



ENGINEERING DATA SHEET

R4i (IE3) Single Phase 60Hz

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Sheet: 1 of 1
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Model Name		R4i-X110	R4i-X125	R4i-X145
GENERAL PERFORMANCE DATA				
Maximum Operating Pressure (2)	barg (psig)	7.5 (110)	8.5 (125)	10.0 (145)
Rated Discharge Pressure	barg (psig)	7 (100)	8 (115)	9.5 (135)
Minimum Operating Pressure	barg (psig)	4.5 (65)	4.5 (65)	4.5 (65)
Capacity FAD (1)	m ³ /min (CFM)	0.55 (19.44)	0.48 (16.93)	0.40 (14.27)
Maximum Operating Ambient Temperature	°C (°F)		40 (104)	
Minimum Operating Ambient Temperature	°C (°F)		2 (35)	
Maximum System Temperature Setting	°C (°F)		109 (228)	
Nominal Power - Main Motor	kW (HP)		3.7 (5.0)	
Main Motor Efficiency (3)	Percent		85.0%	
Package Input Power - Air Cooled (4)	kW	5.26	5.29	5.32
Package Input Power - Air Cooled - No Loaded	kW	2.00	1.80	1.60
Specific Power - Air Cooled (4)(5)	kW/m ³ /min (kW/100cfm)	9.56 (27.06)	11.03 (31.25)	13.17 (37.28)
SOUND LEVEL (6)				
Standard Package - Air Cooled	dB(A)			69
COOLING DATA (@ Maximum Ambient Temperature & Maximum Discharge Pressure)				
Heat Removal Oil Cooler	kW (1000 Btu/hr)	3.8 (13.0)	3.9 (13.3)	3.9 (13.3)
Heat Removal Oil and Aftercooler	kW (1000 Btu/hr)	4.6 (15.7)	4.6 (15.7)	4.5 (15.4)
Additional Static Pressure	Pa (in H ₂ O)		See Document 23883374	
Fan Air Flow	m ³ /min (CFM)		34.0 (1200)	
Fan Motor Nominal Power	kW			0.3
Fan Motor Efficiency	Percent			71.0%
Cooling Air Temperature Rise	°C (°F)	14 (25)	14 (25)	14 (25)
Aftercooler CTD(7)	°C (°F)	5 (9)	5 (9)	5 (9)
AIR END DATA				
Male Rotor Speed	rpm	2348	2154	1931
Tip Speed Rotor	m/sec	9.13	8.37	7.51
Full Load Shaft Power	kW	4.40	4.42	4.45
COOLANT LUBRICATION DATA				
Total Coolant Capacity - Air Cooled	litres (US gal)			5 (1.32)
PIPING CONNECTIONS				
Air Discharge	Inches NPT			0.75
Package Automatic Condensate Drain(8)	Inches NPT			0.25
Coolant Drain - Hose Size	Inches			0.88
Diameter of Power Inlet	mm / inch		M32 gland cable (cable diameters 12-21mm / 0.47-82")	
DIMENSIONS & WEIGHT				
			Base Mounted	
Length / Width / Height	mm (inches)		960 (37.8) / 690 (27.2) / 1186.5 (46.7)	
Net Weight - Air Cooled	kg (lb.)		280 (618)	
GA Drawing Number - Air Cooled			24187775	
ELECTRICAL DATA ⁽¹⁴⁾				
			208V 1Φ	230V 1Φ
Motor Enclosure Protection			IP55	IP55
Full Load Package Current - Air Cooled (10)	Amps		33	32
Package Locked Rotor Current	Amps		390	389
Package Power Factor			0.94	0.94
Electrical Installation				
Recommended Supply Cable Size (11)	mm ² /Cu (AWG or kcmil)		4 (AWG10)	4 (AWG10)
Maximum Recommended Fuse Rating ⁽¹¹⁾⁽¹²⁾	Amps		63.0	63.0

Notes:

- (1) FAD (Free Air Delivery) is full package performance including all losses. Tested per ISO 1217 : 2009 Annex C
- (2) Maximum pressure at package discharge, value at which compressor will stop when unit operating at maximum target pressure
- (3) NEMA Premium efficiency motor
- (4) Measured at rated capacity and rated pressure
- (5) Specific power guaranteed in accordance with ISO 1217 : 2009 Annex C
- (6) Measured in free field conditions per ISO 2151 using Hemispherical Method; ducted inlet and outlet, with + 3 dB(A) tolerance.
- (7) 40% Relative Humidity Inlet Air and maximum speed (For alternate conditions contact Ingersoll Rand)
- (8) Auto drain with receiver only
- (10) Maximum current includes 10% additional current due to fouled filters and elements
- (11) 90°C copper cables. Always apply local electrical codes for sizing cables and fusing.
- (12) Time delay fuse recommended. Apply local electrical codes for fuse sizing
- (13) Coolant volumes listed are approximate. See operator manual for coolant fill procedure.
- (14) Voltage tolerance: (380V) ±6% ; (440, 460, 575V) ±10%

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