

## **COMPRESSOR DATA SHEET**

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

## **Rotary Compressor: Fixed Speed**

| MODEL DATA - FOR COMPRESSED AIR |                                                                                              |              |                         |  |  |  |
|---------------------------------|----------------------------------------------------------------------------------------------|--------------|-------------------------|--|--|--|
| 1                               | Manufacturer: Kaishan Compressor USA                                                         |              |                         |  |  |  |
|                                 | Model Number: KRSD-20-100                                                                    | Date:        | 6/30/2020               |  |  |  |
| 2                               | X Air-cooled Water-cooled                                                                    | Type:        | Screw                   |  |  |  |
|                                 |                                                                                              | # of Stages: | 1                       |  |  |  |
| 3*                              | Rated Capacity at Full Load Operating Pressure a, e                                          | 74.0         | acfm <sup>a,e</sup>     |  |  |  |
| 4*                              | Full Load Operating Pressure <sup>b</sup>                                                    | 100          | psig <sup>b</sup>       |  |  |  |
| 5                               | Maximum Full Flow Operating Pressure                                                         | 100          | psig <sup>c</sup>       |  |  |  |
| 6                               | Drive Motor Nominal Rating                                                                   | 20           | hp                      |  |  |  |
| 7                               | Drive Motor Nominal Efficiency                                                               | 91.5         | percent                 |  |  |  |
| 8                               | Fan Motor Nominal Rating (if applicable)                                                     | 0.75         | hp                      |  |  |  |
| 9                               | Fan Motor Nominal Efficiency                                                                 | 79           | percent                 |  |  |  |
| 10*                             | Total Package Input Power at Zero Flow <sup>e</sup>                                          | 5.2          | kW <sup>e</sup>         |  |  |  |
| 11                              | Total Package Input Power at Rated Capacity and Full Load<br>Operating Pressure <sup>d</sup> | 14.70        | $kW^d$                  |  |  |  |
| 12*                             | Package Specific Power at Rated Capacity and Full Load<br>Operating Pressure <sup>e</sup>    | 19.86        | kW/100 cfm <sup>e</sup> |  |  |  |
| 13                              | Isentropic Efficiency                                                                        | 66.90        | Percent                 |  |  |  |

\*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: <u>www.cagi.org</u>

e. Tolerance is specified in ISO 1217, Annex C, as shown in table below:

NOTES: a. 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.



b. The operating pressure at which the Capacity (Item 3) and Electrical Consumption (Item 11) were measured for this data sheet.

c. Maximum pressure attainable at full flow, usually the unload pressure setting for load/no load control or the maximum pressure attainable before capacity control begins. May require additional power.

d. Total package input power at other than reported operating points will vary with control strategy.

Member

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

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

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12/19 Rev 3 This form was developed by the Compressed Air and Gas Institute for the use of its members participating in the PVP. CAGI has not independently verified the reported data.