



# 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>Ingersoll Rand</b>                                                                                                                                                                                  |                                |                                           |
| 2  | Model Number: <b>RS18ne-A145</b>                                                                                                                                                                                     | Date:                          | <b>4/13/2020</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>100</b>                     | psig <sup>b</sup>                         |
| 4  | Drive Motor Nominal Rating                                                                                                                                                                                           | <b>25</b>                      | hp                                        |
| 5  | Drive Motor Nominal Efficiency                                                                                                                                                                                       | <b>92.6</b>                    | percent                                   |
| 6  | Fan Motor Nominal Rating (if applicable)                                                                                                                                                                             | <b>0.7</b>                     | hp                                        |
| 7  | Fan Motor Nominal Efficiency                                                                                                                                                                                         | <b>79.5</b>                    | percent                                   |
| 8* | Input Power (kW)                                                                                                                                                                                                     | Capacity (acfm) <sup>a,d</sup> | Specific Power (kW/100 acfm) <sup>d</sup> |
|    | <b>23.2</b>                                                                                                                                                                                                          | <b>123.0</b>                   | <b>18.87</b>                              |
|    | <b>20.4</b>                                                                                                                                                                                                          | <b>106.9</b>                   | <b>19.06</b>                              |
|    | <b>17.5</b>                                                                                                                                                                                                          | <b>91.8</b>                    | <b>19.11</b>                              |
|    | <b>14.8</b>                                                                                                                                                                                                          | <b>76.6</b>                    | <b>19.34</b>                              |
|    | <b>12.2</b>                                                                                                                                                                                                          | <b>61.0</b>                    | <b>20.00</b>                              |
|    | <b>9.9</b>                                                                                                                                                                                                           | <b>47.0</b>                    | <b>21.17</b>                              |
| 9* | Total Package Input Power at Zero Flow <sup>c, d</sup>                                                                                                                                                               | <b>0</b>                       | kW                                        |
| 10 | Isentropic Efficiency                                                                                                                                                                                                | <b>68.1</b>                    | percent                                   |
| 11 | <p><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 are the items verified by the third party program administrator

Consult CAGI website for a list of participants in the third party verification program:

[www.cagi.org](http://www.cagi.org)

NOTES:

- Measured at the discharge terminal point of the compressor package in accordance with ISO 1217, Annex C; ACFM is actual cubic feet per minute at inlet conditions.
- The operating pressure at which the Capacity (item 8) and Electrical Consumption (item 8) were measured for this data sheet.
- 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.
- Tolerance is specified in ISO 1217, Annex C, as shown in table below.

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



Member

| Volume Flow Rate<br>at specified conditions |                       | Volume Flow Rate | Specific Energy<br>Consumption | No Load / Zero<br>Flow Power |
|---------------------------------------------|-----------------------|------------------|--------------------------------|------------------------------|
| $\frac{m^3}{min}$                           | 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                          |                              |

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