sea level.
- † For equivalent square feet of radiation, divide I = B = R output by 150.







[§] Propane gas Inlet, all units, 1/2"

FSB Series

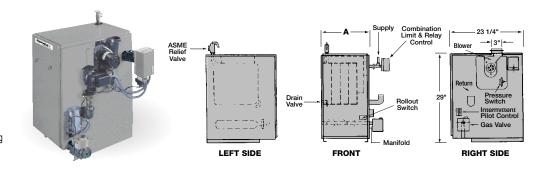
Gas-Fired Hot Water Boiler Side-Wall or Chimney Vent

Standard Equipment:

- Assembled boiler with insulated jacket
- 3" x 4" galvanized increaser fitting and silicone sealant to adapt 3" fan outlet to 4" vent pipe for chimney venting
- Combination high limit control and circulator relay
- 24 volt transformer to power gas control system
- Flame rollout safety shut-off fuse link (rollout switch)
- Pressure switch for proving air flow
- Combination pressure / temperature gauge (packed separately)
- 11/4" circulator
- 3/4" boiler drain valve
- 30 lb. ASME relief valve
- Completely installed and wired gas control system with burners and manifold, consisting of:
 - Stainless steel burners
 - Automatic redundant combination gas valve, 24 volt, with pilot filter
 - Pressure regulator
 - Intermittent Pilot Control, continuous re-try, 100% shut-off for natural & propane gas
 - Combination pilot/burner/electrode/flame sensor
 - Complete installation instructions

Optional Equipment:

- Combustible floor plate 24" x 30" for 2-5 section; 30" x 30" for 6 & 7 section
- Tjerflund VH-1-3" side wall vent hood
- Tjerfund VH-1-4" side wall vent hood
- Propane gas to natural gas conversion kits
- Natural gas to propane gas conversion kits



Specifications:

MEA# 484-84-E Vol. III

| Boiler Model Number | Number of Sections | AGA Input (MBH)†† | DOE Heating Capacity (MBH)† | I=B=R Net Rating (MBH)†† | Width A | Annual Fuel Efficiency (AFUE) |
|---------------------------|--------------------------|-------------------------|--------------------------------------|--------------------------------|--------------|--|
| FSB-2 | 2 | 42.5 | 36 | 31 | 11" | 84.4 |
| FSB-3 | 3 | 75 | 63 | 55 | 141/4" | 83.4 |
| FSB-4 | 4 | 112.5 | 94 | 82 | 17 ½" | 83.0 |
| FSB-5 | 5 | 150 | 125 | 109 | 20 ¾" | 82.7 |
| FSB-6 | 6 | 187.5 | 155 | 135 | 24" | 82.3 |
| FSB-7 | 7 | 225 | 186 | 162 | 27 ½" | 82.0 |

†† MBH = 1,000 Btuh

Btuh = British Thermal Unit Per Hour











* Conventional venting through a lined chimney use 4" Flue Adapter provided. * Through the wall venting — Sizes 2-3-4-5 use 3" Stainless Steel Vent Pipe. Sizes 6-7 use 4" Stainless Steel Vent Pipe (not included)

† AFUE and Heating Capacity are based upon D.O.E (Department of Energy) test procedure.

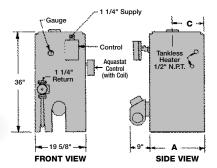
KSW Series

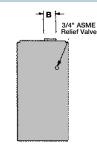
Oil-Fired Hot Water Boiler

Standard Equipment:

- Assembled boiler with insulated jacket
- Combination high limit control and circulator relay, on boilers without optional tankless heater coil
- Combination high limit control, low limit control and circulator relay, on boilers with optional tankless heater coil
- Target wall (vacuum formed refractory ceramic fiber)
- Combination pressure / temperature gauge
- Barometric draft control 6"
- 1 1/4" circulator
- 3/4" boiler drain valve
- 30 lb. ASME relief valve
- Beckett AFG series oil burner equipped with nozzle, primary control, interrupted duty ignition, PSC motor and clean cut (solenoid) pump







