TECHNICAL BROCHURE

BC2WIRE



FEATURES

304 SS casing and end bells for corrosion resistance

Kingsbury type, 3 shoe, 700 lb. thrust bearing

Stainless steel, 17-4 PH splined shaft

PSC design for quiet, efficient operation

Built-in, hermetically sealed, environmentally safe capacitor

Automatic reset, on-winding thermal overload protection on 2-wire up to 1½ HP

Removable, replaceable 48" motor lead on ½ - 1½ HP

Water lubricated with filter/check valve to maintain fluid fill

Lightning and surge protection built-in

NEMA Mounting Dimensions

Annex G, NSF / ANSI 61 -2008

AGENCY LISTINGS



Tested by CSA to CSA and UL Standards

Single Phase 2-Wire, 1/2-11/2 HP PSC Motors

60 HZ, 3450 RPM



Residential Water Systems

APPLICATIONS

- These 4" motors are designed and sized for installation in 4" diameter or larger water wells.
- PSC, permanent split capacitor, 2 wire motors are efficient and quiet.
- Built-in, hermetically sealed, environmentally safe capacitor eliminates the noise causing pulsations common to many split-phase 2 wire motors.

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.

Generation III - Scheduled release date: November/December 2011

2-WIRE MOTORS Identified by a - 01 Nameplate Order No. Suffix

As part of Faradyne Motors' continual improvement process we are pleased to introduce the 2 Wire Generation II motors. Our pump model numbers and motor order number will not change. The Motor Nameplate will have a new Faradyne part number and the Goulds part number on the Motor Nameplate will have a - 01 suffix, example M05422 will be M05422 - 01, only on the Motor Nameplate not in our catalog or price book.

The self-stick, Mylar motor data stickers we pack with 2 wire motors and complete pumps will be updated with the new electrical data so that installers will know which motor is installed in the well should service work ever be necessary. Note that the motor data is only needed to troubleshoot a motor in the well, i.e. resistance and amperage ratings or when installing a variable speed drive system to set the overloads.

MATERIALS OF CONSTRUCTION

Part	Material
Motor (Stator) Shell	304L SS
Shaft - 1 piece	All 17-4 PH hardened SS
Motor End Bells	304 SS Castings
Upper and Lower Radial Bearings	Carbon Sleeve
½ - 1½ HP Thrust Bearing	700 lb. Kingsbury Type
Overload Protection	Built-in, Auto Reset
Lead Wire	XLPE
Lead Potting	Ероху
Lead Connector	18-8 SS
Fasteners	18-8 SS
Sand Slinger / Slinger Seat	NBR / Delrin

Generation III - Scheduled release date November/December 2011

GENERATION II - 2-WIRE, 4" SINGLE PHASE ELECTRICAL DATA, 60 HERTZ, 3450 RPM

							Full	Load	Service	Factor				
	Motor Order No.										Locked Rotor	Winding	KVA	
Туре	Centri- Pro	Red Jacket	HP	KW	Volts	SF	Amps	Watts	Amps	Watts	Amps	Resistance	Code	
	M05421	50C201	0.5	0.37	115	1.6	7.9	910	9.8	1120	28	1.4-2.0	Н	
2-	M05422	50C211	0.5	0.37	230	1.6	4.0	845	4.7	1050	16	6.1-7.2	J	
Wire	M07422	75C211	0.75	0.55	230	1.5	5.0	1130	6.2	1400	18	5.9-6.9	F	
(PSC)	M10422	100C211	1.0	0.75	230	1.4	6.7	1500	8.1	1800	24	4.2-5.2	F	
	M15422	150C211	1.5	1.1	230	1.3	9.0	2000	10.4	2350	43	1.8-2.4	Н	

