

CHAMPION	R Series 20, 25, 30HP			Eng. Data Sheet: CP-R7-V2		
	Engineering Data Sheet			Date: 7/25/2019		
	Air Cooled, 60Hz			Supersedes: CP-R7-V1		
Model Number	<div style="display: flex; justify-content: space-around; text-align: center;"> BR20 HR20-12 HR20-24 HR20D-24 BR25 HR25-12 HR25-24 HR25D-24 BR30 HR30-12 HR30-24 HR30D-24 </div>					
Configurator Number	R2-30A					
Description	Units	Product Data				
Compressor Pump						
Pump Model	na	R70A				
Number of Cylinders	na	4				
Bore & Stroke	in.	6-1/4 (2) & 3-1/4(2) x 4				
Flywheel	OD in.	22				
Pulley 125 PSIG	OD in.	8.95	11.35			
Pulley 175 PSIG	OD in.	8.35	9.75	11.4		
Number of Stages	na	2				
Lubrication	na	Splash Lubricated				
Oil Capacity	qt.	6-1/3				
Oil Type	na	AEON AC-HC, ISO 100 Non-Detergent Industrial Lubricant				
Number of Belt Grooves	na	3				
Belt Section	na	B				
Crankcase	na	Cast Iron				
Bearings	na	Tapered Roller				
Cylinder	na	Cast Iron				
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)	20 (14.9)	25 (18.6)	30 (22.4)		
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	59.4	74.8	88.0		
Drive Motor Full Load Current - 230/3/60 (3)	amps	54	68	80.0		
Drive Motor Full Load Current - 460/3/60 (3)	amps	27	34	40.0		
Drive Motor Full Load Current - 575/3/60 (3)	amps	22	27	32.0		
Wire Size - 208/3/60 (3,4,5)	awg	3 (1/0)	2 (3/0)	1 (4/0)		
Wire Size - 230/3/60 (3,4,5)	awg	4 (1/0)	2 (2/0)	1 (4/0)		
Wire Size - 460/3/60 (3,4,5)	awg	8 (4)	6 (3)	6 (2)		
Wire Size - 575/3/60 (3,4,5)	awg	10 (6)	8 (4)	8 (4)		

- 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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Model Number	<div style="display: flex; justify-content: space-around; text-align: center;"> BR20 HR20-12 HR20-24 HR20D-24 BR25 HR25-12 HR25-24 HR25D-24 BR30 HR30-12 HR30-24 HR30D-24 </div>													
Configurator Number	R2-30A													
Description	Units	Product Data												
Performance Data (6)														
CFM Delivery @ 125 PSIG (7)	acfm	91.9	183.8	102.1	204.2	102.1	204.2							
CFM Delivery @ 175 PSIG (7)	acfm	76.7	153.4	90.1	180.2	101	202							
CFM Displacement @ 125 PSIG	icfm	109.4	218.8	126.4	252.8	126.4	252.8							
CFM Displacement @ 175 PSIG	icfm	93	186	109.4	218.8	126.4	252.8							
Maximum Pressure	psig	175												
Working Pressure Differential	psig	35												
Pump Operating Speed @ 125 PSIG	rpm	770					890							
Pump Operating Speed @ 175 PSIG	rpm	655					770				890			
Minimum Speed	rpm	425												
Maximum Speed	rpm	1000												
Cooling Air Flow @ 125 PSIG	cfm	2580					2980							
Cooling Air Flow @ 175 PSIG	cfm	2195					2580				2980			
Heat Rejection	btu/hr	44700					55970				67160			
Aftercooler Approach Temp	°F	30												
Noise Level (8)	dB(A)	80	82	84	86	84	86							
Min/Max Operating Temp	°F	32 / 104												
Dimensions and Weight														
Tank Size	gal	na	120	240	240	na	120	240	240	na	120	240	240	
Tank Configuration	na	Base	Horizontal			Base	Horizontal			Base	Horizontal			
Tank Capacity @ 125 PSIG	ft³	na	136.7	284.9		na	136.7	284.9		na	137	284.9		
Tank Capacity @ 175 PSIG	ft³	na	191.4	398.8		na	191.4	398.8		na	191	398.8		
Tank Pumping Time @ 125 PSIG (9)	min	na	1.5	3.1	1.5	na	1.3	2.8	1.4	na	1.3	2.8	1.4	
Tank Pumping Time @ 175 PSIG (9)	min	na	2.5	5.2	2.6	na	2.1	4.4	2.2	na	1.9	3.9	2.0	
Package Length	in.	59.1	73.3	89.6	89.5	59.1	73.3	89.6	89.5	59.1	73.3	89.6	89.5	
Package Width	in.	33.6	36.3	36.3	66.5	33.6	36.3	36.3	66.5	33.6	36.3	36.3	66.5	
Package Height	in.	39.8	65.0	71.3	75.8	39.8	65.0	71.3	75.8	39.8	65.0	71.3	75.8	
Approx. Ship Weight	lbs.	1000	1517	1871	2845.0	1020	1557	1911	2940.0	1060	1597	1951	3018	
Pump Length	in.	26.7												
Pump Width	in.	33.5												
Pump Height	in.	33.75												
Pump Weight	lbs.	570												
Discharge Connection (10)	npt "	1-1/4 F												
Operating/Parts Manual ID	na	CQGF3457												

6) All units tested in accordance with CAGI/PNEURO P 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) Tank pumping time is based off 0 PSIG to fully pressurized.
 10) M = Male connection, F=Female connection; the BRA20-30 have a 1" F connection with an air cooled after cooler.

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

Due to Gardner Denver's continuing product development program, specifications and materials are subject to change without notice or obligation.