BACK VIEW

Specifications:

| Model No. | J I_B_D | | Firing Tankless Rate Heater Chimney | | DIMENSION (Inches) | A.F.U.E. | Approx. Shipping | | | | | | |
|------------------|----------------|----------|-------------------------------------|------|-----------------------|----------|---------------------|--------|---------------------------------------|---|--------|------|--------|
| Tankless Coil | Tankless Coil | Sections | *MBH | *MBH | Rating *MBH | †GPH | Capacity ††GPM | Size ' | A | В | C | ttt | Weight |
| ★ 3K.60C | ★ 3K.60 | 3 | 84 | 74 | 64 | .60 | 2.85 | 8x8x15 | 17 3/4 | 6 | 93/4 | 86.1 | 500 |
| ★ 3K.75C | ★ 3K.75 | 3 | 105 | 92 | 80 | .75 | 3.00 | 8x8x15 | 17 ³ / ₄ | 6 | 93/4 | 85.6 | 500 |
| 3K1.00C | 3K1.00 | 3 | 140 | 120 | 104 | 1.00 | 3.25 | 8x8x15 | 17 ³ / ₄ | 6 | 93/4 | 84.4 | 500 |
| ★ 4K.90C | ★ 4K.90 | 4 | 126 | 111 | 97 | .90 | 3.15 | 8x8x15 | 21 | 6 | 11 ³/8 | 86.4 | 580 |
| ★ 4K1.25C | ★ 4K1.25 | 4 | 175 | 153 | 133 | 1.25 | 3.50 | 8x8x15 | 21 | 6 | 113/8 | 85.9 | 580 |
| ★ 4K1.50C | ★ 4K1.50 | 4 | 210 | 181 | 157 | 1.50 | 3.75 | 8x8x15 | 21 | 6 | 11 ³/8 | 85.1 | 580 |
| ★ 5K1.20C | ★ 5K1.20 | 5 | 168 | 147 | 128 | 1.20 | 3.45 | 8x8x15 | 24 ¹ / ₄ | 6 | 13 | 86.1 | 680 |
| 5K1.75C | 5K1.75 | 5 | 245 | 210 | 183 | 1.75 | 4.00 | 8x8x15 | 24 ½/4 | 6 | 13 | 84.8 | 680 |
| 5K2.00C | 5K2.00 | 5 | 280 | 239 | 209 | 2.00 | 4.25 | 8x8x20 | 24 1/4 | 6 | 13 | 84.0 | 680 |

MBH = 1,000 Btu per hour Btu = British Thermal Unit Heating capacity based on 13% CO2 with a ÑO.02i W.C. draft overfirig and a #1 smoke or less. Testing was done in accordance with the D.O.E. (Department of Energy) test procedure.

- † GPH = Gallons per hour oil at 140,000 Btu per gallon
- ff Gallons of water per minute, heated from 40° to 140°, with 200°
- ††† A.F.U.E. = Annual Fuel Utilization Efficiency based on D.O.E. test procedure. As an Energy Star Partner, Pennco has determined that this product meets Energy Star guidelines for energy efficiency.











16 Series

Gas-Fired Steam Boiler

Standard Equipment:

- Assembled boiler with insulated jacket
- Two 21/2" supply tappings and two 21/2" return tappings
- Integral draft diverter built into jacket
- 24 volt, 40VA transformer
- Pressure limit control
- Electronic probe type low water cut off
- Flame rollout safety shut-off fuse link and blocked vent safety shut-off switch
- Glass water level aguae
- Steam pressure gauge
- 3/4" boiler drain valve
- 15 lb. ASME pop safety valve
- Two 2 1/2" square head pipe plugs to plug unused supply and return tappings
- Vent damper
- Completely installed and wired gas control systems with burners and manifold, *consisting of:*
 - Automatic redundant combination gas valve, 24 volt, with pilot filter Electronic Ignition Only:
 - Intermittent Pilot Control. continuous re-try, 100% shut-off
 - Combination pilot/burner/ electrode/flame sensor