GENERATION II - EFFICIENCY AND POWER FACTOR DATA

						Efficie	ncy %	Power F	actor %	Len	gth	Wei	ight	Thrust		
Time	Motor Order Number		LID KAN		Valta	EI	C E		c F	Imahaa		lb.	lea.	Rating		
Туре	CentriPro	Red Jacket	HP	HP	HP	KW	Volts	/olts F.L.	S.F.	F.L.	S.F.	Inches	mm	ID.	kg.	
	M05421	50C201	0.5	0.37	115	42%	54%	99%	99%	10.5	267	18	8.2			
2-	M05422	50C211	0.5	0.37	230	45%	59%	92%	97%	10.5	267	18	8.2			
Wire	M07422	75C211	0.75	0.55	230	51%	61%	98%	98%	11.9	302	22	9.7	700 #		
(PSC)	M10422	100C211	1.0	0.75	230	50%	59%	98%	98%	12.5	318	24	10.5			
	M15422	150C211	1.5	1.1	230	57%	63%	98%	99%	14.2	361	28	12.4			

GENERATION II - FUSE OR CIRCUIT BREAKER AMPS

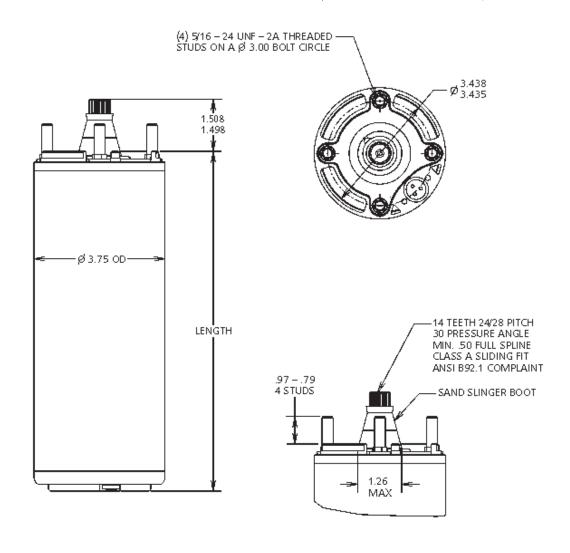
				Fuse	e or Circuit Breaker A	nps
Tyme	Motor Ord	ler Number	НР	Standard	Dual Element	Circuit
Туре	CentriPro	Red Jacket	пг	Fuse	Time Delay	Breaker
	M05421	50C201	0.5	25	15	20
2-Wire	M05422	50C211	0.5	15	10	10
(PSC)	M07422	75C211	0.75	15	10	15
(130)	M10422	100C211	1.0	20	15	20
	M15422	150C211	1.5	30	15	25

GENERATION II, 2-WIRE MOTORS, RECOMMENDED LEAD LENGTHSReleased for Sale in November/December 2011

	CentriPro Motor Lead Lengths - 2 Wire Motors, 1Ø, 4" Motors Based on Service Factor Amps, 30° C Ambient and 5% Voltage Drop														
Motor Rating 60° C and 75° C Insulation - AWG Copper Wire Size															
Volts	HP	kW	FLA	SFA	14	12	10	8	6	4	2	1/0	2/0	3/0	4/0
115	1/2	0.37	7.9	9.8	112	178	284	449	699	1114	1769	2814	3550	4481	5646
230	1/2	0.37	4.0	4.7	466	742	1183	1874	2915	4648	7379	11733			
230	3/4	0.55	5.0	6.2	353	562	897	1420	2210	3523	5594	8895	11222		
230	1	0.75	6.7	8.1	271	430	686	1087	1692	2697	4281	6808	8590	10843	
230	1 1/2	1.1	9.0	10.4	211	335	535	847	1318	2100	3335	5303	6690	8445	

WEIGHTS AND DIMENSIONS

	Motor Ord	ler Number			Len	gth	Motor	Weight
Туре	CentriPro	Red Jacket	HP	Volts	Inches	mm	Lb.	Kg.
	M05421	50C201	.5	115	10.5	267	18	8.2
2-wire	M05422	50C211	.5		10.5	267	18	8.2
PSC	M07422	75C211	.75	230	11.9	302	22	9.7
130	M10422	100C211	1	250	12.5	318	24	10.5
	M15422	150C211	1.5		14.2	361	28	12.4





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www.xyleminc.com/brands/centripro

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