NO MORE ENERGY WASTE WITH VARIABLE SPEED COMPRESSORS

R290
NLV-CN COMPRESSORS

GLOBAL VOLTAGE RANGE
WIDE OPERATING VOLTAGE RANGE
NEW 105N4760 CONTROLLER CAN BE USED FOR ALL VOLTAGES AND FREQUENCIES GLOBALLY

up to 40%
ENERGY REDUCTION
POSSIBLE WITH VARIABLE SPEED CONTROL IN SUPERMARKET AND CONVENIENCE STORE CABINETS, COMPARED TO NON-OPTIMISED COMPRESSORS.

IP54
HIGH PROTECTION CLASS
AGAINST DUST AND WATER JETS

www.secop.com
SETTING THE STANDARD
Secop’s variable speed NLV propane compressor solution provides perfect cooling efficiency, tailor-made features, and easy integration within a single unit while ensuring considerable energy savings. It is the right choice if you are looking for a green solution using the environmentally-friendly refrigerant propane (R290) with a low global warming potential (GWP 3).

The new °CCD® controller features a high IP54 protection class and easy integration by using speed control through Adaptive Energy Optimization (AEO), frequency signal or serial communication. Only the variable speed design can obtain energy savings of up to 40% when compared to fixed speed compressors in on/off operation mode.

Benefits
- Energy savings of up to 40%
- IP54 controller housing
- Suitable for LBP and MBP applications
- High starting torque
- Easy customization via TOOL4COOL® software

### General (code numbers)
<table>
<thead>
<tr>
<th>NLV8.0CN</th>
<th>NLV10CN</th>
<th>NLV12.6CN</th>
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<tr>
<td>Compressor connectors: metric</td>
<td>105H7800</td>
<td>105H7801</td>
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<td>Approvals</td>
<td>105H7000</td>
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<td>Electronic unit - Standard</td>
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<td>Electronic unit - Multi Voltage</td>
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### Application
- Electronic unit - Standard
  - LBP/MBP
  - Evaporating temperature °C (°F) -40 to 7.2 (40 to 45)
  - Voltage range / frequency V/Hz 180 - 270 / 50/60
  - Speed range rpm 2000 - 4500

- Electronic unit - Multi Voltage
  - LBP/MBP
  - Evaporating temperature °C (°F) -40 to 7.2 (40 to 45)
  - Voltage range / frequency V/Hz 90 - 270 / 50/60
  - Speed range rpm 90 - 270 / 50/60

### Performance data ASHRAE LBP [115/220 V, 50/60 Hz • fan cooling] @ -23.3 °C (10 °F) evaporating temperature

<table>
<thead>
<tr>
<th>Speed</th>
<th>2000</th>
<th>2500</th>
<th>3000</th>
<th>4500</th>
<th>2000</th>
<th>2500</th>
<th>3000</th>
<th>4500</th>
<th>2000</th>
<th>2500</th>
<th>3000</th>
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<tbody>
<tr>
<td>Cooling capacity W</td>
<td>266</td>
<td>346</td>
<td>384</td>
<td>358</td>
<td>352</td>
<td>439</td>
<td>514</td>
<td>749</td>
<td>422</td>
<td>541</td>
<td>653</td>
<td>938</td>
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<tr>
<td>BTU/h</td>
<td>907</td>
<td>1182</td>
<td>1313</td>
<td>1905</td>
<td>1202</td>
<td>1498</td>
<td>1756</td>
<td>2559</td>
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<td>1844</td>
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<td>3204</td>
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<tr>
<td>Power consumption W</td>
<td>153</td>
<td>188</td>
<td>217</td>
<td>324</td>
<td>203</td>
<td>243</td>
<td>289</td>
<td>425</td>
<td>251</td>
<td>309</td>
<td>371</td>
<td>466</td>
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<tr>
<td>COP</td>
<td>1.73</td>
<td>1.64</td>
<td>1.76</td>
<td>1.72</td>
<td>1.74</td>
<td>1.81</td>
<td>1.87</td>
<td>1.76</td>
<td>1.68</td>
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<td>1.76</td>
<td>1.66</td>
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<tr>
<td>EER</td>
<td>5.91</td>
<td>6.28</td>
<td>5.88</td>
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<td>5.75</td>
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</tr>
</tbody>
</table>

**Test conditions**
- Condensing temperature: 54.4 °C (130 °F)
- Suction gas temperature: 32.2 °C (90 °F)
- Ambient temperature: 32.2 °C (90 °F)
- Liquid temperature: 32.2 °C (90 °F)

### Performance data ASHRAE MBP [115/220 V, 50/60 Hz • fan cooling] @ -6.7 °C (20 °F) evaporating temperature

<table>
<thead>
<tr>
<th>Speed</th>
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<th>3000</th>
<th>4500</th>
<th>2000</th>
<th>2500</th>
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<th>4500</th>
<th>2000</th>
<th>2500</th>
<th>3000</th>
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</thead>
<tbody>
<tr>
<td>Cooling capacity W</td>
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<td>616</td>
<td>718</td>
<td>1049</td>
<td>636</td>
<td>781</td>
<td>929</td>
<td>1357</td>
<td>753</td>
<td>952</td>
<td>1137</td>
<td>1675</td>
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<tr>
<td>BTU/h</td>
<td>1671</td>
<td>2103</td>
<td>2453</td>
<td>3581</td>
<td>2172</td>
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<td>4635</td>
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<td>3250</td>
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<td>5719</td>
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<tr>
<td>Power consumption W</td>
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<td>262</td>
<td>306</td>
<td>458</td>
<td>289</td>
<td>341</td>
<td>408</td>
<td>612</td>
<td>348</td>
<td>441</td>
<td>520</td>
<td>818</td>
</tr>
<tr>
<td>COP</td>
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<td>2.35</td>
<td>2.29</td>
<td>2.21</td>
<td>2.29</td>
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<tr>
<td>EER</td>
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<td>7.57</td>
<td>7.40</td>
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</tbody>
</table>

**Test conditions**
- Condensing temperature: 54.4 °C (130 °F)
- Suction gas temperature: 35 °C (95 °F)
- Ambient temperature: 35 °C (95 °F)
- Liquid temperature: 44.1 °C (115 °F)

### Dimensions
- Compressor height mm (in.) A 203 (7.99)
- B 197 (7.76)
- Suction connector location/D. mm (in.) | angle C 8.2 | 15°
- Process connector location/D. mm (in.) | angle D 6.2 | 25°
- Discharge connector location/D. mm (in.) | angle E 6.2 | 21°
- Conn. tolerance I.D. mm ±0.09

Note: Drawing shows controller 105N4710. Controller 105N4760 has a slightly larger heatsink.