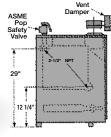
Standing Pilot Only:

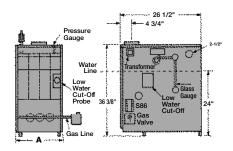
• Pilot burner and thermocouple

Optional Equipment:

- Combustible floor plate 14614031 for 3-6 section; 14614032 for 7-9 section
- Electronic water feeder
- Float type low water cut-off in place of probe type
- Natural to propane conversion kit (when ordering kit, please provide serial number of boiler to be converted)







Specifications:

MEA# 77-91-E

| BOILER UNI | BOILER UNIT NUMBER | | † NATURAL GAS | | | | | † PROP | ANE GAS | | DIMENSI | ONS (in.) | A.F.U.E. | |
|-------------------------------|-----------------------------|--------------------------|-----------------------|------------------------------|-----------------------|----------------------------|-----------------------|------------------------------|-----------------------|-----------------------------|------------------|---------------------------------------|-----------------------|------------------------|
| Cont. Pilot with Damper | E/I Pilot with Damper | Number of Sections | AGA Input **MBH | Heating Capacity **MBH | NET I=B=R ++MBH | NET I=B=R Sq.Ft. EDR | AGA Input **MBH | Heating Capacity **MBH | NET I=B=R ++MBH | NET I=B=R Sq. Ft. EDR | Flue Diameter | "A" Width | HSD with Damper | HSID with Damper |
| 1603HSD | 1603HSID | 3 | 75 | 62 | 47 | 196 | 70 | 58 | 44 | 183 | 5 | 111/4 | 81.1 | 82.7 |
| 1604HSD | 1604HSID | 4 | 112 | 91 | 68 | 283 | 105 | 85 | 64 | 267 | 6 | 14 ½ | 78.8 | 82.0 |
| 1605HSD | 1605HSID | 5 | 150 | 122 | 92 | 383 | 140 | 114 | 86 | 358 | 6 | 17 3/4 | 79.2 | 82.0 |
| 1606HSD | 1606HSID | 6 | 187 | 153 | 115 | 479 | 175 | 143 | 107 | 446 | 7 | 21 | 79.6 | 82.0 |
| 1607HSD | 1607HSID | 7 | 225 | 183 | 137 | 571 | 210 | 171 | 128 | 533 | 7 | 21 ½ | 80.1 | 82.0 |
| 1608HSD | 1608HSID | 8 | 262 | 214 | 161 | 671 | 245 | 200 | 150 | 625 | 7 | 27 1/2 | 80.5 | 82.0 |
| 1609HSD | 1609HSID | 9 | 299 | 245 | 184 | 767 | 280 | 229 | 172 | 717 | 7 | 30 ³ / ₄ | 80.9 | 82.0 |

For altitudes above 2,000 feet, ratings should be reduced at a rate or 4% for each 1,000 feet above sea level.

MBH = 1,000 Btu per hour Btuh = British Thermal Unit per hour

Heating capacity based on D.O.E. (Department of Energy) standards

* Add 5-1/2 " to height for vent damper EDR = Equivalent Direct Radiation











MEA# 182-86E

KSC Series

Oil-Fired Steam Boiler

Standard Equipment:

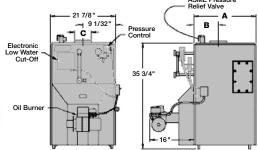
- Crated Cast-Iron Boiler
- Flush Jacket
- Swing-Out Burner Door
- Clean Cut Beckett Burner
- Target Wall / Liner
- ASME Relief Valve
- Water Level Gauge
- Steam Pressure Gauge ■ Steam Pressure Control
- Electronic Low Water Cut-Off
- Drain Valve
- Wiring Harness
- Burner Electric Disconnect ■ Plastic Cover
- Supply Tappings (Qty. 2 2")
- Return Tapping 11/2"
- **Tankless** Water Heater

