

CHAMPION	R Series 5HP	Eng. Data Sheet: CP-R3-V2
	Engineering Data Sheet	Date: 7/25/2019
	Air Cooled, 60Hz	Supersedes: CP-R3-V1

Model Number	BR5	VR5-6	VR5-8	VR5-12	HR5-3	HR5-6	HR5-8	HR5-12	HR5D-8	HR5D-12	HR5D-25
---------------------	-----	-------	-------	--------	-------	-------	-------	--------	--------	---------	---------

Configurator Number	R2-30A										
----------------------------	---------------	--	--	--	--	--	--	--	--	--	--

Description	Units	Product Data
--------------------	--------------	---------------------

Compressor Pump

Pump Model	na	R15B
Number of Cylinders	na	2
Bore & Stroke	in.	4-5/8 & 2-1/2 x 3
Flywheel	OD in.	16.5
Pulley 125 PSIG	OD in.	7.35
Pulley 175 PSIG	OD in.	7
Number of Stages	na	2
Lubrication	na	Splash Lubricated
Oil Capacity	qt.	2
Oil Type	na	AEON AC-HC, ISO 100 Non-Detergent Industrial Lubricant
Number of Belt Grooves	na	2
Belt Section	na	B
Crankcase	na	Cast Iron
Bearings	na	Tapered Roller
Cylinder	na	Aluminum with Cast Iron Liner
Piston 1st Stage	na	Aluminum Alloy
Piston 2nd Stage	na	Cast Iron
Valves	na	Disc Valves
Intake Filter	na	5 Micron

Main Drive Motor (1)

Drive Motor Nominal Power	hp(kW)	5 (3.73)
Voltage (2)	na	208/230/460/575
Phase	na	1 or 3
Drive Motor Speed	rpm	1800
Service Factor	na	1.15
Motor Insulation Class	na	F
Drive Motor Full Load Current - 208/1/60 (3)	amps	30.8
Drive Motor Full Load Current - 230/1/60 (3)	amps	28
Drive Motor Full Load Current - 208/3/60 (3)	amps	16.7
Drive Motor Full Load Current - 230/3/60 (3)	amps	15.2
Drive Motor Full Load Current - 460/3/60 (3)	amps	7.6
Drive Motor Full Load Current - 575/3/60 (3)	amps	6.1
Wire Size - 208/1/60 (3,4,5)	awg	8 (4)
Wire Size - 230/1/60 (3,4,5)	awg	8 (4)
Wire Size - 208/3/60 (3,4,5)	awg	10 (8)
Wire Size - 230/3/60 (3,4,5)	awg	12 (8)
Wire Size - 460/3/60 (3,4,5)	awg	14 (12)
Wire Size - 575/3/60 (3,4,5)	awg	14 (12)

- 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.

CHAMPION	R Series 5HP										Eng. Data Sheet: CP-R3-V2		
	Engineering Data Sheet										Date: 7/25/2019		
	Air Cooled, 60Hz										Supersedes: CP-R3-V1		
Model Number	<div style="display: flex; justify-content: space-around; text-align: center;"> BR5 VR5-6 VR5-8 VR5-12 HR5-3 HR5-6 HR5-8 HR5-12 HR5D-8 HR5D-12 HR5D-25 </div>												
Configurator Number	R2-30A												
Description	Units	Product Data											
Performance Data (6)													
CFM Delivery @ 125 PSIG (7)	acfm	19.1						38.2					
CFM Delivery @ 175 PSIG (7)	acfm	17.3						34.6					
CFM Displacement @ 125 PSIG	icfm	23.5						47					
CFM Displacement @ 175 PSIG	icfm	21.4						42.8					
Maximum Pressure	psig	175											
Working Pressure Differential	psig	35											
Pump Operating Speed @ 125 PSIG	rpm	750											
Pump Operating Speed @ 175 PSIG	rpm	710											
Minimum Speed	rpm	400											
Maximum Speed	rpm	1050											
Cooling Air Flow @ 125 PSIG	cfm	868											
Cooling Air Flow @ 175 PSIG	cfm	820											
Heat Rejection	btu/hr	12000											
Noise Level (8)	dB(A)	75						78					
Aftercooler Approach Temp (9)	°F	45											
Min/Max Operating Temp	°F	32/104											
Dimensions and Weight													
Tank Size	gal	na	60	80	120	30	60	80	120	80	120	250	
Tank Configuration	na	na	Vertical				Horizontal						
Tank Capacity @ 125 PSIG	ft³	na	68.4	91.1	136.7	34.2	68.4	91.1	136.7	91.1	136.7	284.9	
Tank Capacity @ 175 PSIG	ft³	na	95.7	127.6	191.4	47.8	95.7	127.6	191.4	127.6	191.4	398.8	
Tank Pumping Time @ 125 PSIG (10)	min	na	3.6	4.8	7.1	1.8	3.6	4.8	7.1	2.4	3.6	7.4	
Tank Pumping Time @ 175 PSIG (10)	min	na	5.5	7.4	11.0	2.8	5.5	7.4	11.0	3.7	5.5	11.5	
Package Length	in.	38.0	35.3	35.0	35.3	42.6	51.8	66.8	71.5	74.9	74.9	88.3	
Package Width	in.	24.7	32.5	34.5	37.4	31.4	31.6	31.6	32.8	31.7	32.7	37.9	
Package Height	in.	29.5	77.4	76.4	75.8	43.7	49.3	48.8	54.8	49.8	54.0	60.5	
Approx. Ship Weight	lbs.	280	525	590	762	432	525	590	762	755	980	1140	
Pump Length	in.	20											
Pump Width	in.	16.5											
Pump Height	in.	23.25											
Pump Weight	lbs.	109											
Discharge Connection (11)	npt "	3/4	1/2 F		3/4 F	1/2 F			3/4 F	1/2	3/4 F		
Operating/Parts Manual ID	na	CQGF3454											

6) All units tested in accordance with CAGI/PNEUROP 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.