



**R Series 15HP  
Engineering Data Sheet  
Air Cooled, 60Hz**

**Eng. Data Sheet: CP-R6-V2  
Date: 7/25/2019  
Supersedes: CP-R6-V1**

Model Number		VR15F-12	HR15F-8	HR15F-12	HR15F-24	HR15DF-12	HR15DF-24	BR15F	BR15	HR15-12	HR15-24	HR15D-24
Configurator Number		R2-30A										
Description	Units	Product Data										
<b>Compressor Pump</b>												
Pump Model	na	R30D						R40A				
Number of Cylinders	na	4						2				
Bore & Stroke	in.	4-5/8 & 2-1/2 x 3						6-1/4 & 3-1/4 x 4-1/2				
Flywheel	OD in.	18-7/8						22				
Pulley 125 PSIG	OD in.	11.15						11.35				
Pulley 175 PSIG	OD in.	11.15						9.75				
Number of Stages	na	2										
Lubrication	na	Splash Lubricated										
Oil Capacity	qt.	4										
Oil Type	na	AEON AC-HC, ISO 100 Non-Detergent Industrial Lubricant										
Number of Belt Grooves	na	2						3				
Belt Section	na	B										
Crankcase	na	Cast Iron										
Bearings	na	Tapered Roller										
Cylinder	na	Aluminum with Cast Iron Liner						Cast Iron				
Piston 1st Stage	na	Aluminum Alloy										
Piston 2nd Stage	na	Cast Iron										
Valves	na	Disc Valves										
Intake Filter	na	5 Micron										
<b>Main Drive Motor (1)</b>												
Drive Motor Nominal Power	hp(kW)	15 (11.19)										
Voltage (2)	na	208/230/460/575										
Phase	na	3										
Drive Motor Speed	rpm	1800										
Service Factor	na	1.15										
Motor Insulation Class	na	F										
Drive Motor Full Load Current - 208/3/60 (3)	amps	46.2										
Drive Motor Full Load Current - 230/3/60 (3)	amps	42										
Drive Motor Full Load Current - 460/3/60 (3)	amps	21										
Drive Motor Full Load Current - 575/3/60 (3)	amps	17										
Wire Size - 208/3/60 (3,4,5)	awg	6 (1)						6 (1)				
Wire Size - 230/3/60 (3,4,5)	awg	6 (2)						6 (2)				
Wire Size - 460/3/60 (3,4,5)	awg	10 (6)						10 (6)				
Wire Size - 575/3/60 (3,4,5)	awg	10 (8)						10 (8)				

- 1) Main Drive Motor performance is based off the standard ODP motor.
- 2) Compressors are voltage specific and must be specified at time of order.
- 3) The amp draws and wire size provided are off general NEC guidelines. For proper breaker and fuses please consult a licensed electrician or electrical contractor.
- 4) Copper wire, 75°C (167°F) maximum temperature rating, 30°C (86°F) ambient temperature
- 5) Values in ( ) is for incoming power line on duplex units.

<b>CHAMPION</b>	<b>R Series 15HP</b>							<b>Eng. Data Sheet: CP-R6-V2</b>					
	<b>Engineering Data Sheet</b>							<b>Date: 7/25/2019</b>					
	<b>Air Cooled, 60Hz</b>							<b>Supersedes: CP-R6-V1</b>					
<b>Model Number</b>	<div style="display: flex; justify-content: space-around; text-align: center;"> <span>VR15F-12</span> <span>HR15F-8</span> <span>HR15F-12</span> <span>HR15F-24</span> <span>HR15DF-12</span> <span>HR15DF-24</span> <span>BR15F</span> <span>BR15</span> <span>HR15-12</span> <span>HR15-24</span> <span>HR15D-24</span> </div>												
<b>Configurator Number</b>	<b>R2-30A</b>												
<b>Description</b>	<b>Units</b>	<b>Product Data</b>											
<b>Performance Data (6)</b>													
CFM Delivery @ 125 PSIG (7)	acfm	50.2	100.4	50.2	59.0	118.0							
CFM Delivery @ 175 PSIG (7)	acfm	49	98	49	53.7	107.4							
CFM Displacement @ 125 PSIG	icfm	60.9	121.8	60.9	71.1	142.2							
CFM Displacement @ 175 PSIG	icfm	60.9	121.8	60.9	61.5	123.0							
Maximum Pressure	psig	175											
Working Pressure Differential	psig	35											
Pump Operating Speed @ 125 PSIG	rpm	1035					890						
Pump Operating Speed @ 175 PSIG	rpm	1035					770						
Minimum Speed	rpm	400					425						
Maximum Speed	rpm	1050					1000						
Cooling Air Flow 125 PSIG	cfm	1505					2980						
Cooling Air Flow 175 PSIG	cfm	1505					2580						
Heat Rejection	btu/hr	33,600											
Noise Level (8)	dB(A)	82	84	82	84								
Aftercooler Approach Temp (9)	°F	40					30						
Min/Max Operating Temp	°F	32/104											
<b>Dimensions and Weight</b>													
Tank Size	gal	120	80	120	240	120	240	na	120	240			
Tank Configuration	na	Vert.	Horizontal					na	Horizontal				
Tank Capacity @ 125 PSIG	ft³	136.7	91.1	136.7	284.9	136.7	284.9	na	136.7	284.9			
Tank Capacity @ 175 PSIG	ft³	191.4	127.6	191.4	398.8	191.4	398.8	na	191.4	398.8			
Tank Pumping Time @ 125 PSIG (10)	min	2.7	1.8	2.7	5.7	1.4	2.8	na	2.3	4.8	2.4		
Tank Pumping Time @ 175 PSIG (10)	min	3.9	2.6	3.9	8.1	2.0	4.1	na	3.6	7.4	3.7		
Package Length	in.	42.7	67.2	71.8	88.2	83.0	88.3	42.7	48.7	73.2	89.0	89.5	
Package Width	in.	37.4	31.6	32.8	33.3	33.7	37.9	25.3	33.7	35.6	33.3	53.4	
Package Height	in.	75.7	48.8	54.7	60.7	54.0	60.6	28.2	37.6	62.4	60.6	73.2	
Approx. Ship Weight	lbs.	1017	898	1012	1371	1860	2460	550	730	1210	1564	2460	
Pump Length	in.	21.13					26.0						
Pump Width	in.	25.42					30.0						
Pump Height	in.	23.563					32.0						
Pump Weight	lbs.	220					440.0						
Discharge Connection (11)	npt "	3/4 F					1 F	1-1/4 F					
Operating/Parts Manual ID	na	CQGF3455					CQGF3456						

6) All units tested in accordance with CAGI/PNEUROOP Acceptance Test Code PN2CPTC2.

7) acfm is actual cubic feet per minute at inlet conditions.

8) Sound levels are based off estimated dB(A).

9) Approach temperature is the temperature above the discharge air and above the ambient air of the aftercooler.

10) Tank pumping time is based off 0 PSIG to fully pressurized.

11) M = Male connection, F=Female connection

**NOTE: Duplex models take quantities of 2 on applicable items such as motors, pump, oil quantity, etc.**