4" Motors and Controls
SINGLE-PHASE MOTORS:
- Two-Wire PSC Motors
  - ½ HP, 115 V
  - ½ - 1½ HP, 230 V
- Three-Wire Motors
  - ½ HP, 115 V
  - ½ - 5 HP, 230 V

THREE-PHASE MOTORS:
- ½ - 10 HP (10 HP is 460V only)
- 200V, 230V, 460V and 575V available

FEATURES:
- Three-Wire - Capacitor Start Motor Design
  - Use with CentriPro Quick Disconnect, CSCR or Magnetic Contactor (MC) style control boxes.
- Two-Wire PSC (Permanent Split Capacitor) Design
  - Quieter than split-phase, 2-wire motors, capacitor reduces pulsation noise.
  - Capacitor built-in and hermetically sealed.
- Two-Wire and Three-Wire Designs
  - 304 Stainless steel end bells, top and bottom
  - 304 Stainless steel shell
  - Laser Welded - 21st century welding technology for improved welds.
  - Built-in lightning/surge protection through 5 HP, 200 or 230V.
  - Three-shoe Kingsbury thrust bearing (ratings in chart).
  - Precision machined, one-piece, 304 stainless steel castings used for upper and lower end bells.
  - Water-filled design with non-toxic propylene glycol solution to protect the motor during shipping and storage.
  - Built-in check valve maintains water fill needed for cooling and lubrication.
  - Replaceable motor lead is held in place by (2) screws for controlled compression - no danger of stripping the lead threads.
  - Tested to UL and CSA standards by CSA.
  - Tested to ANSI/NSF 61 by U.L.

CentriPro Motor - tested to UL778 and CAN 22.2 by CSA International (Canadian Standards Association)
CentriPro Motor - Certified to NSF/ANSI 61, Annex G, Drinking Water System Components 4P49
### SINGLE PHASE 115 AND 230 VOLT

<table>
<thead>
<tr>
<th>Type</th>
<th>Order No.</th>
<th>Control Box</th>
<th>HP</th>
<th>Volts</th>
<th>SF</th>
<th>Thrust Rating</th>
<th>Length (in)</th>
<th>Wt. (lbs)</th>
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### THREE PHASE 4" MOTORS - ORDER NUMBERS FOR CENTRIPRO

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<th>kW</th>
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<th>200 Volt</th>
<th>230 Volt</th>
<th>460 Volt</th>
<th>575 Volt</th>
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### Quick Disconnect Control Box Features
- Voltage Relays for installer convenience
- 115 and 230 volt models
- Start Capacitors
- Multiple knockouts
- Two ground lugs
- 208 volt relay available for low voltage applications
- NEMA 3R enclosure for indoor or outdoor mounting
- Quick disconnect cover design will retrofit with F.E. Q-D control boxes

### AGENCY LISTINGS:

![UL Listing](ul-logo.png)

### CentriPro Order Numbers

<table>
<thead>
<tr>
<th>Control Box Order Number</th>
<th>HP</th>
<th>KW</th>
<th>Volts</th>
<th>Enclosure Dimensions W x D x H (in)</th>
<th>Shipping Weight (lbs)</th>
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<tbody>
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Note: 208 Volt starting relay is available as a repair part for 200-208 volt power supplies, 9K461.

### CSCR (Capacitor Start-Capacitor Run) Control Box Features
- Voltage Relay for installer convenience
- 230 volt standard models - 208 volt relay, order no. 9K479 is available for low voltage applications
- Start Capacitors for starting torque
- Run Capacitors for efficiency and quiet operation
- Type 3R enclosure for indoor or outdoor mounting
- Accepts up to #2 AWG wire
- Multiple knockouts and two ground terminals
- Higher HP models require heavy duty pressure switches - See Magnetic Contactor version to use standard pressure switches
- Manual reset overloads on 1½ - 5 HP models

### AGENCY LISTINGS:

![UL Listing](ul-logo.png)

### CentriPro Control Box Dimensions

<table>
<thead>
<tr>
<th>Control Box Order Number</th>
<th>HP</th>
<th>KW</th>
<th>Volts</th>
<th>Enclosure Dimensions W x D x H (in)</th>
<th>Shipping Weight (lbs)</th>
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<td>8.1 x 5.9 x 9.3</td>
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</table>
MAGNETIC CONTACTOR 1Ø CONTROL BOXES
For 3-wire, 1½ - 5 HP Submersible Motors

FEATURES

• Built-in Magnetic Contactors allow the use of standard pressure switches, prolong switch life and eliminate the need to source and install separate contactors, saving installation time and reducing total system component costs.

