

# ITT

BC3WIRE

## Residential Water Systems

# CentriPro

Single Phase 3-Wire,  
1/2-5 HP Motors  
60 Hertz, 3450 RPM



### FEATURES

- 304 SS casing and end bells for corrosion resistance
- Kingsbury type, 3 shoe, thrust bearing, see chart for ratings.
- Stainless steel, 17-4 PH splined shaft
- Removable, replaceable 48" motor lead on 1/2 - 2 HP, 100" on 3 and 5 HP
- Water lubricated with filter/check valve to maintain fluid fill
- Lightning and surge protection built-in
- Automatic reset, on-winding thermal overload protection on 3-wire up to 1 HP, 1 1/2 - 5 HP have overloads in control box.
- UL 778 Recognized
- CSA Certified
- NEMA Mounting Dimensions
- Tested to ANSI/NSF 61
- Quick disconnect control boxes with voltage relays for motors up to 1 HP.
- CSCR control boxes available for 1/2 - 5 HP motors.
- MC (magnetic contactor) control boxes available for 1Ø, 4" motors from 1 1/2 - 5 HP.



CentriPro is a brand of ITT Corporation.

[www.centripro.com](http://www.centripro.com)

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Tested by CSA to  
CSA and UL Standards



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## CENTRIPRO Residential Water Systems

### APPLICATIONS

- These 4" motors are designed and sized for installation in 4" diameter or larger water wells.
- Three wire motors are a capacitor start induction run design and require a control box with a starting relay and capacitor.
- Use the CSCR capacitor start/capacitor run control boxes on 1/2 - 1 HP motors to increase efficiency and motor life and reduce energy consumption.
- The 1 1/2 HP and larger control boxes are all CSCR type.

### SPECIFICATIONS

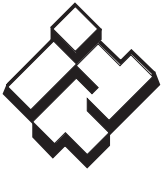
- **Temperature Rating:** Rated for continuous duty in water of 86° F (30° C) maximum.
- **Cooling:** Proper motor cooling requires a water velocity past the motor of .25'/sec which translates into 1.2 gpm in a 4" casing, 7 gpm in a 5" casing and 13 gpm in a 6" casing.
- **Power Lead:** Removable and replaceable motor leads are held in place by two (2) stainless steel screws for positive compression and sealing. Leads are furnished with motors and are also available as replacement parts.
- **Rotation:** CCW, counterclockwise as you face the top or shaft end of the motor.
- **Control Box:** Required on single phase 3 wire models, available in quick disconnect or more efficient CSCR designs.

### Three Wire, Single Phase 4" Motors - Engineering Data

Type	Motor Order Number		HP	Volts	Efficiency %		Power Factor %		Thrust Rating	KVA Code
	CentriPro	Red Jacket			F.L.	S.F.	F.L.	S.F.		
3-Wire	M05411	50C301	0.5	115	51	59	54	69	700 #	N
	M05412	50C311	0.5		50	58	58	71		M
	M07412	75C311	0.75		55	61	61	72		L
	M10412	100C311	1.0		59	62	66	75		L
	M15412	150C311	1.5	230	66	67	80	86	900 #	J
	M20412	200C311	2		68	69	96	95		G
	M30412	300C311	3		72	72	96	97	G	
	M50412	500C311	5		71	71	97	98	1500 #	E

### Fuse or Circuit Breaker Amps

Type	Motor Order Number		HP	Fuse or Circuit Breaker Amps		
	CentriPro	Red Jacket		Standard Fuse	Dual Element Time Delay	Circuit Breaker
3-Wire QD (CSIR)	M05411	50C301	0.5	30	20	30
	M05412	50C311	0.5	15	10	15
	M07412	75C311	0.75	20	10	20
	M10412	100C311	1.0	25	15	25
3-Wire CSCR	M05412	50C311	0.5	15	10	10
	M07412	75C311	0.75	20	10	15
	M10412	100C311	1.0	20	10	15
	M15412	150C311	1.5	30	15	25
	M20412	200C311	2.0	30	20	25
	M30412	300C311	3.0	45	25	40
M50412	500C311	5.0	70	40	60	



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## CENTRIPRO Residential Water Systems

