

CHAMPION		R Series 10HP					Eng. Data Sheet: CP-R5-V2		
		Engineering Data Sheet					Date: 7/25/2019		
		Air Cooled, 60Hz					Supersedes: CP-R5-V1		
Model Number		BR10	VR10-8	VR10-12	HR10-8	HR10-12	HR10-24	HR10D-12	HR10D-24
Configurator Number		R2-30A							
Description	Units	Product Data							
Compressor Pump									
Pump Model	na	R30D							
Number of Cylinders	na	4							
Bore & Stroke	in.	4-5/8 (2) & 2-1/2 (2) x 3							
Flywheel	OD in.	18.875							
Pulley 125 PSIG	OD in.	8.38							
Pulley 175 PSIG	OD in.	8.15							
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							
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)	10 (7.46)							
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	30.8							
Drive Motor Full Load Current - 230/3/60 (3)	amps	28							
Drive Motor Full Load Current - 460/3/60 (3)	amps	14							
Drive Motor Full Load Current - 575/3/60 (3)	amps	11							
Wire Size - 208/3/60 (3,4,5)	awg	8 (4)							
Wire Size - 230/3/60 (3,4,5)	awg	8 (4)							
Wire Size - 460/3/60 (3,4,5)	awg	12 (8)							
Wire Size - 575/3/60 (3,4,5)	awg	14 (10)							

- 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.

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Configurator Number		R2-30A								
Description	Units	Product Data								
Performance Data (6)										
CFM Delivery @ 125 PSIG (7)	acfm	37.3					74.6			
CFM Delivery @ 175 PSIG (7)	acfm	34.8					69.6			
CFM Displacement @ 125 PSIG	icfm	47.3					94.6			
CFM Displacement @ 175 PSIG	icfm	43.1					86.2			
Maximum Pressure	psig	175								
Working Pressure Differential	psig	35								
Pump Operating Speed @ 125 PSIG	rpm	810								
Pump Operating Speed @ 175 PSIG	rpm	740								
Minimum Speed	rpm	400								
Maximum Speed	rpm	1050								
Cooling Air Flow 125 PSIG	cfm	1180								
Cooling Air Flow 175 PSIG	cfm	1075								
Heat Rejection	btu/hr	22400								
Noise Level (8)	dB(A)	78					80			
Aftercooler Approach Temp (9)	°F	40								
Min/Max Operating Temp	°F	32/104								
Dimensions and Weight										
Tank Size	gal	na	80	120	80	120	240	120	240	
Tank Configuration	na	na	Vertical			Horizontal				
Tank Capacity @ 125 PSIG	ft³	na	91.1	136.7	91.1	136.7	284.4	136.7	284.4	
Tank Capacity @ 175 PSIG	ft³	na	127.6	191.4	127.6	191.4	398.8	191.4	398.8	
Tank Pumping Time @ 125 PSIG (10)	min	na	2.4	3.7	2.4	3.7	7.6	1.8	3.8	
Tank Pumping Time @ 175 PSIG (10)	min	na	3.7	5.5	3.7	5.5	11.4	2.7	5.7	
Package Length	in.	42.7	42.8	42.7	67.2	71.8	88.2	83.0	88.3	
Package Width	in.	25.3	37.9	37.4	31.6	32.8	33.3	33.7	37.9	
Package Height	in.	28.2	63.7	75.7	48.8	54.7	60.7	54.0	60.6	
Approx. Ship Weight	lbs.	723	766	895	776	895	1249	1725	2325	
Pump Length	in.	21.13								
Pump Width	in.	25.42								
Pump Height	in.	23.563								
Pump Weight	lbs.	220								
Discharge Conn.	npt "	3/4 F				3/4 F				
Operating/Parts Manual ID	na	CQGF3455								

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