CHAMPION	R Series 20, 25, 30HP Engineering Data Sheet Air Cooled, 60Hz	Eng. Data Sheet: CP-R7-V2 Date: 7/25/2019 Supersedes: CP-R7-V1

Model Number		BR20	HR20-12	HR20-24	HR20D-24	BR25	HR25-12	HR25-24	HR25D-24	BR30	HR30-12	HR30-24	HR30D-24
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.

CHAMPION	R Series 20, 25, 30HP Engineering Data Sheet Air Cooled, 60Hz	Eng. Data Sheet: CP-R7-V2 Date: 7/25/2019 Supersedes: CP-R7-V1

Model Number		BR20	HR20-12	HR20-24	HR20D-24	BR25	HR25-12	HR25-24	HR25D-24	BR30	HR30-12	HR30-24	HR30D-24
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/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) 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.