• Voltage Relay for installer convenience

• 230 volt standard models - 208 volt relay, order no. 9K479 is available for low voltage applications

• Start Capacitors for starting torque

• Run Capacitors for efficiency and quiet operation

• Type 3R enclosure for indoor or outdoor mounting

• Accepts up to #2 AWG wire

• Multiple knockouts and two ground terminals

• Manual reset overloads on 1½ - 5 HP models

AGENCY LISTINGS:
TESTED TO UL AND CSA STANDARDS BY UL.

<table>
<thead>
<tr>
<th>Control Box Order Number</th>
<th>HP</th>
<th>KW</th>
<th>Volts</th>
<th>Enclosure Dimensions W x D x H (in)</th>
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<td>3.7</td>
<td>230</td>
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</tbody>
</table>
PUMPSAVER® INSIDERS
PUMPSAVER® 111, 233 AND 235
777KWHP - 3 PHASE

FEATURES

- Quickly and easily calibrates any submersible or centrifugal pump to jobsite conditions (voltage and current). Unlike other protection devices which only work with one brand of submersible motors.

- Most models available installed in NEMA 3R Rainproof (outside) enclosures or shipped loose for installation in existing control panels.

- Single phase units work with the hand held Informer for simple, fast troubleshooting and system diagnostics.

- Available in single and three phase models.

- Insider Plus models fit in CentriPro, Goulds Water Technology, Pentair and Franklin Electric Quick Disconnect type control boxes from ½ - 1 HP. The Plus version contains a fiber optic kit to signal an Informer.

- Protects against dry wells, low and high voltage, rapid cycling, jammed pump, dead heading (flow restriction)

- Automatic reset selectable, 2-225 minutes or can be set on manual reset.
AQUAVAR SOLO™

1AS15, 3AS20, 3AS30 and 3AS50
Constant Pressure Controllers for ½-2, 3 and 5 HP Submersible Pumps

FEATURES

• Enclosure Rating: NEMA 3R, IP22 rainproof, indoor/outdoor enclosure. Allows mounting the controller outdoors.

• Current Limit Selector Switch: Rotary switch to set current limit to match motor Service Factor Amps (SFA).

• The controller may be used on smaller pump/motor combinations as long as the motor SFA is within the current limit range of the controller.

• Communications Port: RS-232 serial port to facilitate software updates and future expansion.

• Three sizes available for ½ - 5 HP, three phase pumps.

• 1AS15 for ¾ - 2 HP single phase pumps.

• Constant Pressure: The system provides consistent pressure even as system flow requirements vary.

• Controller acts as a pump protection device and troubleshooting device.

• Flashing LED lights indicate system faults by number of flashes.

• Controller will operate between 196 and 265 volts.

• Includes a pressure sensor and sensor cable.

• Integrated output motor filter protects the motor from voltage spikes and limits electrical interference with devices such as portable telephones, radios, televisions and garage door openers.

• Cooling fan: Allows operation in ambient temperatures up to 122°F.
ELECTRICAL ACCESSORIES
Replacement Motor Leads, Cable Accessories, Lightning Protection Devices, Bulk Cable

FEATURES

Motor Leads
• 4” CentriPro Motor Leads
• 6” CentriPro Motor Leads
• 4” CentriPro Packaged Cables 50’ - 300’

Cable Accessories
• Heat Shrink Kits
• Splicing Tape

Lightning Protection Devices
• AW24-1 and AW24-3 Lightning Arrestors
• Watt-Knot® Voltage Surge Arrestors

Bulk cable with ground
• Twisted design, solid copper conductor.
• PVC insulated
• AWG 8-14

AWK3230 / AWK3460  AWK1230

AW24-1  AW24-3

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