



ENGINEERING DATA SHEET

RS200 60Hz

CCN: 47590676001
 Rev.: C
 ECN: 1267546
 Sheet: 1 of 2
 Date: Sep-2017

Model RS200ne-A145

GENERAL PERFORMANCE DATA

Maximum Target Operating Pressure	(2)	barg (psig)		10.0 (145)						
Rated Discharge Pressure		barg (psig)		10.0 (145)						
Minimum Operating Pressure		barg (psig)		4.5 (65)						
Capacity FAD	(1)		<i>Max RPM</i>	Max	A	B	C	D	Min	<i>Min RPM</i>
@ 10 barg (145 psig)		m ³ /min (CFM)	1447	37.0 (1306)	33.4 (1178)	29.7 (1047)	26.0 (918)	22.3 (786)	18.7 (660)	755
@ 9.3 barg (135 psig)		m ³ /min (CFM)	1496	38.5 (1361)	34.3 (1210)	30.4 (1072)	26.5 (935)	22.6 (798)	18.7 (661)	755
@ 8.6 barg (125 psig)		m ³ /min (CFM)	1547	39.8 (1407)	35.8 (1263)	31.5 (1112)	27.2 (961)	22.9 (810)	18.7 (659)	755
@ 7.9 barg (115 psig)		m ³ /min (CFM)	1600	41.5 (1464)	36.8 (1300)	32.3 (1141)	27.8 (982)	23.3 (822)	18.8 (664)	755
@ 7.6 barg (110 psig)		m ³ /min (CFM)	1628	42.1 (1487)	37.6 (1328)	32.8 (1160)	28.2 (996)	23.4 (827)	18.8 (663)	755
@ 6.9 barg (100 psig)		m ³ /min (CFM)	1685	43.9 (1551)	38.7 (1365)	33.7 (1191)	28.8 (1016)	23.8 (842)	18.8 (664)	755
Maximum Operating Ambient Temperature		°C (°F)				46 (115)				
Minimum Operating Ambient Temperature		°C (°F)				2 (36)				
Maximum System Temperature Setting		°C (°F)				109 (228)				
Nominal Power - Main Motor		kW (HP)				200 (268)				
Main Motor Efficiency	(3)	%				96.0%				
Main Inverter Drive Efficiency		%				97.0%				
Package Input Power with Fan - Air Cooled	(4)		<i>Max RPM</i>	Max	A	B	C	D	Min	<i>Min RPM</i>
@ 10 barg (145 psig)		kW (HP)	1447	248.4 (333)	225.3 (302)	201.0 (270)	177.4 (238)	153.5 (206)	129.5 (174)	755
@ 9.3 barg (135 psig)		kW (HP)	1496	247.9 (332)	221.6 (297)	197.8 (265)	173.0 (232)	149.0 (200)	124.9 (167)	755
@ 8.6 barg (125 psig)		kW (HP)	1547	247.4 (332)	222.7 (299)	197.8 (265)	170.7 (229)	144.5 (194)	118.9 (159)	755
@ 7.9 barg (115 psig)		kW (HP)	1600	244.9 (328)	217.8 (292)	192.4 (258)	166.3 (223)	140.0 (188)	113.9 (153)	755
@ 7.6 barg (110 psig)		kW (HP)	1628	249.5 (335)	222.7 (299)	194.6 (261)	165.2 (222)	137.8 (185)	109.8 (147)	755
@ 6.9 barg (100 psig)		kW (HP)	1685	245.2 (329)	216.2 (290)	188.1 (252)	161.3 (216)	134.4 (180)	107.5 (144)	755
Specific Power - Air Cooled	(4)(5)		<i>Max RPM</i>	Max	A	B	C	D	Min	<i>Min RPM</i>
@ 10 barg (145 psig)		kW/m ³ /min (kW/100CFM)	1447	6.7 (19.0)	6.8 (19.1)	6.8 (19.2)	6.8 (19.3)	6.9 (19.5)	6.9 (19.6)	755
@ 9.3 barg (135 psig)		kW/m ³ /min (kW/100CFM)	1496	6.4 (18.2)	6.5 (18.3)	6.5 (18.4)	6.5 (18.5)	6.6 (18.7)	6.7 (18.9)	755
@ 8.6 barg (125 psig)		kW/m ³ /min (kW/100CFM)	1547	6.2 (17.6)	6.2 (17.6)	6.3 (17.8)	6.3 (17.8)	6.3 (17.8)	6.4 (18.0)	755
@ 7.9 barg (115 psig)		kW/m ³ /min (kW/100CFM)	1600	5.9 (16.7)	5.9 (16.8)	6.0 (16.9)	6.0 (16.9)	6.0 (17.0)	6.1 (17.2)	755
@ 7.6 barg (110 psig)		kW/m ³ /min (kW/100CFM)	1628	5.9 (16.8)	5.9 (16.8)	5.9 (16.8)	5.9 (16.6)	5.9 (16.7)	5.9 (16.6)	755
@ 6.9 barg (100 psig)		kW/m ³ /min (kW/100CFM)	1685	5.6 (15.8)	5.6 (15.8)	5.6 (15.8)	5.6 (15.9)	5.6 (16.0)	5.7 (16.2)	755