■ Skim Port

- Tankless Hot Water Coil
- Limit Control

Option:





Specifications:

| | I = B = R Oil Burner D.O.E. | | | | | | | | DIMENSIONS | | Tankless Water Heater Capacities | Boiler | |
|-----------------|--------------------------------|-------------------|---------------------|-------|---------|------------------|-----------------------|----------|----------------|-----------------------|-------------------------------------|--------------------------|------------------|
| Boiler Model | | ut ² | Heating Capacity | Steam | Sq. Ft. | Pump Pressure | Nozzle Furnished | A.F.U.E. | A Length of | B Front of Jkt. to | C Diameter of | Intermittent Draw G.P.M. | Water Content |
| Number 1 | G.P.H. | M BH ⁴ | MBH ⁴ | MBH | Steam | PSI | 140 PSIG ⁵ | Rating | Flush Jacket | C/L of Flue Out | Flue Outlet | (Model L-24) | Gals. |
| *KSC0365 | 0.65 | 91 | 79 | 59 | 246 | 140 | .60 80°B | 85.00 | 16% | 6 ½ | 6 | ** | 11 |
| KSC3100 | 1.00 | 140 | 116 | 87 | 363 | 140 | .85 80°B | 81.50 | 16% | 6 ½ | 6 | 4.5 | 11 |
| *KSC4100 | 1.00 | 140 | 120 | 91 | 377 | 140 | .85 80°B | 85.00 | 201/4 | 81/2 | 6 | 4.5 | 13 |
| KSC4125 | 1.25 | 175 | 145 | 109 | 454 | 140 | 1.10 80°B | 82.50 | 201/4 | 81/2 | 6 | 4.5 | 13 |
| KSC4150 | 1.50 | 210 | 170 | 128 | 533 | 140 | 1.25 80°B | 81.00 | 201/4 | 81/2 | 6 | 4.5 | 13 |
| KSC5175 | 1.75 | 245 | 202 | 152 | 633 | 140 | 1.50 80°B H | 83.00 | 23% | 101/4 | 7 | 5.0 | 15 |
| KSC5200 | 2.00 | 280 | 227 | 170 | 708 | 140 | 1.75 70°B H | 82.00 | 23¾ | 101/4 | 7 | 5.0 | 15 |
| KSC6225 | 2.25 | 315 | 251 | 188 | 783 | 140 | 2.00 45°B | _ | 27½ | 85/16 | 8 | 5.0 | 17 |
| KSC7275 | 2.75 | 385 | 307 | 230 | 958 | 140 | 2.25 45°B | _ | 311/⁄8 | 85/16 | 8 | 5.0 | 19 |

^{*}Indicates an Energy Star efficient Product

 $\textbf{Explanation} \quad \textbf{1. Add suffix "T" to denote boiler with tankless heater.}$

- Notes: 2. I=B=R burner capacity is based on an oil heating value of 140,000 Btu/gal. and with 13% CO2.

 3. Net ratings based on 170°F temperature in radiators and include 33% allowance for normal piping and pick-up load. Consult manufacturer for unusual piping and pick-up requirements.
- 4. For altitudes above 2,000 ft., ratings may be reduced at the rate of $4\%\,$ for every 1,000 ft. above sea level.

 5. Nozzle sizes with an H designation are Hago brand, all others are Delevan.
- 6. The electrical service is 120 Volts, 15 Amps, 60 Hz.







