P-K MACH® Model CM-300
Natural Gas or Liquid Propane with NURO® Control

This MACH Boiler requires Category IV venting (condensing-positive pressure) or Category II venting* (condensing-negative pressure) as defined in ANSI Z223.1/NFPA 54/CSA -B.149 Latest Edition

*Category II Venting must include optional combustion air damper

BOILER CONNECTIONS:
- Combustion Air Inlet: 5" dia stub
- Condensate Drain: 3/4" hose
- Exhaust Vent: 4"
- Liquid Propane Gas Connection: 1" NPT-F
- Natural Gas Connection: 1" NPT-F
- Wiring Junction Boxes: inside cabinet
- Pressure Relief Valve: see list for selection
- Boiler Water Return, Victaulic® clamp: 1 1/2" pipe, grooved
- Boiler Water Supply, Victaulic® clamp: 1 1/2" pipe, grooved

BOILER CONTROLS: ASME CD-1 is standard.
- Complies with CE Gas (C) guidelines GAP-A1.1 and GAP-A1.3.
- Complies with FM Global 6-4 Section 1.0
- Main Gas Train with Dual Shut-Off
- Integrated Boiler Control, NURO Series
- Operating Thermostat: 42°-195°F (5.6°-91°C)
- High Limit Thermostat, Manual Reset: 100°-197°F (38°-92°C)
- High Exhaust Pressure Switch
- LWCO, Probe Type, Manual Reset
- Combustion Air Proving Switch, Differential Pressure Type
- Combustion Blower, Variable Speed, 300 Watt

A.S.M.E. Section IV Design Data
- Maximum Pressure: 80 psig
- Maximum Allowable Temperature: 250°F
- Maximum Operating Temperature: 194°F
- Heated Wet Surface Area: 12.29 sqft.
- Flow rate @ 20°F ΔT: 28 GPM
- Flow rate @ 40°F ΔT: 14 GPM

MODEL SELECTION: CM-300

<table>
<thead>
<tr>
<th>Natural Gas</th>
<th>Liquid Propane</th>
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<tbody>
<tr>
<td>Min Inlet Gas Pressure: 3.5&quot; w.c.</td>
<td>7.0&quot; w.c.</td>
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<tr>
<td>Max Inlet Gas Pressure: 14&quot; w.c.</td>
<td>300,000</td>
</tr>
<tr>
<td>Input, BTU/hr:</td>
<td>279,000</td>
</tr>
<tr>
<td>Output, BTU/hr:</td>
<td>8.3</td>
</tr>
<tr>
<td>Boiler HP:</td>
<td>290 lbs.*</td>
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<tr>
<td>Operating Weight:</td>
<td>1.2 gallons</td>
</tr>
<tr>
<td>Water Content:</td>
<td>58&quot; x 36&quot; x 63&quot; (LxWxH)</td>
</tr>
<tr>
<td>Estimated Shipping Weight:</td>
<td>420 lbs.*</td>
</tr>
<tr>
<td>Power Supply:</td>
<td>120V, 1ph, 60Hz</td>
</tr>
<tr>
<td>Operating Current:</td>
<td>&lt; 5 Amps</td>
</tr>
<tr>
<td>Recommended Minimum Circuit Capacity:</td>
<td>10 Amps</td>
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Pressure Relief Valve/Press-Temp Gauge
- Shipped Loose for Field Installation
- 30 PSIG 3/4" x 1" 0-100psi/30-240°F
- 50 PSIG 3/4" x 1" 0-100psi/30-240°F
- 60 PSIG 3/4" x 1" 0-100psi/30-240°F
- 75 PSIG 3/4" x 1" 0-240psi/30-240°F
- 80 PSIG 3/4" x 1" 0-240psi/30-240°F

Recommended Clearance for Service Access
- Front - 30" Rear - 0" Top - 24" Left Side - 24 Right Side - 24

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