



R37ne

50Hz

ENGINEERING DATA SHEET

CCN: 24192403
 Rev.: B
 ECN: 82093
 Sheet: 1 of 1
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Model Name		R37NE-X7	R37NE-X7.5	R37NE-X8	R37NE-X8.5	R37NE-X9.5	R37NE-X10	
GENERAL PERFORMANCE DATA								
Rated Discharge Pressure	barg (psig)	7 (100)	7.5 (110)	8 (115)	8.5 (125)	9.5 (135)	10 (145)	
Minimum Operation Pressure	barg (psig)	4.5 (65)	4.5 (65)	4.5 (65)	4.5 (65)	4.5 (65)	4.5 (65)	
Capacity FAD @ Max Speed (1)	m ³ /min (CFM)	6.63 (234)	6.43 (227)	6.34 (224)	6.12 (216)	5.97 (211)	5.83 (206)	
Capacity FAD @ Min Speed (1)	m ³ /min (CFM)	1.64 (58)	1.67 (59)	1.67 (59)	1.70 (60)	1.76 (62)	1.78 (63)	
Turndown Percentage	Percent	75%	74%	74%	72%	71%	69%	
Maximum Target Operating Pressure (2)	barg (psig)				10 (145)			
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)	Percent				93.70%			
Package Input Power w/Fan - Air Cooled (4)	kW	48.4	48.4	48.4	48.4	48.4	48.4	
Specific Power - Air Cooled (4)(5)	kW/m ³ /min (kW/100cfm)	7.30 (20.7)	7.53 (21.3)	7.63 (21.6)	7.91 (22.4)	8.10 (22.9)	8.30 (23.5)	
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)	36 (123)	36 (123)	37 (125)	37 (125)	37 (127)	37 (127)	
Heat Removal Oil and Aftercooler	kW (1000 Btu/hr)	47 (160)	47 (161)	47 (161)	48 (162)	47 (162)	48 (162)	
Additional Static Pressure (13)	Pa (in H ₂ O)				See document 23883374			
Fan Air Flow	m ³ /min (cfm)		Nom: 65 (2295)		Max: 108 (3825)			
Fan Motor Nominal Power	kW				1.5			
Cooling Air Temperature Rise	°C (°F)	25 (45)	24 (43)	23 (42)	23 (42)	23 (42)	23 (42)	
Aftercooler CTD, 60 Hz (7)	°C (°F)	8 (15)	8 (15)	8 (15)	8 (15)	8 (15)	8 (15)	
AIR END DATA								
Male Rotor Speed	rpm	4800	4647	4575	4426	4297	4170	
Tip Speed Rotor	m/sec	32.2	31.2	30.7	29.7	28.8	28.0	
Full Load Shaft Power	kW	43.1	43.1	43.1	43.1	43.1	43.1	
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	mm / inch				Up to 4.0" (removable plate)			
DIMENSIONS & WEIGHT								
					Base Mounted			
Length, Width, Height	mm (inches)				1947(77)/1114(44)/1607(63)			
Net Weight - Air Cooled	kg (lb.)				776(1711)			
GA Drawing Number - Air Cooled					24068652			
ELECTRICAL DATA								
			380V. 3Φ	400V. 3Φ	415V. 3Φ	440V. 3Φ		
Motor Protection					IP23 (ODP)			
Full Load Package Current - Air Cooled (10)	Amps		89	85	82	77		
Package Power Factor			0.93	0.93	0.93	0.93		
Electrical Installation								
Recommended Supply Cable Size (11)	mm ² /Cu (AWG or kcmil)		50(1/0)	50(1/0)	50(1/0)	50(1/0)		
Maximum Recommended Fuse Rating (11)(12)	Amps		150	150	150	150		
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								

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