SOUND LEVEL

Noise Level Standard Package - Air Cooled	(6)	Sound Pressure - dB(A)		75
Noise Level Standard Package - Air Cooled		Sound Power - dB(A)		95

COOLING DATA (@ Maximum Ambient Temperature & Maximum Discharge Pressure)

Heat Removal (Oil Cooler)			<i>Max RPM</i>	Max	A	B	C	D	Min	<i>Min RPM</i>
@ 10 barg (145 psig)		kW (1000 Btu/hr)	1447	199.5 (681)	180.7 (617)	161.0 (549)	138.7 (473)	119.4 (408)	97.6 (333)	755
Heat Removal (Oil and Aftercooler)										
@ 10 barg (145 psig)		kW (1000 Btu/hr)	1447	256.2 (874)	231.8 (791)	206.4 (704)	178.5 (609)	153.6 (524)	126.3 (431)	755
Permitted Additional Static Pressure		Pa (in H ₂ O)				63 (.25)				
Fan / Blower Airflow		m ³ /min (CFM)				453 (15998)				
Fan / Blower Motor Nominal Power		kW				8.0				
Cooling Air Temperature Rise @ 30°C		°C (°F)				26 (47)				
Aftercooler CTD	(7)	°C (°F)				8.33 (15)				

AIR END DATA

STG1 Male Rotor Speed	RPM	1048
STG1 Rotor Tip Speed	m/sec	19.14
STG2 Male Rotor Speed	RPM	1205
STG2 Rotor Tip Speed	m/sec	16.22
Full Load Shaft Power	kW	227.0



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Model	RS200ne-A145	
COOLANT LUBRICATION DATA		
Total Coolant Capacity - Air Cooled	litres (US gal)	121.0 (32.0)
PIPING CONNECTIONS		
Air Discharge	Inches Flange	4.00 (8xM16; 7.5 IN B.C)
Package Automatic Condensate Drain	Inches NPT	.38 (FEMALE)
Coolant Drain - Hose Size	Inches	0.875
Diameter of Power Inlet	mm / (inches)	110 (4.3)
DIMENSIONS AND WEIGHT		
Length, Width, Height	mm (inches)	4320, 2150, 2504 (170.1, 84.6, 98.6)
Net Weight - Air Cooled	kg (lb.)	8116 (17893)
GA Drawing Number - Air Cooled		47589259
ELECTRICAL DATA ⁽¹³⁾		
Motor Protection		TEFC, IP55
Motor, Number of Poles		4
Motor Insulation Class / Temperature Rise		Class F, 155 °C
Full Load Package Current - Air Cooled	⁽⁹⁾	
	Amps @ 380V	472
	Amps @ 460V	390
	Amps @ 575V	312
Package Power Factor		0.90
Electrical Installation		
Recommended Supply Cable Size	⁽¹⁰⁾	
	mm ² /Cu (Kcmil) @ 380V	800 (1500)
	mm ² /Cu (Kcmil) @ 460V	500 (900)
	mm ² /Cu (Kcmil) @ 575V	400 (600)
Maximum Recommended Fuse Rating	⁽¹⁰⁾⁽¹¹⁾	
	Amps @ 380V	1000
	Amps @ 460V	1000
	Amps @ 575V	700

Notes :

- FAD (Free Air Delivery) is full package performance including all losses. Tested per ISO 1217 : 2009 Annex E
- Maximum pressure at package discharge, value at which compressor will stop when unit operating at maximum target pressure
- Equivalent to IE3 efficiency motor
- Measured at rated capacity and rated pressure
- Specific power guaranteed in accordance with ISO 1217 : 2009 Annex E
- Measured in free field conditions per ISO 2151 using Hemispherical Method; ducted inlet and outlet, with + 3 dB(A) tolerance
- CTD based on 100°F/38°C inlet air at 40% Relative Humidity. For Canada, CTD of CRN Cooler is 11.3°C (20°F) (For alternate conditions contact Ingersoll Rand)
- BSPT or NPT, depending on regional standard
- Maximum current includes 10% additional current due to fouled filters and elements
- 90°C copper cables. Always apply local electrical codes for sizing cables and system protection
- Fast acting Class-J, T or semiconductor type, current limiting, and Interrupt rating-200,000 Amps RMS. Apply local electrical codes for fuse sizing.
- Coolant volumes listed are approximate. See operator manual for coolant fill procedure
- 60Hz (±0.5%) motor voltage tolerance: (208)±10% ; (220)±10% ; (230)±10% ; (380)-6/+10% ; (440) ±10% ; (460) ±10% ; (575) -6/+10%

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