VALUPAK®

Packaged gas burners

- High turndown.
- Available in 6 sizes.
- Capacities: 2 kW - 1124 kW (HHV).
- Stable and clean combustion.
- Suitable for UV scanner and flame rod.
- Natural gas and LPG.
- Low gas pressure requirements.
- Ease of installation and operation with low maintenance requirements.
- All metal construction.
- Multi voltage and frequency blower motors.
Product description

The VALUPAK® is designed for process air heating applications.

A motorized gas control valve controls the heat output of the burner over the full operating range. The gas flows through the nozzle and then along the inside of the burner cone where combustion air is progressively and tangentially mixed with the gas. This results in a short, very stable flame and clean combustion.
Available VALUPAK® sizes

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Standard blower type</strong></td>
<td>UHC102</td>
<td>UHC122</td>
<td>UMI300</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Maximum heat release [3] kW(HHV)</strong></td>
<td>40</td>
<td>60</td>
<td>80</td>
<td>185</td>
<td>325</td>
<td>645</td>
</tr>
<tr>
<td><strong>Minimum heat release kW(HHV)</strong></td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td><strong>Turndown</strong></td>
<td>20:1</td>
<td>30:1</td>
<td>27:1</td>
<td>46:1</td>
<td>36:1</td>
<td>36:1</td>
</tr>
<tr>
<td><strong>Gas Q max. m³ (st)/h</strong></td>
<td>3.7</td>
<td>5.5</td>
<td>7.3</td>
<td>17</td>
<td>30</td>
<td>59</td>
</tr>
<tr>
<td><strong>Gas Q min. m³ (st)/h</strong></td>
<td>0.18</td>
<td>0.18</td>
<td>0.28</td>
<td>0.37</td>
<td>0.80</td>
<td>1.65</td>
</tr>
<tr>
<td><strong>Max. combustion air volume m³ (st)/h</strong></td>
<td>48</td>
<td>64</td>
<td>98</td>
<td>180</td>
<td>311</td>
<td>780</td>
</tr>
<tr>
<td><strong>Gas pressure at test connection at maximum heat release mbar</strong></td>
<td>5.4</td>
<td>9</td>
<td>18</td>
<td>2.5</td>
<td>1</td>
<td>2.2</td>
</tr>
<tr>
<td><strong>Blower motor 3x220-420x50 Hz kW</strong></td>
<td>0.09</td>
<td></td>
<td></td>
<td>0.09</td>
<td>0.18</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Weight kg</strong></td>
<td></td>
<td></td>
<td></td>
<td>12.5</td>
<td>16.5</td>
<td>40</td>
</tr>
<tr>
<td><strong>Flame length [4] mm</strong></td>
<td>up to 400 (after sleeve)</td>
<td>500</td>
<td>1000</td>
<td>1100</td>
<td>1600</td>
<td>1800</td>
</tr>
</tbody>
</table>

[1] Air pressure switches should be selected to have a setpoint ranging from (2-10) mbar, with exception of the VALUPAK® 60 burner with a capacity of 40 kW or 60 kW: setpoint ranging from (0.4 - 3) mbar
[3] Use of the standard round air inlet filter will cause a ± 15 % capacity reduction.
[4] Use of the standard VALUPAK® burner at 60 Hz will result in a higher max. capacity to which the gas pressures need to be adapted.

Protection: IP54

1) Rp 1/2 gas inlet
2) Rp 3/4 gas inlet
3) Rp 1 gas inlet
4) Rp 1 1/4 gas inlet
5) Rp 1 1/2 gas inlet (Rp 1 1/4 for LPG)
6) Rp 1 1/2 gas inlet
Dimensions and weights

1) Gas inlet Rp1/2" with UHC122 & UM300 blower
2) Sight glass (alternative SI position)
3) Alternative SI position
4) Min. 150 mm free space required for spark ignitor removal
5) Gas inlet Rp 1/2" with UHC102 blower
6) Alternative gas inlet position with UHC102 blower

