## MATTEI ROTARY VANE AIR COMPRESSOR DATA SHEET - VARIABLE FREQUENCY DRIVE

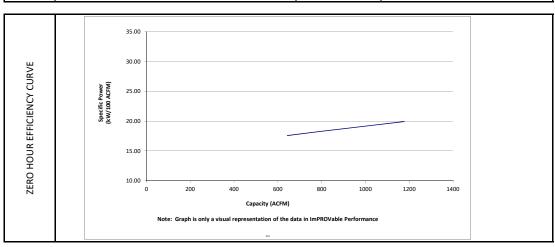
Model Number:	OPTIMA 200			Date:	16-Jan-2017
Cooling Media:	Air-cooled	Х	Water-cooled		Oil Injection X
Inlet Control Scheme:	Load/No Load		Modulation		Inverter X
Starting System:	Full Voltage		Star-Delta		Soft-Start x

## PERFORMANCE SPECIFICATIONS: SPEED, POWER, PRESSURE

Compression Module Rotational Speed	800 ÷ 1600	rpm
Nominal Drive Motor Rotational Speed	800 ÷ 1600	rpm
Drive Motor Nominal Rating	275	hp
Drive Motor Nominal Efficiency	96.2	percent
Maximum Working Pressure	145	psig <sup>c</sup>
Rated Operating Pressure	116	psig
Fan Motor Nominal Rating (if applicable)	5.90	hp
Fan Motor Nominal Efficiency	-	percent

## Improvable Performance energy efficiency

ZERO HOUR EFFICIENCY	Input Power (kW)	Inverter	Caracia (a.c., a,d	Isentropic	Specific Power
		Range <sup>e</sup>	Capacity (acfm) <sup>a,d</sup>	Efficiency <sup>f</sup>	(kW/100 acfm) <sup>d</sup>
	234.43	Max	1176.9	72.43	19.92
	218.02		1110.6	73.49	19.63
	186.38		977.7	75.68	19.06
	156.03		844.2	78.05	18.48
	127.07		710.4	80.65	17.89
	113.03	Min	643.1	82.08	17.58
	Total Package Input Power at Zero Flow <sup>c, d</sup>		21.39		kW



NOTES:

- a. Measured at the discharge terminal point of the compressor package in accordance with ISO 1217, Annex E;
- 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.
   b. The operating pressure at which the Capacity and Electrical Consumption 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%,
   c. manufacturer may state "not significant" or "0" on the test report.
   Tolerance is specified in ISO 1217, Annex E, as shown in table below:

- d. NOTE: The terms "power" and "energy" are synonymous for purposes of this document.
  e. Superior energy efficiency at flows below Min Capacity in leveraging Load/No load operation and air system storage.
  f. Isentropic Efficiency: real performance at flow and pressure as a percent compared to an ideal compression process.

