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

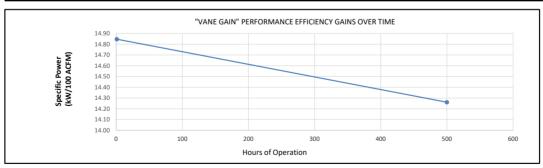
Model Number:	RVX 75 UPW_IE 3		Date	: 6-May-2022
Cooling Media:	Air-cooled		Water-cooled X	Oil Injection X
Inlet Control Scheme:	Load/No Load	Х	Modulation	Inverter
Starting System:	Full Voltage		Star-Delta	Soft-Start

#### PERFORMANCE SPECIFICATIONS: SPEED, POWER, PRESSURE

Compression Module Rotational Speed	900	rpm
Nominal Drive Motor Rotational Speed	1200	rpm
Drive Motor Nominal Rating	100	hp
Drive Motor Nominal Efficiency	94.9	percent
Maximum Full Flow Operating Pressure <sup>c</sup>	102	psig <sup>c</sup>
Full Load Operating Pressure b	123	psig b
Fan Motor Nominal Rating (if applicable)	1.1	hp
Fan Motor Nominal Efficiency	n/a	percent

# "VANE GAIN" PERFORMANCE EFFICIENCY GAINS OVER TIME<sup>8</sup>

Efficiency Improvement timeline	0	500	hours
Rated Capacity at Full Load Operating Pressure a	560.8	566.4	acfm <sup>a</sup>
Total Package Input Power at Rated Capacity and Full Load Operating Pressure <sup>d</sup>	83.26	80.78	kW <sup>d</sup>
Specific Package Input Power at Rated Capacity and Full Load Operating Pressure	14.8	14.3	kW/100 cfm
Isentropic Efficiency at Rated Capacity and Full Load Operating Pressure <sup>f</sup>	90.90	94.60	Percent of ideal compression
Total Package Input Power at Zero Flow	15.10	14.70	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.



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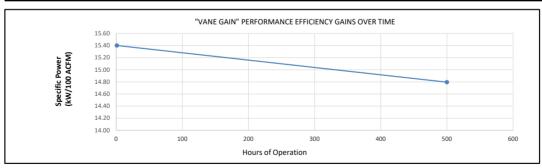
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Inlet Control Scheme:	Load/No Load	Х	Modulation	Inverter
Starting System:	Full Voltage		Star-Delta	Soft-Start

#### PERFORMANCE SPECIFICATIONS: SPEED, POWER, PRESSURE

Compression Module Rotational Speed	900	rpm
Nominal Drive Motor Rotational Speed	1200	rpm
Drive Motor Nominal Rating	100	hp
Drive Motor Nominal Efficiency	94.9	percent
Maximum Full Flow Operating Pressure <sup>c</sup>	108	psig <sup>c</sup>
Full Load Operating Pressure b	123	b psig
Fan Motor Nominal Rating (if applicable)	1.1	hp
Fan Motor Nominal Efficiency	n/a	percent

# "VANE GAIN" PERFORMANCE EFFICIENCY GAINS OVER TIME<sup>8</sup>

Efficiency Improvement timeline	0	500	hours
Rated Capacity at Full Load Operating Pressure a	558.7	564.3	acfm <sup>a</sup>
Total Package Input Power at Rated Capacity and Full Load Operating Pressure <sup>d</sup>	86.05	83.49	kW <sup>d</sup>
Specific Package Input Power at Rated Capacity and Full Load Operating Pressure	15.4	14.8	kW/100 cfm
Isentropic Efficiency at Rated Capacity and Full Load Operating Pressure <sup>f</sup>	90.90	94.60	Percent of ideal compression
Total Package Input Power at Zero Flow	15.10	14.70	Kw



## NOTES:

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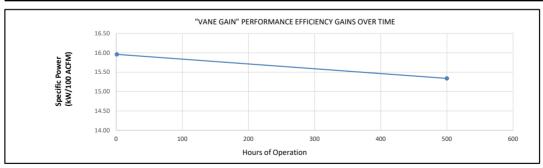
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Starting System:	Full Voltage		Star-Delta	Soft-Start

#### PERFORMANCE SPECIFICATIONS: SPEED, POWER, PRESSURE

Compression Module Rotational Speed	900	rpm
Nominal Drive Motor Rotational Speed	1200	rpm
Drive Motor Nominal Rating	100	hp
Drive Motor Nominal Efficiency	94.9	percent
Maximum Full Flow Operating Pressure <sup>c</sup>	116	psig <sup>c</sup>
Full Load Operating Pressure b	123	psig b
Fan Motor Nominal Rating (if applicable)	1.1	hp
Fan Motor Nominal Efficiency	n/a	percent

# "VANE GAIN" PERFORMANCE EFFICIENCY GAINS OVER TIME<sup>8</sup>

Efficiency Improvement timeline	0	500	hours
Rated Capacity at Full Load Operating Pressure a	556.5	561.8	acfm <sup>a</sup>
Total Package Input Power at Rated Capacity and Full Load Operating Pressure <sup>d</sup>	88.83	86.19	kW <sup>d</sup>
Specific Package Input Power at Rated Capacity and Full Load Operating Pressure	16.0	15.3	kW/100 cfm
Isentropic Efficiency at Rated Capacity and Full Load Operating Pressure <sup>f</sup>	90.90	94.60	Percent of ideal compression
Total Package Input Power at Zero Flow	15.10	14.70	Kw



# NOTES:

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