<table>
<thead>
<tr>
<th>Blower</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>J</th>
<th>K</th>
<th>L</th>
<th>M</th>
<th>N</th>
<th>O</th>
<th>P</th>
<th>Q</th>
<th>S</th>
<th>T</th>
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<tbody>
<tr>
<td>UHC102</td>
<td>302</td>
<td>135</td>
<td>140</td>
<td>238</td>
<td>85</td>
<td>162</td>
<td>71</td>
<td>40</td>
<td>76</td>
<td>90</td>
<td>130</td>
<td>155.5</td>
<td>191</td>
<td>28</td>
<td>200</td>
<td>96</td>
<td>160</td>
<td>136</td>
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<tr>
<td>UHC122</td>
<td>443</td>
<td>179</td>
<td>208</td>
<td>238</td>
<td>85</td>
<td>208</td>
<td>112</td>
<td>42</td>
<td>96</td>
<td>130</td>
<td>155.5</td>
<td>191</td>
<td>28</td>
<td>200</td>
<td>96</td>
<td>160</td>
<td>136</td>
<td></td>
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<tr>
<td>UMI300</td>
<td>539</td>
<td>248</td>
<td>257</td>
<td>238</td>
<td>85</td>
<td>257</td>
<td>120</td>
<td>40.5</td>
<td>112</td>
<td>130</td>
<td>191</td>
<td>155.5</td>
<td>200</td>
<td>96</td>
<td>160</td>
<td>136</td>
<td>297</td>
<td>136</td>
</tr>
</tbody>
</table>
Dimensions and weights

1) Round air filter (optional)
2) Gas inlet (Y)
3) Air press. switch connection
4) Name plate
5) Burner mounting holes 4 x ø13
6) Gas pressure test connection
7) Air pressure test connection
8) Observation port
9) Rp1/2 flame detector connection
10) Spark ignitor [1]
11) Combustion air inlet
12) Gas inlet (Z)
13) Rp1/2 flame detector connection
14) For size 150 & 300 = 4 x M6
   for size 600 & larger = 4 x M8
15) Discharge sleeve
   [1] spark ignitor 90° rotated (counter-clockwise) when looking into flame direction) on VALUPAK® 300 burner

### Dimensions in mm unless stated otherwise

| VALUPAK® | Burner size | A   | B   | C   | D   | E   | F Ø | G Ø | H   | J   | K Ø | L   | M   | N   | O   | P   | Q   | R   | S   | T   | U   | V   | W   | Y   | Rp  | Z   |
|----------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|          | 150         | 435 | 86  | 184 | 238 | 200 | 160 | 110 | 208 | 215 | 120 | 323 | 230 | 184 | 214 | 177 | 74  | 96  | 115 | 178 | 435 | 116 | 89  | 3/4 | 3/4 |
|          | 300         | 455 | 84  | 198 | 237 | 200 | 213 | 120 | 226 | 230 | 130 | 344 | 235 | 226 | 264 | 190 | 94  | 112 | 130 | 186 | 455 | 126 | 70  | 1   | 1   |
|          | 600         | 547 | 137 | 216 | 273 | 200 | 263 | 144 | 293 | 282 | 170 | 401 | 286 | 318 | 225 | 115 | 147 | 170 | 248 | 547 | 182 | 77  | 1-1/4| 1-1/4|
|          | 1000        | 592 | 112 | 237 | 372 | 200 | 314 | 144 | 293 | 282 | 170 | 446 | 305 | 340 | 374 | 208 | 115 | 147 | 170 | 248 | 592 | 157 | 150 | 1-1/2 | 1-1/2 |

[1] For LPG C=241 and Z=Rp 1.1/4
[2] 300 mm optional available
Applications

Specifically designed for applications where burners are used under balanced pressure conditions such as in textile machines, printing machines and many other types of dryers.

Options

- round air filter
- single phase motor for sizes 60, 150 and 300
- long discharge sleeve 300 mm
- control motor
- flame rod or UV scanner

Application example MAXON VALUPAK® 600 burner (gas)

Read VALUPAK® instructions for complete information on VALUPAK® burners