


RS75i
60Hz

CCN: 47619348001
Rev.: A
ECN: 1279690
Sheet: 1 of 1
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Model		RS75i-A110	RS75i-A125	RS75i-A145	RS75i-A200
GENERAL PERFORMANCE DATA					
Maximum Target Operating Pressure	⁽²⁾ barg (psig)	7.6 (110)	8.6 (125)	10.0 (145)	13.8 (200)
Rated Discharge Pressure	barg (psig)	6.9 (100)	7.9 (115)	9.3 (135)	13.1 (190)
Minimum Operating Pressure	barg (psig)	4.5 (65)	4.5 (65)	4.5 (65)	4.5 (65)
Maximum Operating Ambient Temperature	°C (°F)	46 (115)	46 (115)	46 (115)	46 (115)
Minimum Operating Ambient Temperature	°C (°F)	2 (36)	2 (36)	2 (36)	2 (36)
Maximum System Temperature Setting	°C (°F)	109 (228)	109 (228)	109 (228)	109 (228)
Nominal Power - Main Motor	kW (HP)	75 (100)	75 (100)	75 (100)	75 (100)
Main Motor Efficiency	⁽³⁾ %	95.4%	95.4%	95.4%	95.4%
Capacity FAD	⁽¹⁾ m ³ /min (CFM)	14.7 (518)	14.1 (499)	13.2 (465)	10.9 (384)
Package Input Power with Fan - Air Cooled	⁽⁴⁾ kW	87.3	89.5	89.8	89.9
Specific Power - Air Cooled	⁽⁴⁾⁽⁵⁾ kW/m ³ /min (kW/100CFM)	5.96 (16.9)	6.33 (17.9)	6.82 (19.3)	8.27 (23.4)
SOUND LEVEL					
Noise Level Standard Package - Air Cooled	⁽⁶⁾ Sound Pressure - dB(A)	69	69	69	69
Noise Level Standard Package - Air Cooled	Sound Power - dB(A)	87	87	87	87
COOLING DATA (@ Maximum Ambient Temperature & Maximum Discharge Pressure)					
Heat Removal (Oil Cooler)	kW (1000 Btu/hr)	68.2 (233)	70.7 (241)	71.7 (245)	73.5 (251)
Heat Removal (Oil and Aftercooler)	kW (1000 Btu/hr)	90.8 (310)	92.5 (316)	92.0 (314)	90.2 (308)
Permitted Additional Static Pressure	Pa (in H ₂ O)	63 (.25)	63 (.25)	63 (.25)	63 (.25)
Fan Air Flow	m ³ /min (CFM)	176 (6215)	176 (6215)	176 (6215)	176 (6215)
Fan Motor Nominal Power	kW	2.2	2.2	2.2	2.2
Cooling Air Temperature Rise @ 30°C	°C (°F)	24 (43)	24 (44)	24 (44)	24 (44)
Aftercooler CTD	⁽⁷⁾ °C (°F)	8.0 (14)	8.0 (14)	8.0 (14)	8.0 (14)
AIR END DATA					
Male Rotor Speed	RPM	2295	2219	2074	1752
Tip Speed Rotor	m/sec	23.31	22.54	21.07	17.79
Full Load Shaft Power	kW	79.1	81.2	81.5	81.5
COOLANT LUBRICATION DATA					
Total Coolant Capacity - Air Cooled	⁽¹²⁾ litres (US gal)	45 (11.9)	45 (11.9)	45 (11.9)	45 (11.9)
PIPING CONNECTIONS					
Air Discharge	⁽⁸⁾ Inches NPT	2.0 INCH (FEMALE)	2.0 INCH (FEMALE)	2.0 INCH (FEMALE)	2.0 INCH (FEMALE)
Package Automatic Condensate Drain	Inches NPT	.38 INCH (FEMALE)	.38 INCH (FEMALE)	.38 INCH (FEMALE)	.38 INCH (FEMALE)
Coolant Drain - Hose Size	Inches	0.750	0.750	0.750	0.750
Diameter of Power Inlet	mm (Inches)	120 (4.7)	120 (4.7)	120 (4.7)	120 (4.7)
DIMENSIONS AND WEIGHT					
Length, Width, Height	mm (inches)	2433, 1250, 2032 (95.8, 49.2, 80)	2433, 1250, 2032 (95.8, 49.2, 80)	2433, 1250, 2032 (95.8, 49.2, 80)	2433, 1250, 2032 (95.8, 49.2, 80)
Net Weight - Air Cooled	kg (lb.)	1962 (4325)	1962 (4325)	1962 (4325)	1962 (4325)
GA Drawing Number - Air Cooled		47613761001	47613761001	47613761001	47613761001
ELECTRICAL DATA					
Motor Protection	⁽¹³⁾	TEFC, IP55	TEFC, IP55	TEFC, IP55	TEFC, IP55
Full Load Package Current - Air Cooled	⁽⁹⁾				
	Amps @ 230V	271	278	279	279
	Amps @ 380V	164	169	169	169
	Amps @ 460V	136	139	140	140
	Amps @ 575V	109	112	112	112
Main Motor Locked Rotor Current	⁽¹⁴⁾				
	Amps @ 230V	2152	2152	2152	2152
	Amps @ 380V	1271	1271	1271	1271
	Amps @ 460V	1076	1076	1076	1076
	Amps @ 575V	879	879	879	879
Package Power Factor		0.89	0.89	0.89	0.89
Electrical Installation					
Recommended Supply Cable Size	⁽¹⁰⁾				
	mm ² /Cu (Kcmil) @ 230V	150 (300)	150 (300)	150 (300)	150 (300)
	mm ² /Cu (Kcmil) @ 380V	70 (2/0)	70 (2/0)	70 (2/0)	70 (2/0)
	mm ² /Cu (Kcmil) @ 460V	70 (1/0)	70 (1/0)	70 (1/0)	70 (1/0)
	mm ² /Cu (Kcmil) @ 575V	50 (2)	50 (2)	50 (2)	50 (2)
Maximum Recommended Fuse Rating	⁽¹⁰⁾⁽¹¹⁾				
	Amps @ 230V	450	450	450	450
	Amps @ 380V	250	250	250	250
	Amps @ 460V	225	225	225	225
	Amps @ 575V	175	175	175	175

Notes:

- FAD (Free Air Delivery) is full package performance including all losses. Tested per ISO 1217 : 2009 Annex C
- Maximum pressure at package discharge, value at which compressor will stop when unit operating at maximum target pressure
- IE3 efficiency motor
- Measured at rated capacity and rated pressure
- Specific power guaranteed in accordance with ISO 1217 : 2009 Annex C
- 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 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
- Time delay fuse recommended. 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%
- Star-Delta starting current inrush is about 33% of direct starting current
- During the Star-Delta open-starting transition, the in-rush current value could instantaneously peak from 1.8 to 2.8 times the noted Locked-Rotor-Amperage (LRA) values

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