### Three Wire, Single Phase 4" Motors - Electrical Data, 60 Hertz, 3450 RPM

Type	Motor Order No.		HP	KW	Volts	SF	Full Load		Service Factor		Locked Rotor Amps	Winding Resistance		Required Control Box
	Centri-Pro	Red Jacket					Amps	Watts	Amps	Watts		Main (B-Y)	Start (R-Y)	
3-Wire with Q.D. Cap. Start Box	M05411	50C301	0.5	0.37	230	1.6	Y-11.0 B-11.0 R-0	733	Y-12.6 B-12.6 R-0	1021	49.6	.9-1.6	5.7-7.0	CB05411
	M05412	50C311	0.5	0.37		1.6	Y-5.5 B-5.5 R-0	745	Y-6.3 B-6.3 R-0	1033	22.3	4.2-4.9	17.4-18.7	CB05412
	M07412	75C311	0.75	0.55		1.5	Y-7.2 B-7.2 R-0	1014	Y-8.3 B-8.3 R-0	1381	32.0	2.6-3.6	11.8-13	CB07412
	M10412	100C311	1.0	0.75		1.4	Y-8.4 B-8.4 R-0	1267	Y-9.7 B-9.7 R-0	1672	41.2	2.2-3.2	11.3-12.3	CB10412
3-Wire with CSCR (CR) or Magnetic Contactor (MC) Control Box	M05412	50C311	0.5	0.37		1.6	Y-4.1 B-4.1 R-2.2	720	Y-4.9 B-4.4 R-2.1	955	22.3	4.2-4.9	17.4-18.7	CB05412CR
	M07412	75C311	0.75	0.55		1.5	Y-5.1 B-5.0 R-3.2	1000	Y-6.3 B-5.6 R-3.1	1300	32.0	2.6-3.6	11.8-13	CB07412CR
	M10412	100C311	1.0	0.75		1.4	Y-6.1 B-5.7 R-3.3	1205	Y-7.2 B-6.3 R-3.3	1530	41.2	2.2-3.2	11.3-12.3	CB10412CR
	M15412	150C311	1.5	1.1		1.3	Y-9.7 B-9.5 R-1.4	1693	Y-11.1 B-11.0 R-1.3	2187	47.8	1.6-2.3	7.9-8.7	CB15412CR or CB15412MC
	M20412	200C311	2	1.5	1.25	Y-9.9 B-9.1 R-2.6	2170	Y-12.2 B-11.7 R-2.6	2660	49.4	1.6-2.2	10.8-12.0	CB20412CR or CB20412MC	
	M30412	300C311	3	2.2	1.15	Y-14.3 B-12.0 R-5.7	3170	Y-16.5 B-13.9 R-5.6	3620	76.4	1.1-1.4	2.0-2.5	CB30412CR or CB30412MC	
	M50412	500C311	5	3.7	1.15	Y-24.0 B-19.1 R-10.2	5300	Y-27.0 B-22.0 R-10.0	6030	101.0	.62-.76	1.36-1.66	CB50412CR or CB50412MC	

### Materials of Construction

Part	Material
Motor (Stator) Shell	304 SS
Shaft Extension	17-4 PH hardened SS
Motor End Bells	304 SS Castings
Upper and Lower Radial Bearings	Carbon Sleeve
Thrust Bearing	Kingsbury Type
Overload Protection	Built-in, Auto Reset
Lead Wire	XLPE
Lead Potting	Epoxy
Lead Connector	18-8 SS
Fasteners	18-8 SS
Sand Slinger / Slinger Seat	NBR / Delrin

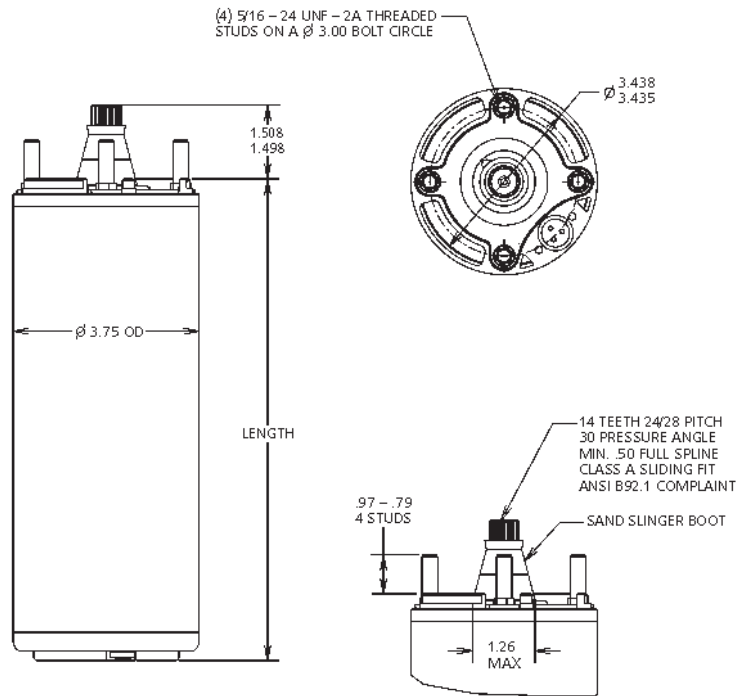


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### Weights and Dimensions

Type	Motor Order Number		HP	Volts	Length		Motor Weight	
	CentriPro	Red Jacket			Inches	mm	Lb.	Kg.
3-wire	M05411	50C301	.5	115	10.0	253	18.9	8.6
	M05412	50C311	.5		9.7	246	18.1	8.2
	M07412	75C311	.75		10.8	275	21.4	9.7
	M10412	100C311	1		11.7	297	23.1	10.5
	M15412	150C311	1.5		13.6	345	27.4	12.4
	M20412	200C311	2		15.1	383	31.0	14.1
	M30412	300C311	3		18.3	466	40.0	18.1
	M50412	500C311	5		27.7	703	70.0	31.8



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