

Variable Speed – 60 Hz

PRODUCT DATA		Units	L18RS-190 PSIG					
Performance (1)								
Working Pressure	Package Pressure (Configurator Pick)	190 psig	Operating Speed					
		13.1 bar g	min	60%	70%	80%	90%	100%
Airend Model at configurator pressure / Sheave Ratio		EK100NK / 1.000						
100 psig 6.9 bar g	Capacity (2)	acfm (m ³ /min)	46.7 (1.32)	47.2 (1.34)	56.0 (1.59)	64.8 (1.83)	73.5 (2.08)	82.3 (2.33)
	Package Input Power (3)	kW	9.94	10.02	11.59	13.21	14.89	16.64
	Specific Power	kW/100 cfm	21.26	21.22	20.69	20.40	20.26	20.23
	Male Rotor Speed	rpm	2056	2076	2422	2768	3114	3460
110 psig 7.6 bar g	Capacity (2)	acfm (m ³ /min)	46.4 (1.31)	46.9 (1.33)	55.7 (1.58)	64.5 (1.83)	73.2 (2.07)	81.9 (2.32)
	Package Input Power (3)	kW	10.44	10.54	12.15	13.83	15.57	17.38
	Specific Power	kW/100 cfm	22.50	22.45	21.82	21.45	21.27	21.21
	Male Rotor Speed	rpm	2056	2076	2422	2768	3114	3460
125 psig 8.6 bar g	Capacity (2)	acfm (m ³ /min)	45.8 (1.3)	46.3 (1.31)	55.1 (1.56)	63.9 (1.81)	72.6 (2.06)	81.3 (2.3)
	Package Input Power (3)	kW	11.20	11.30	13.00	14.76	16.59	18.50
	Specific Power	kW/100 cfm	24.47	24.41	23.60	23.12	22.86	22.75
	Male Rotor Speed	rpm	2056	2076	2422	2768	3114	3460
130 psig 9 bar g	Capacity (2)	acfm (m ³ /min)	45.6 (1.29)	46.1 (1.3)	54.9 (1.55)	63.6 (1.8)	72.4 (2.05)	81.1 (2.3)
	Package Input Power (3)	kW	11.46	11.56	13.29	15.08	16.94	18.88
	Specific Power	kW/100 cfm	25.15	25.09	24.22	23.70	23.41	23.28
	Male Rotor Speed	rpm	2056	2076	2422	2768	3114	3460
145 psig 10 bar g	Capacity (2)	acfm (m ³ /min)	44.8 (1.27)	45.3 (1.28)	54.1 (1.53)	62.8 (1.78)	71.6 (2.03)	80.3 (2.27)
	Package Input Power (3)	kW	12.23	12.33	14.15	16.03	17.99	20.02
	Specific Power	kW/100 cfm	27.31	27.23	26.16	25.50	25.12	24.92
	Male Rotor Speed	rpm	2056	2076	2422	2768	3114	3460
175 psig 12.1 bar g	Capacity (2)	acfm (m ³ /min)	42.9 (1.22)	43.4 (1.23)	52.3 (1.48)	61.1 (1.73)	69.8 (1.98)	78.5 (2.22)
	Package Input Power (3)	kW	13.74	13.85	15.84	17.90	20.02	22.19
	Specific Power	kW/100 cfm	32.00	31.88	30.31	29.31	28.67	28.27
	Male Rotor Speed	rpm	2056	2076	2422	2768	3114	3460
190 psig 13.1 bar g	Capacity (2)	acfm (m ³ /min)	42.0 (1.19)	42.5 (1.2)	51.3 (1.45)	60.1 (1.7)	68.9 (1.95)	77.5 (2.2)
	Package Input Power (3)	kW	14.47	14.59	16.66	18.79	20.98	23.23
	Specific Power	kW/100 cfm	34.49	34.35	32.47	31.26	30.46	29.97
	Male Rotor Speed	rpm	2056	2076	2422	2768	3114	3460
Unloaded Package Input Power		kW	3.4					
Maximum Operating Pressure		psig (bar g)	193 (13.3)					
Minimum Operating Pressure		psig (bar g)	75 (5.2)					
Airend Data								
Drive Type		n/a	V-Belt					
Airend Speed (male rotor, Maximum)		rpm	3460					
Male / Female Rotor Diameter		mm	101 / 83					
Male / Female Rotor Tip Speed		m/s	18 / 13					
General Package Data								
System Capacity - oil		gal (l)	2.5 (10)					
Oil Cooler Heat Rejection @ Configured Pressure		btu/min	1058					
Aftercooler Heat Rejection @ 100 psig		btu/min	265					
Nominal Oil Temp. Rise Across Airend @100% Load		°F (°C)	17 (10)					
Approximate oil carryover rate		ppm	< 3					
Min / Max Operating Temperature		°F (°C)	34 / 113 (1 / 45)					
Noise Level Data (4)								
Free Field Noise Level - AC / WC		dB(A)	74 @ 100% Load / 68 @ 70% Load					

