



## COMPRESSOR DATA SHEET

**In Accordance with Federal Uniform Test Method  
for Certain Lubricated Air Compressors**

**Rotary Compressor: Variable Frequency Drive**

| MODEL DATA - FOR COMPRESSED AIR |  |                                |   |
|---------------------------------|--|--------------------------------|---|
| 1                               | Manufacturer:  | <b>Atlas Copco</b>             |   |
| 2                               | Model Number:  | <b>GA90VSD+</b>                | Date: <b>11/30/2020</b>                   |
|                                 | <input checked="" type="checkbox"/> Air-cooled <input type="checkbox"/> Water-cooled   |                                | Type: <b>Screw</b>                        |
|                                 |  |                                | # of Stages: <b>1</b>                     |
| 3                               | Full Load Operating Pressure <sup>b</sup>  | <b>102</b>                     | psig <sup>b</sup>                         |
| 4                               | Drive Motor Nominal Rating   | <b>125</b>                     | hp  |
| 5                               | Drive Motor Nominal Efficiency   | <b>96</b>                      | percent                                   |
| 6                               | Fan Motor Nominal Rating (if applicable)   | <b>2.6</b>                     | hp  |
| 7                               | Fan Motor Nominal Efficiency   | <b>79</b>                      | percent                                   |
| 8*                              | Input Power (kW)   | Capacity (acfm) <sup>a,d</sup> | Specific Power (kW/100 acfm) <sup>d</sup> |
|                                 | <b>109.1</b> Max   | <b>648.1</b>                   | <b>16.8</b>                               |
|                                 | <b>78.2</b>  | <b>480.8</b>                   | <b>16.3</b>                               |
|                                 | <b>58.8</b>  | <b>361.7</b>                   | <b>16.3</b>                               |
|                                 | <b>37.8</b>  | <b>223.9</b>                   | <b>16.9</b>                               |
|                                 | <b>27.2</b>  | <b>150.3</b>                   | <b>18.1</b>                               |
|                                 | <b>20.6</b> Min  | <b>103.6</b>                   | <b>19.9</b>                               |
| 9*                              | Total Package Input Power at Zero Flow <sup>c, d</sup>   | <b>0.0</b>                     | kW  |
| 10                              | Isentropic Efficiency  | <b>81.60</b>                   | %   |
| 11                              | <p style="text-align: center;"><b>Note: Graph is only a visual representation of the data in Section 8</b><br/>Note: Y-Axis Scale, 10 to 35, + 5kW/100acfm increments if necessary above 35<br/>X-Axis Scale, 0 to 25% over maximum capacity</p> |                                |   |

\*For models that are tested in the CAGI Performance Verification Program, these items are verified by the third party administrator. Consult CAGI website for a list of participants in the third party verification program: [www.cagi.org](http://www.cagi.org)

**NOTES:**

- a. Measured at the discharge terminal point of the compressor package in accordance with ISO 1217, Annex E; ACFM is actual cubic feet per minute at inlet conditions.
- b. The operating pressure at which the Capacity (Item 8) and Electrical Consumption (Item 8) were measured for this data sheet.
- c. No Load Power. In accordance with ISO 1217, Annex E, if measurement of no load power equals less than 1%, manufacturer may state "not significant" or "0" on the test report.
- d. Tolerance is specified in ISO 1217, Annex E, as shown in table below:

NOTE: The terms "power" and "energy" are synonymous for purposes of this document.

| Volume Flow Rate at specified conditions |                       | Volume Flow Rate | Specific Energy Consumption | No Load / Zero Flow Power |
|--|-----------------------|------------------|-----------------------------|---------------------------|
| m <sup>3</sup> / min                     | ft <sup>3</sup> / min | %                | %                           |                           |
| Below 0.5                                | Below 17.6            | +/- 7            | +/- 8                       | +/- 10%                   |
| 0.5 to 1.5                               | 17.6 to 53            | +/- 6            | +/- 7                       |                           |
| 1.5 to 15                                | 53 to 529.7           | +/- 5            | +/- 6                       |                           |
| Above 15                                 | Above 529.7           | +/- 4            | +/- 5                       |                           |



ROT 030.1