## **COMPRESSOR DATA SHEET**

**Rotary Compressor: Variable Frequency Drive** 

|     | MODEL DATA - FOR C  |                        |   |   |  |  |
|-----|---|------------------------|---|---|--|--|
| 1   | Manufacturer: Atlas Copco   |                        |   |   |  |  |
| 2   | Model Number: ZT 90VSD-125  |                        | Date:   | 12-17-2018                                |  |  |
|     | x Air-cooled Water-cooled   |                        | Type:   | Screw                                     |  |  |
|     | Oil-injected x Oil-free   |                        | # of Stages:  | 2   |  |  |
| 3   | Rated Operating Pressure  |                        | 125   | psig <sup>b</sup>                         |  |  |
| 4   | Drive Motor Nominal Rating  |                        | 121   | hp  |  |  |
| 5   | Drive Motor Nominal Efficiency  | 93.5                   | percent   |   |  |  |
| 6   | Fan Motor Nominal Rating (if applicable)  |                        | 5.4   | hp  |  |  |
| 7   | Fan Motor Nominal Efficiency  | ominal Efficiency 81.3 |   | percent                                   |  |  |
|     | Input Power (kW)  |                        | Capacity (acfm) <sup>a,d</sup>  | Specific Power (kW/100 acfm) <sup>d</sup> |  |  |
|     | 121.1 N   | Лах                    | 498   | 24.3                                      |  |  |
| 0.* | 100.2   |                        | 413   | 24.3                                      |  |  |
| 8*  | 82.2  |                        | 328   | 25.1                                      |  |  |
|     | 65.7  |                        | 243   | 27.0                                      |  |  |
|     | 50.3  | Min                    | 157   | 32.0                                      |  |  |
|     |   |                        |   |   |  |  |
| 9*  | Total Package Input Power at Zero Flow <sup>c, d</sup>  |                        | 15.3  | kW  |  |  |
|     | 45.0  |                        |   |   |  |  |
|     | 40.0  |                        |   |   |  |  |
|     |   |                        |   |   |  |  |
|     | 35.0  |                        |   |   |  |  |
| 10  | (KW/100 ACFM) 30.0 - Specific Power |                        |   |   |  |  |
|     | 98 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9  | 100 Mary 25.0          |   |   |  |  |
|     | 20.0  |                        |   |   |  |  |
|     | 20.0  |                        |   |   |  |  |
|     | 15.0  |                        |   |   |  |  |
|     | 10.0 0 50 100 150 200 250 Connection  | 30                     |   | 00 550 600                                |  |  |
|     | Note: Graph is only a visual re Note: Y-Axis Scale, 10 to 35, + 5kW X-Axis Scale, 0 to 25   | presen<br>/100ac       | tation of the data in Section 8<br>fm increments if necessary above 3 | 35  |  |  |

\*For models that are tested in the CAGI Performance Verification Program, these items are verified by program administrator Consult CAGI website for a list of participants in the third party verification program: <a href="https://www.cagi.org">www.cagi.org</a>

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.

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- b. The operating pressure at which the Capacity and Electrical Consumption 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<br>Consumption | No Load / Zero Flow<br>Power |
|--|------------------|------------------|--------------------------------|------------------------------|
| m <sup>3</sup> /min                      | <u>ft3 / min</u> | %                | %                              |                              |
| Below 0.5                                | Below 15         | +/- 7            | +/- 8                          | ]                            |
| 0.5 to 1.5                               | 15 to 50         | +/- 6            | +/- 7                          | +/- 10%                      |
| 1.5 to 15                                | 50 to 500        | +/- 5            | +/- 6                          |                              |
| Above 15                                 | Above 500        | +/- 4            | +/- 5                          |                              |

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This form was developed by the Compressed Air and Gas Institute for the use of its members. CAGI has not independently verified the reported data.