

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/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.