41J Series

Gas-Fired Hot Water or Steam Modular Boiler

Electronic Ignition Base Standard Equipment:

- Base
- Fire Door
- Burner Orifice
- Manifold
- Main and Pilot Burner
- Electronic Pilot Gas Valve
- Intermittent Pilot Module
- High Gas PressureSwitch

Water Trim Package:

- Limit Control (two required on units 2,500,000 BTU and larger)
- Pressure Temperature Gauge
- Relief Valve
- Drain Valve
- Complete Jacket Assembly

Steam Trim Package:

- Low Water Cut-Off
- Glass Gauge Set
- Pop Safety Valve
- Steam Gauge
- Pressure Limit
- Drain Valve
- Complete Jacket Assembly

41J Series Boiler Bases are preassembled at the factory with burner manifold, burner orifices, gas valves, electronic ignition and pilot installed, ready for field installation of the pre-tested sections and appropriate packages.

Plug 'N Play Harness and Junction Box

Individual base and junction box controls are designed for easy installation with Plug 'n Play h a messes. The entire boiler links together in a "snap". A color-coded factory supplied harness eliminates wining errors.

Modular Efficiency

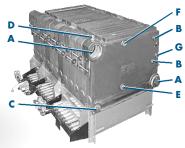
Most commercial boilers are either "all-on" or "all-off". The 41J boiler when used in conjunction with the optional Argo AMB Control Kit will stage fire the individual bases. Depending on model, capacities as low as 11% of full load can be obtained for optimal performance. The optional AMB Control Kit adjusts the water temperature for increased fuel economy. The control balances section un time for in creased reliability. The modular base design allows for built in back-up to reduce "no heat" situations.

CSD1 Option

41J boilers are available with a CSD1 option to comply with CSD1 standards where required by public building code. The CSD1 option provides the increased number of controls and safety devices required to meet CSD1 standards.







If opening F is to be used for something other than the Pop Safety Valve or Pressure Relief Valve, or the Safety/Relief Valve is larger than 1", the Safety/Relief Valve must be installed in the Header Piping as near to the boiler as possible.

41J Series Right-End and Left-End Tappings Data

| OPENING | SIZE | STEAM | WATER |
|---------|-------|--|-----------------------|
| A | 4" | Supply and Return | Supply and Return |
| В | 1/2" | Primary LWCO and Gauge Glass Set | Plugged |
| C | 11/2" | Drain, Right End | Drain, Left End |
| C | 3/4" | Drain, Right End | Drain, Right End |
| D | 1/2" | Plugged | Limit Contro l |
| E | 1" | Accessories | Accessories |
| * F | 1" | Pop Safety Valve | Pressure Relief Valve |
| G | 3/4" | Plugged or Electronic (Prabe Type) LWCO | Plugged |

Specifications:

