

**MATTEI ROTARY VANE AIR COMPRESSOR DATA SHEET - FIXED-SPEED**

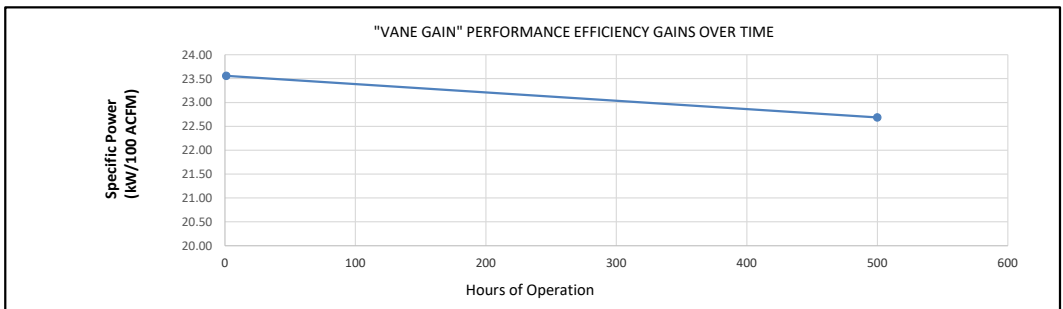
Model Number:	<b>RVD 7 HX</b>	Date:	<b>10-Feb-2021</b>
Cooling Media:	Air-cooled <input checked="" type="checkbox"/>	Water-cooled <input type="checkbox"/>	Oil Injection <input checked="" type="checkbox"/>
Inlet Control Scheme:	Load/No Load <input checked="" type="checkbox"/>	Modulation <input checked="" type="checkbox"/>	Inverter <input type="checkbox"/>
Starting System:	Full Voltage <input type="checkbox"/>	Star-Delta <input checked="" type="checkbox"/>	Soft-Start <input type="checkbox"/>

**PERFORMANCE SPECIFICATIONS: SPEED, POWER, PRESSURE**

Compression Module Rotational Speed	<b>1800</b>	rpm
Nominal Drive Motor Rotational Speed	<b>1800</b>	rpm
Drive Motor Nominal Rating	<b>10</b>	hp
Drive Motor Nominal Efficiency	<b>91.7</b>	percent
Maximum Full Flow Operating Pressure <sup>c</sup>	<b>145</b>	psig <sup>c</sup>
Full Load Operating Pressure <sup>b</sup>	<b>137</b>	psig <sup>b</sup>
Fan Motor Nominal Rating (if applicable)	<b>0.23</b>	hp
Fan Motor Nominal Efficiency	<b>65.0</b>	percent

**"VANE GAIN" PERFORMANCE EFFICIENCY GAINS OVER TIME<sup>g</sup>**

Efficiency Improvement timeline	<b>0</b>	<b>500</b>		hours
Rated Capacity at Full Load Operating Pressure <sup>a</sup>	<b>39.9</b>	<b>40.2</b>		acfm <sup>a</sup>
Total Package Input Power at Rated Capacity and Full Load Operating Pressure <sup>d</sup>	<b>9.40</b>	<b>9.12</b>		kW <sup>d</sup>
Specific Package Input Power at Rated Capacity and Full Load Operating Pressure	<b>23.56</b>	<b>22.69</b>		kW/100 cfm
Isentropic Efficiency at Rated Capacity and Full Load Operating Pressure <sup>f</sup>	<b>66.95</b>	<b>69.52</b>		Percent of ideal compression
Total Package Input Power at Zero Flow	<b>2.59</b>	<b>2.52</b>		Kw



**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 Rated Capacity and Total Package Input Power Energy Consumption at Rated Capacity and Full Load Operating Pressure were measured.
- 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 inlet control scheme.
- f. Isentropic Efficiency: real performance at flow and pressure per ISO 1217 compared to an ideal compression process.
- g. VANE GAIN: Proven efficiency and output performance gains as the blades season through normal operation.

