MATTEI ROTARY VANE AIR COMPRESSOR DATA SHEET - FIXED-SPEED

Model Number:	**ERC 18 HX**				Date:	**2-Jan-2025**
Cooling Media:	Air-cooled	X	Water-cooled		Oil Injection	X
Inlet Control Scheme:	Load/No Load	X	Modulation	X	Inverter	
Starting System:	Full Voltage		Star-Delta	X	Soft-Start	

PERFORMANCE SPECIFICATIONS: SPEED, POWER, PRESSURE

Compression Module Rotational Speed	**1800**	rpm
Nominal Drive Motor Rotational Speed	**1800**	rpm
Drive Motor Nominal Rating	**25**	hp
Drive Motor Nominal Efficiency	**93.6**	percent
Maximum Full Flow Operating Pressure [c]	**145**	psig [c]
Full Load Operating Pressure [b]	**137**	psig [b]
Fan Motor Nominal Rating (if applicable)	**0.47**	hp
Fan Motor Nominal Efficiency	**n/a**	percent

"VANE GAIN" PERFORMANCE EFFICIENCY GAINS OVER TIME[g]

Efficiency Improvement timeline		**500**		hours
Rated Capacity at Full Load Operating Pressure [a]		**92.2**		acfm [a]
Total Package Input Power at Rated Capacity and Full Load Operating Pressure[d]		**21.80**		kW[d]
Specific Package Input Power at Rated Capacity and Full Load Operating Pressure		**23.64**		kW/100 cfm
Isentropic Efficiency at Rated Capacity and Full Load Operating Pressure[f]		**70.10**		Percent of ideal compression
Total Package Input Power at Zero Flow		**4.51**		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.

mattei®
NO VANE. NO GAIN.