| Cuitai | | | | | | | | | | | | | |
|--------|---------------------|----------------------|----------------------|------------------|------------------|--------------|----------------------------|---------------|---------------------|--------------------|---------------------|---------------------|-------------------------|
| Boiler | A.G.A. Input (1) | A.G.A. Output (1) | Ne | t I=B=R Ratin | ıgs | | Base Size 8 Flue Outlet | | Chimney Size (6) | Flue Collector | Horsepower Gross | Pressu Thru Wate | re Drop r Boiler (5) |
| Model | Btu Mbh | Btu Mbh | Steam Sq. Ft. (3) | Steam Btv Mbh | Water Btv Mbh | 300 8 in. | 400 10 in. | 500 12 in. | I.D. x Ht. | Size To Chimney | Output (4) | GPM | In. Water |
| 300 | 300 | 240 | 750 | 180 | 209 | 1 | | | 8" x 20' | 8 | 7.16 | 18.9 37.8 | 0.10 0.50 |
| 400 | 400 | 320 | 1000 | 240 | 278 | | 1 | | 10" x 20' | 10 | 9.55 | 25.2 50.4 | 0.27 0.86 |
| 500 | 500 | 400 | 1250 | 300 | 348 | | | 1 | 12" x 20' | 12 | 11.94 | 31.5 63.0 | 0.40 1.20 |
| 600 | 600 | 480 | 1500 | 360 | 417 | 2 | | | 12" x 20' | 12 | 14.33 | 37.8 75.6 | 0.50 1.70 |
| 700 | 700 | 560 | 1750 | 420 | 487 | 1 | 1 | | 12" x 20' | 12 | 16.72 | 44.1 88.2 | 0.70 2.50 |
| 800 | 800 | 640 | 2000 | 480 | 557 | | 2 | | 14" x 20' | 14 | 19.10 | 50.4 100.8 | 0.88 2.90 |
| 900 | 900 | 720 | 2250 | 540 | 626 | | 1 | 1 | 14" x 20' | 14 | 21.49 | 56.7 113.4 | 1.10 3.80 |
| 1000 | 1000 | 800 | 2500 | 600 | 696 | | | 2 | 14" x 20' | 14 | 23.88 | 63.0 126.0 | 1.30 4.00 |
| 1100 | 1100 | 880 | 2750 | 660 | 765 | 1 | 2 | | 16" x 20' | 16 | 26.27 | 69.3 138.6 | 1.50 5.00 |
| 1200 | 1200 | 960 | 3000 | 720 | 835 | | 3 | | 16" x 20' | 16 | 28.66 | 75.6 151.2 | 1.80 6.00 |
| 1300 | 1300 | 1040 | 3250 | 780 | 904 | 1 | | 2 | 16" x 20' | 16 | 31.04 | 81.9 163.8 | 2.00 5.60 |
| 1400 | 1400 | 1120 | 3500 | 840 | 974 | | 1 | 2 | 18" x 20' | 18 | 33.43 | 88.2 176.4 | 2.40 7.00 |
| 1500 | 1500 | 1200 | 3750 | 900 | 1043 | | | 3 | 18" x 20' | 18 | 35.82 | 94.5 189.0 | 2.60 8.30 |
| 1600 | 1600 | 1280 | 4008 | 962 | 1113 | | 4 | | 18" x 20' | 18 | 83.21 | 100.8 201.0 | 2.80 9.60 |
| 1700 | 1700 | 1360 | 4283 | 1028 | 1183 | 1 | 1 | 2 | 18" x 20' | 18 | 40.60 | 107.1 214.2 | 3.15 10.30 |
| 1800 | 1800 | 1440 | 4563 | 1095 | 1252 | | 2 | 2 | 20" x 20' | 20 | 42.99 | 113.4 226.8 | 3.50 11.00 |
| 1900 | 1900 | 1520 | 4838 | 1161 | 1322 | | 1 | 3 | 20" x 20' | 20 | 45.37 | 119.7 239.4 | 4.00 12.50 |
| 2000 | 2000 | 1600 | 5117 | 1228 | 1391 | | | 4 | 20" x 20' | 20 | 47.76 | 126.0 252.0 | 4.50 14.00 |
| 2100 | 2100 | 1680 | 5392 | 1294 | 1461 | 2 | | 3 | 20" x 20' | 20 | 50.15 | 132.3 264.6 | 4.95 16.00 |
| 2200 | 2200 | 1760 | 5671 | 1361 | 1530 | | 3 | 2 | 22" x 20' | 22 | 52.54 | 138.6 277.2 | 5.40 18.00 |
| 2300 | 2300 | 1840 | 5913 | 1426 | 1600 | | 2 | 3 | 22" x 20' | 22 | 54.93 | 144.9 289.8 | 5.70 17.00 |
| 2400 | 2400 | 1920 | 6213 | 1491 | 1670 | | 1 | 4 | 22" x 20' | 22 | 57.31 | 151.2 302.4 | 8.00 19.00 |
| 2500 | 2500 | 2000 | 6471 | 1553 | 1739 | | | 5 | 22" x 20' | 22 | 59.70 | 157.5 315.0 | 8.00 20.50 |
| 2600 | 2600 | 2080 | 6729 | 1615 | 1809 | 2 | | 4 | 22" x 20' | 22 | 62.09 | 163.8 327.6 | 7.00 24.00 |
| 2700 | 2700 | 2160 | 6988 | 1677 | 1878 | 1 | 1 | 4 | 24" x 20' | 24 | 64.48 | 170.1 340.2 | 7.50 24.00 |
| 2800 | 2800 | 2240 | 7246 | 1739 | 1948 | | 2 | 4 | 24" x 20' | 24 | 66.87 | 176.4 352.8 | 8.00 26.00 |
| 2900 | 2900 | 2320 | 7504 | 1801 | 2017 | | 1 | 5 | 24" x 20' | 24 | 69.25 | 182.75 365.5 | 8.50 27.50 |
| 3000 | 3000 | 2400 | 7763 | 1863 | 2087 | | | 6 | 24" x 20' | 24 | 71.64 | 189.1 378.2 | 9.00 29.00 |

