

7-22 KW VARIABLE SPEED ROTARY SCREW COMPRESSORS

# **LRS-Series**

# Advanced Technology. Inspired Simplicity.

LRS-Series compressors from Champion feature more than just the latest compressor technology. They contain the cleanest, simplest, most intuitive machine layouts on the market. Equipped with standard TEFC main motors, robust and high performing Yaskawa inverter drives, Pilot™ microprocessor controllers and quiet enclosures, an LRS-Series unit from Champion is the optimal solution when a feature-rich, simple-to-operate compressor is required.

# First Class Serviceability

The LRS-Series units set a new standard in serviceability. By utilizing integrated airend design techniques, Champion delivers unprecedented access to service items such as; a high efficiency air filter, air/oil separator and oil filter. At the same time, the compact design eliminates unneeded connections and minimizes piping; reducing the opportunity for leaks. Couple these features with standard automatic belt tensioning and you have a world class small horsepower compressor package.

# Configuration Flexibility

LRS-Series compressors are available in base mount or AirStation™ configurations. The plug-and-play AirStation™ configuration is an LRS-Series compressor mounted on a horizontal receiver tank with or without a refrigerated air dryer. Featuring standard high-end and optional components such as a three-way bypass valve, stainless steel piping, integrated fork lift slots and an automatic tank drain, the LRS-Series AirStation™ is the ideal solution for a compressed air system that requires minimal installation time and cost.



#### LO7RS-L22RS ROTARY SCREW COMPRESSOR

MODEL	DRIVE MOTOR		50 Hz				60 Hz							
			NOMINAL PRESSURE		FAD¹		NOMINAL PRESSURE		FAD¹		NOISE LEVEL <sup>2</sup>	WEIGHT		DIMENSIONS L × W × H
	HP	KW	PSIG	BAR	ACFM	M³/MIN	PSIG	BAR	ACFM	M³/MIN	DB(A) @ 70% LOAD	LBS	KG	IN. (MM)
L07RS	10	7	100 130 190	7.0 9.0 13.0	44.5 35.7 29.3	1.26 1.01 0.83	110 130 190	7.0 9.0 13.0	42.9 37.6 27.9	1.22 1.07 0.79	63	489	222	_ 27 × 25 × 41 (686 × 635 × 1041)
L11RS	15	11	100 130 190	7.0 9.0 13.0	63.9 55.1 44.5	1.81 1.56 1.26	110 130 190	7.0 9.0 13.0	62.1 56.9 43.5	1.76 1.61 1.23	64	509	231	
L15RS	20	15	100 130 190	7.0 9.0 13.0	91.8 77.0 59.0	2.60 2.18 1.67	110 130 190	7.0 9.0 13.0	92.0 81.3 59.1	2.61 2.30 1.67	67	805	365	
L18RS	25	18	100 130 190	7.0 9.0 13.0	107.7 92.5 77.7	3.05 2.62 2.20	110 130 190	7.0 9.0 13.0	107.8 95.7 77.8	3.05 2.71 2.20	68	840	381	
L22RS	30	22	100 130 190	7.0 9.0 13.0	125.0 111.2 93.9	3.54 3.15 2.66	110 130 190	7.0 9.0 13.0	125.2 116.3 94.0	3.55 3.29 2.66	69	851	386	

<sup>1)</sup> Data measured and stated in accordance with ISO1217, Ed. 4, Annex C & Annex E at the following conditions: Air Intake Pressure 1 bar A, Air Intake Temperature 20° C, Humidity 0% (Dry)

### AIR STATION SPECIFICATIONS, 60 HZ

MODEL	DRYER MODEL	RECEIVER SIZE GAL. (LITERS)	REFRIGERANT	WEIGHT LBS (KG) 120 GAL	DIMENSIONS L×W×H IN. (MM) 120 GAL		
L07RS	GSRN XCNC	80, 120, 240		less dryer 984 (446) with GSRN dryer 1121 (508) with XCNC dryer 1072 (486)	less dryer 73 × 32 × 66 (1854 × 819 × 1676)		
L11RS	GSRN XCNC	(303, 454, 908)	- R134A	less dryer 984 (446) with GSRN dryer 1128 (512) with XCNC dryer 1078 (489)	with dryer 72 × 32 × 66 (1829 × 819 × 1676)		
L15RS	GSRN XCNC XCCY			less dryer 1306 (592) with GSRN dryer 1572 (713) with XCNC dryer 1425 (646) with XCCY dryer 1415 (642)			
L18RS	GSRN XCNC XCCY	120, 240 (454, 908)		less dryer 1341 (608) with GSRN dryer 1627 (738) with XCNC dryer 1524 (691) with XCCY dryer 1530 (694)	less dryer 72 × 32 × 72 (1829 × 813 × 1829) with dryer 72 × 32 × 72 1829 × 813 × 1829)		
L22RS	GSRN XCNC XCCY	-		less dryer 1352 (613) with GSRN dryer 1639 (743) with XCNC dryer 1527 (693) with XCCY dryer 1533 (695)			

 $\label{prop:linear} {\sf Dryer} \ \ {\sf on} \ {\sf AirStation}^{\scriptscriptstyle{\mathsf{TM}}} \ {\sf package} \ {\sf has} \ {\sf separate} \ {\sf electrical} \ {\sf connection} \ {\sf and} \ {\sf voltage}.$ 

#### LRS-Series Features (7-22 kW)

- Belt drive, oil flooded, single stage rotary screw air compressor
- RotorLube 4000 lubricant
- Air-cooled only
- Robust inverter drive
- Optional automatic zero-loss condensate drain (with receiver tank selection)
- CRN and ASME rated aftercooler
- Optional EMI filter and standard DC bus choke
- Pilot™ microprocessor controller
- Integrated thermostatic thermal mixing valve
- Integrated spin-on oil filter, spin-on air/oil separator and two-stage air filter
- IP54 electrical enclosure

- Moisture separator (shipped loose)
- Optional ASME receiver tank (80, 120, 240 gallons)
- Optional line reactor (shipped loose)
- Optional mounted cycling or non-cycling refrigerated dryer (with receiver tank selection)
- Quiet enclosure
- Standard manual tank drain (with receiver tank)
- TEFC main motor
- Optional three-way bypass valve (with receiver tank and mounted dryer)
- Second pressure band control for lead/lag operation

- Stainless steel piping (with receiver tank and mounted dryer)
- UL labeled electronics (including C-UL-US open industrial control panel)
- Voltage: 208/230/380/400/460/575V
  \*Dryer on AirStation package has separate electrical connection and voltage.









<sup>2)</sup> Measured in free field conditions in accordance with ISO 2151, tolerance +/- 3dB