NOTES:

 (1) Capacity and Power measured in accordance with ISO 1217 Annex C.
 Air Intake: 1 bar(a) / 14.5 psia and 20°C / 68°F
 Humidity: 0% (dry)

 (2) acfm is actual cubic feet per minute at inlet conditions
 (3) Package Input Power includes main motor, fan power and control input power
 (4) Sound level measurement in accordance with ISO 2151.



L18RS - 190 PSIG ENGINEERING DATA SHEET

Eng Data Sheet: 47848861001

Revision: C

Config. Number: LRS15-22D

Date: 6/18/2024

Variable Speed – 60 Hz

Supersedes: 8/2/2023

PRODUCT DATA	Units	L18RS-190 PSIG				
Main Drive Motor Data						
Drive Motor Nominal Power	hp (kW)	25 (18.5)				
Drive Motor Speed Min. / Max.	rpm	2077 / 3495				
Drive Motor Service Factor	n/a	1.2				
Drive Motor Minimum Nameplate Efficiency	%	91.7%				
Drive Motor Min. Insulation Class	n/a	F				
Nominal Voltage [+/- 10%]	Vac	200V / 208V / 230V / 380V / 460V / 575V				
Nominal Full Load Package Current (6)	Amps @ Vac	73A@200V / 63A@230V / 38A@380V / 32A@460V / 25A@575V				
Minimum Supply Circuit Ampacity Rating (6)	n/a	Refer to document BP-39 available on GD Inside				
Starting current (Max. % of Full Load Current)	%	100				
Air Cooled Package Data						
Cooling Fan Motor Speed	rpm	N/A				
Cooling Fan Motor Power	hp (kW)	N/A				
Fan Motor Nameplate Efficiency	%	N/A				
Total Ventilation Flow Rate (Max)	cfm (m ³ /min)	2057 (58.2)				
Max Total Added Static Pressure, 95°F/113°F	in H ₂ O (Pa)	0.12 / 0.08 (30 / 20)				
Size Of Cooling Air Inlet Aperture	inch (mm)	Diameter 14 (355)				
Size Of Cooling Air Outlet Aperture	inch (mm)	22.2 x 15.6 (564 x 396)				
Cooling air temp above ambient, approximate	°F (°C)	47 (26)				
Aftercooler Approach Temperature - above amb	°F (°C)	27 (15)				
Connections						
Discharge Connection Size	Inches NPT	1				
Oil Drain Connection Size	Inches NPT	1/2				
Condensate Drain Connection Size	Inches NPT	1/4				
Dimensions and Weights						
Package type	Units	Base Mounted	120 Gallon Receiver		240 Gallon Receiver	
			Less Dryer	With Dryer	Less Dryer	With Dryer
Length	in (mm)	32.3 (820)	75.0 (1905)	74.8 (1899)	91.6 (2328)	91.2 (2318)
Width	in (mm)	34.7 (881)	35.0 (889)	35.0 (889)	35.0 (889)	35.0 (889)
Height	in (mm)	50.2 (1274)	76.3 (1938)	76.3 (1938)	82.9 (2106)	82.9 (2106)
Weight	lbs (kg)	945 (429)	1417 (643)	1821 (826)	1715 (778)	2116 (960)
Outline Drawing - standard package	n/a	47763994	47749763			

NOTES:

(6) Wiring, wire sizes, and over current protective devices utilized to power the compressor should be selected and installed in accordance with all applicable local electrical codes. Form BP-39 can be utilized as a reference guide in determining wire ampacity for variable speed compressors, however local electrical codes always take precedence and should be consulted prior to sizing and running wire to operate the compressor.

(7) Gardner Denver policy is one of continuous improvement and we therefore reserve the right to alter specifications without prior notice.