

## **Residential Water Systems**

# CentriPro

Single Phase 2-Wire, 1/2-11/2 HP PSC Motors 60 Hertz, 3450 RPM





CentriPro is a brand of ITT Corporation.

www.centripro.com

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## **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 1<sup>1</sup>/<sub>2</sub> HP
- Removable, replaceable 48" motor lead on 1/2 - 11/2 HP
- Water lubricated with filter/check valve to maintain fluid fill
- Lightning and surge protection built-in
- U.L. 778 Recognized
- CSA Certified
- NEMA Mounting Dimensions
- Tested to ANSI/NSF 61



Tested by CSA to CSA and UL Standards



### **CENTRIPRO** 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.

#### **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           |  |  |  |
| <sup>1</sup> / <sub>2</sub> - 1 <sup>1</sup> / <sub>2</sub> 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            |  |  |  |



|       |                 |               |      |      | Full Load |     | Service Factor |       | I a alva al |       |                 |            |
|-------|-----------------|---------------|------|------|-----------|-----|----------------|-------|-------------|-------|-----------------|------------|
|       | Motor Order No. |               |      |      |           |     |                |       |             |       | Locked<br>Rotor | Winding    |
| Туре  | Centri-<br>Pro  | Red<br>Jacket | HP   | KW   | Volts     | SF  | Amps           | Watts | Amps        | Watts | Amps            | Resistance |
|       | M05421          | 50C201        | 0.5  | 0.37 | 115       | 1.6 | 7.4            | 845   | 9.5         | 1088  | 36.4            | 1.3-1.8    |
| 2-    | M05422          | 50C211        | 0.5  | 0.37 | 230       | 1.6 | 3.7            | 834   | 4.7         | 1073  | 19.5            | 4.5-5.2    |
| Wire  | M07422          | 75C211        | 0.75 | 0.55 | 230       | 1.5 | 5.0            | 1130  | 6.4         | 1459  | 24.8            | 3.0-4.8    |
| (PSC) | M10422          | 100C211       | 1.0  | 0.75 | 230       | 1.4 | 7.9            | 1679  | 9.1         | 1990  | 21.7            | 4.2-5.2    |
|       | M15422          | 150C211       | 1.5  | 1.1  | 230       | 1.3 | 9.2            | 2108  | 11.0        | 2520  | 42.0            | 1.9-2.3    |

## Two Wire PSC, Single Phase 4" Motors - Electrical data, 60 Hertz, 3450 RPM

#### **Efficiency and Power Factor Data**

|                 |                    |            |      |       |      | Efficiency % |      | actor % | Thrust | KVA  |
|-----------------|--------------------|------------|------|-------|------|--------------|------|---------|--------|------|
| <b>T</b>        | Motor Order Number |            |      | V. I. |      |              |      | 6.5     | Rating | Code |
| Туре            | CentriPro          | Red Jacket | HP   | Volts | F.L. | S.F.         | F.L. | S.F.    | nating | couc |
| 2.147           | M05421             | 50C201     | 0.5  | 115   | 49   | 61           | 99   | 99      | _      | К    |
|                 | M05422             | 50C211     | 0.5  | 230   | 50   | 62           | 97   | 99      |        | K    |
| 2-Wire<br>(PSC) | M07422             | 75C211     | 0.75 | 230   | 55   | 65           | 97   | 99      | 700 #  | J    |
| (F3C)           | M10422             | 100C211    | 1.0  | 230   | 58   | 65           | 94   | 96      |        | F    |
|                 | M15422             | 150C211    | 1.5  | 230   | 59   | 64           | 99   | 99      |        | Н    |

#### **Fuse or Circuit Breaker Amps**

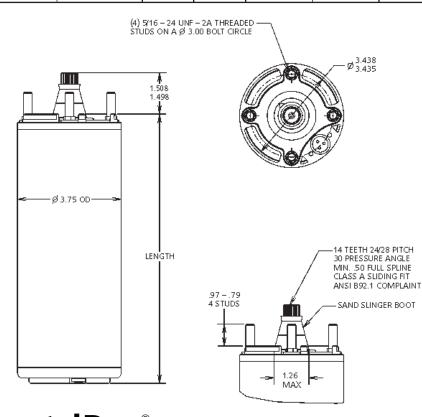
|        |           |            | _    | Fuse or Circuit Breaker Amps |              |         |  |  |  |  |
|--------|-----------|------------|------|------------------------------|--------------|---------|--|--|--|--|
| Туре   | Motor Ord | ler Number | НР   | Standard                     | Dual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



## **Residential Water Systems**

|               | Motor Ord | er Number  |     |       | Len    | gth | <b>Motor Weight</b> |      |
|---------------|-----------|------------|-----|-------|--------|-----|---------------------|------|
| Туре          | CentriPro | Red Jacket | HP  | Volts | Inches | mm  | Lb.                 | Kg.  |
|               | M05421    | 50C201     | .5  | 115   | 11.0   | 279 | 19.2                | 8.7  |
| 2-wire<br>PSC | M05422    | 50C211     | .5  | 230   | 11.0   | 279 | 19.2                | 8.7  |
|               | M07422    | 75C211     | .75 |       | 12.4   | 314 | 22.7                | 10.3 |
|               | M10422    | 100C211    | 1   | 250   | 13.3   | 337 | 24.5                | 11.1 |
|               | M15422    | 150C211    | 1.5 |       | 14.9   | 378 | 28.9                | 13.1 |

#### **Weights and Dimensions**





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