



ENGINEERING DATA SHEET

R37ne Total Air System (TAS) 60Hz

CCN: 24192577

Rev.: D

ECN: 1300120

Sheet: 1 of 2

Date: 25-Apr-2018

Model Name	R37NE-X-TAS					
GENERAL PERFORMANCE DATA						
Rated Discharge Pressure	barg (psig)	7 (100)	7.5 (110)	8 (115)	8.5 (125)	9.5 (135)
Minimum Operation Pressure	barg (psig)	4.5 (65)	4.5 (65)	4.5 (65)	4.5 (65)	4.5 (65)
Capacity FAD @ Max Speed (1)	m³/min (CFM)	6.12 (216)	6.01 (212)	5.81 (205)	5.65 (200)	5.49 (194)
Capacity FAD @ Min Speed (1)	m³/min (CFM)	1.64 (58)	1.67 (59)	1.67 (59)	1.70 (60)	1.76 (62)
Turndown Percentage	Percent	73%	72%	71%	70%	68%
Maximum Target Operating Pressure (2)	barg (psig)			9.5 (138)		
Maximum Operating Ambient Temperature	°C (°F)			46 (115)		
Minimum Operating Ambient Temperature	°C (°F)			2 (35)		
Maximum System Temperature Setting	°C (°F)			109 (228)		
Nominal Power - Main Motor	kW (HP)			37.00 (50)		
Main Drive Efficiency (3)	Percent			97.00%		
Main Motor Efficiency (3)	%			93.70%		
Pkg Input Power w/Fan and Dryer- Air Cooled (4)	kW	50.1	50.2	50.5	50.9	51.2
Specific Power - Air Cooled (4)(5)	kW/m³/min (kW/100cfm)	8.18 (23.16)	8.35 (23.65)	8.68 (24.6)	9.00 (25.5)	9.33 (26.43)
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)	35 (120)	36 (122)	36 (123)	37 (126)	37 (127)
Heat Removal Oil and Aftercooler	kW (1000 Btu/hr)	45 (154)	46 (156)	46 (157)	46 (158)	47 (159)
Additional Static Pressure (13)	Pa (in H2O)	See document 23883374				
Fan Air Flow	m³/min (cfm)	Nom: 65 (2295)		Max: 108 (3825)		
Fan Motor Nominal Power	kW	1.5				
Cooling Air Temperature Rise	°C (°F)	25 (44)	24 (43)	24 (43)	24 (42)	24 (43)
Aftercooler CTD(7)	°C (°F)	8 (15)	8 (15)	8 (15)	8 (15)	8 (15)
AIR END DATA						
Male Rotor Speed	rpm	4647	4575	4426	4297	4170
Tip Speed Rotor	m/sec	31.2	30.7	29.7	28.8	28.0
Full Load Shaft Power	kW	42.0	42.2	42.4	42.7	43.0
COOLANT LUBRICATION DATA						
Total Coolant Capacity - Air Cooled	litres (US gal)	26 (6.9)				
PIPING CONNECTIONS						
Air Discharge	Inches BSPT/NPT (9)	1.50				
Package Automatic Condensate Drain	Inches BSPT/NPT (9)	0.38				
Coolant Drain - Hose Size	Inches	0.88				
Diameter of Power Inlet	Inches	Up to 4.0" (removable plate)				
DIMENSIONS & WEIGHT						
			Base Mounted			
Length, Width, Height	mm (inches)	1947(77)/1114(44)/1635(64)				
Net Weight - Air Cooled	kg (lb.)	926(2041)				
GA Drawing Number - Air Cooled		24068652				
ELECTRICAL DATA						
		380V. 3Φ	460V. 3Φ	575V. 3Φ	440V. 3Φ	
Motor Protection		IP23 (ODP)				
Full Load Package Current - Air Cooled (10)	Amps	94.9	78.5	63.0	82.0	
Package Power Factor		0.93	0.93	0.93	0.93	
Electrical Installation						
Recommended Supply Cable Size (11)	mm²/Cu (AWG or kcmil)	50(1/0)	35(1)	35(1)	35(1)	
Maximum Recommended Fuse Rating (11)(12)	Amps	150	150	150	150	



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Refrigerated Dryer Data

Pressure Dew Point ISO Class (14)	°C (°F)		ISO Class 4
Refrigerant Weight of R-404a	Grams(oz)		1250(44)

Filter Data

		Particulate		Liquid
Filter Detail - at 21°C (70°F)	ISO Class	Filtration	ISO Class	Filtration
	2	0.01 micron	1	0.01 mg/m ³ (0.1 ppm)

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) At maximum speed and flow for the given package discharge pressure
- (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, with + 3 dB(A) tolerance.
- (7) 40% Relative Humidity Inlet Air and maximum speed (For alternate conditions contact IR)
- (9) BSPT or NPT, depending on regional standard
- (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) Fast Acting Class-J, T or Semiconductor type fuse required. Apply local electrical codes for fuse sizing
- (14) TAS units deliver ISO Class 1-4-2 quality air measured at steady state conditions in accordance with ISO 8573-1:2010, with inlet air to package of 25°C (77°F) and RH of 60%.

Product Improvement is a continuing goal at Ingersoll Rand. Design and specifications are subject to change without notice or obligation.