Explanation Notes:

- Ratings are at sea level to 2,000 feet. For altitudes above 2,000 feet, reduce all ratings 4% for each 1,000 feet above sea level
- 2. Ratings in square feet are computed at 240 Btuh/square foot for steam boilers.
- 3. Ratings based on 33,500 Btuh per horsepower
- 4. Pressure drop based on given flow from a single outlet and returning to a single inlet at the opposite end of the boiler.
- 5. Chimney sizes shown are one option based on a typical venting system, and sized according to the National Fuel Gas Code, assuming Type B double wall vent and vent connectors, other venting system designs are acceptable as shown on Flue Connection And Venting section of the installation manual. For further chimney design and sizing information, consult the National Fuel Gas Code, ANSI Z223.1/NFPA 54-latest revision, or ASHRAE-1996 HVAC Systems and Equipment Handbook, Chapter 30, Chimney, Cas Vent, and Fireplace Systems, or the Standard for Chimneys, Fireplaces, Vents, and Solid Fuel Burning Appliances. NFPA 211 latest revision. Follow standard engineering practice.







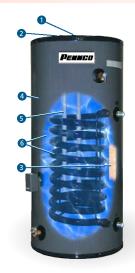


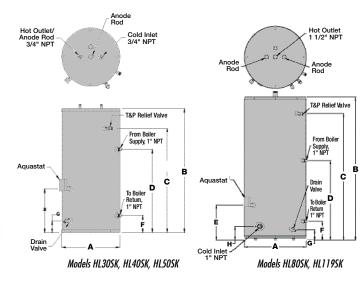
Pennco

Indirect Hot Water Heater

Commercial Quality and Capability. Residential Affordability.

- Domestic Water Hot and Cold Side Connection — HL 30SK, HL 40SK, HL 50SK. Hot Only Top Connection — HL 80SK, HL 119SK. Cold Only Bottom/Side — HL 80SK, HL 119SK.
- Coil Connections Include dielectric unions for both inlet and outlet
- 3 2" Foam Insulation
- 4 Heavy-Duty Steel Jacket
- Seplaceable Extra-Thick Magnesium Anode Rod
- Corrosion Resistant Porcelain-coated Enamel Smooth Coil and Interior Tank Walls
- Immersion Aquastats standard on all models
- Surface-mounted Thermostat
- Self-cleaning Drain Valve
- Factory Installed T&P Valve





Specifications:

| • | | | | | | | | | | |
|-----------------|---------------------|-----|--------|--------|---------|-------------------|-------|-------|-------|--------------------|
| Model Number | Storage Capacity | A | В | c | DIMENSI | ONS (inches) E | F | G | Н | Shipping Weight |
| HL30SK | 30 Gal. | 22" | 35¾" | 273/4" | 191/2" | 11¾" | 61/2" | 41/2" | N/A | 180 lbs. |
| HL40SK | 38 Gal. | 22" | 42¾" | 343/4" | 31½" | 16¾" | 6½" | 41/2" | N/A | 226 lb s. |
| HL50SK | 45 Gal. | 22" | 48¾" | 39¾" | 31½" | 16¾" | 61/2" | 41/2" | N/A | 231 lbs. |
| HL80SK | 75 Gal. | 24" | 64¾" | 57½" | 33" | 191⁄4" | 8" | 5" | 5" | 297 lbs. |
| HL119SK | 110 Gal. | 28" | 651/4" | 573/4" | 33¾" | 161⁄4" | 8¾" | 5" | 61/2" | 397 lbs. |

NOTES: Potable outlet water temperature at 135° F as per D.O.E. • Boiler output should be at least 74,000 BTU/h.

First Hour Rating (Gal) @ Coil Output (Btu/hr)

| MODEL | 180°F/6 GPM* | 180°F/10 GPM* | 180°F / 12 GPM* | 200°F/6 GPM* | 200°F/8 GPM* | 200°F/10 GPM* | 200°F/12 GPM* |
|---------|--------------|---------------|-----------------|--------------|---------------|---------------|---------------|
| HL30SK | 107 @ 53,000 | 114@57,000 | 117 @ 59,000 | 129 @ 67,000 | 132 @ 69,000 | 136 @ 71,000 | 139 @ 73,000 |
| HL40SK | 141 @ 69,000 | 165 @ 84,000 | 177 @ 92,000 | 171 @ 88,000 | 183 @ 96,000 | 195 @ 104,000 | 207 @ 111,000 |
| HL50SK | 148 @ 69,000 | 172 @ 84,000 | 184 @ 92,000 | 178 @ 88,000 | 190 @ 96,000 | 202 @ 104,000 | 214@111,000 |
| HL80SK | 188 @ 76,000 | 212 @ 91,000 | 224 @ 98,000 | 221 @ 97,000 | 233 @ 104,000 | 245 @ 112,000 | 257 @ 119,000 |
| HL119SK | 220 @ 76,000 | 244 @ 91,000 | 256 @ 98,000 | 253 @ 97,000 | 265 @ 104,000 | 277 @ 112,000 | 289 @ 119,000 |

NOTES: First Hour Rating = First Draw + Continuous Draw * Coil Input (temperature, flow rate). Ratings based on 77°F rise with 58°F inlet potable water. All data obtained through testing in accordance with GAMA INDIRECT-FIRED WATER HEATER TESTING STANDARD IWH-TS-1_MARCH 2003

Additional Boiler Model Notes: Selection of water boiler size should be based upon Net I=B=R Rating being equal to or greater than the calculated heat loss of the building. Selection of steam boiler size should be based upon Net I=B=R Steam Rating being equal to or greater than the installed radiation in square feet EDR. The ratings marked Net I=B=R Ratings represent the portion of the heat output that can be applied to heat the radiation or terminal units. Ratings based on selection factors recommended by Hydronics institute for piping and pickup. Net water boiler ratings are based on an allowance of 1.33. For water applications with high piping and pickup requirements, use steam rating.

| | 15B | FSB | KSW | KSC | 16 | 41J |
|--|-----|-----|-----|-----|----|-----|
| All boilers are design-certified for installation on non-combustible floors. | ~ | ~ | ~ | ~ | ~ | ~ |
| For installation on any combustible floor, use combustible floor kit. If combustible floor kit is unavailable refer to installation manual for specific instructions for that model. | V | ~ | | | ~ | ~ |
| Recommended chimney height 20 feet. In special cases where conditions permit, chimney height may be reduced. Refer to the latest revision of National Fuel Gas Code. | ~ | ~ | ~ | ~ | ~ | ~ |
| • Electrical service to be 120 volts, 15 amps, 60Hz3. | ~ | V | ~ | ~ | ~ | ~ |
| Manufacturer should be consulted on installations having other than normal piping and pickup requirements. | ~ | ~ | ~ | ~ | V | ~ |

Specifications and dimensions for all Pennco SILVER models are subject to change without notice.



An ISO 9001-2000 Certified Company 📳



2201 Dwyer Avenue, Utica, New York 13501 Phone: 315-797-1310 • Fax: 866-432-7329

E-mail: info@ecrinternational.com Web: www.penncoboilers.com **USA Contractor Assistance:** 800-325-5479