

## Bronze Close Coupled Centrifugal Pump 600 Series

600

### by Gardner Denver

# Inlet 3/4" NPT, Outlet 1/2" NPT



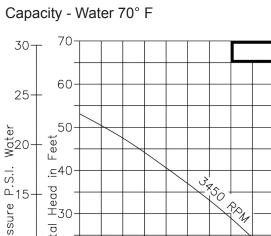
#### **FEATURES:**

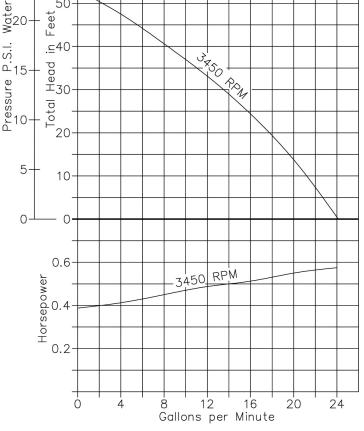
- Rugged bronze construction
- A standard in the marine air conditioning industry
- Extremely quiet operation
- O-ring housing seal eliminates gasket problems
- Handles contaminated liquids
- Discharge port orientation flexibility
- Mechanical seal carbon/ceramic - NBR, FKM, or PTFT options
- Pump heads mount to standard footed NEMA 56J jet pump motors
- Shafts: 416 Stainless
- Multiple motor options available
- For marine version see Model 104M
- For pedestal style version, see Model 60P

#### LIQUIDS:

The special pump alloys used provide corrosion resistance to many liquids including water, water solutions, and a wide range of commercial chemicals. Questions as to the chemical compatibility of special liquids

### **PERFORMANCE:**





should be referred to the factory.

Viscous liquids with a maximum viscosity of 2000 Saybolt Seconds Universal can be pumped. However, when pumping viscous liquids as compared with water, a reductio inflow and pressure occurs and the required horsepower rate increases.

Liquids heavier than water require additional horsepower in direct proportion to the increase in specific gravity. Liquids contaminated with small solids or abrasives can be handled, but a reduction in mechanical seal life must be expected.

#### **CHARACTERISTICS:**

This close coupled pump uses a standard NEMA C-Flange Jet Pump Motor with weld-on base and threaded shaft end to accept the pump impeller. Single phase motors are non-reversible and are wired for the proper pump rotation which is counter-clockwise looking at the inlet end of the pump. Three phase motors must be checked out for proper rotation when pump is installed. Interchanging of any 2 wires in a 3-phase system will reverse motor rotation.

The pump uses a mechanical type shaft seal with a NBR rubber element. It is suitable for water, oils, and some mild solvents. It is limited to 212° F and 75 PSI. FKM seals and PTFE seals are available for severe solvents and difficult chemicals. These centrifugal pumps are not self-priming. They must be installed below the liquid level so that the liquid flows to the pump by gravity (flooded suction). However, if a foot valve is used at the beginning of the suction line and all air is bled from the pump by manual priming, the pump will lift on the suction side up to 15 feet. Such a system relies entirely on a nonleaking foot valve for starting capability.

The flow of a centrifugal pump can be conveniently controlled by a throttling valve in the discharge line without the need for a relief valve. In centrifugal pumps, the horsepower demand will decrease as the pressure increases. Maximum horsepower occurs with a wide open discharge.

|          | 1      | 2      | 3*       | 4*       | <b>5</b> a*  | 5b*              | 5c*                    | 6      |
|----------|--------|--------|----------|----------|--------------|------------------|------------------------|--------|
|          | Screw  | Cover  | O-Ring   | Impeller | Seal<br>Head | Seal<br>Wearface | Seal Seat<br>or O-Ring | Plug   |
| Model    | Qty. 4 | Qty. 1 | Qty. 1   | Qty. 1   | Qty. 1       | Qty. 1           | Qty. 1                 | Qty. 2 |
| 600      | 5385   | 5168-2 | 9797-043 | 5219     | 2913         | 529201           |                        | 6052   |
| 600P     | 5385   | 5168-2 | 9797-043 | 7201     | 2913         | 529201           |                        | 5395   |
| 600S-10  | 5385   | 5168-2 | 9797-043 | 6033     | 6141         | 6142             | 6143                   | 6052   |
| 600PS-10 | 5385   | 5168-2 | 9797-043 | 7432     | 6141         | 6142             | 6143                   | 6052   |
| 600S-11  | 5385   | 5168-2 | 9355-043 | 6033     | 32211        |                  |                        | 6052   |
| 600PS-11 | 5385   | 5168-2 | 9355-043 | 7432     |              | 32211            |                        | 6052   |

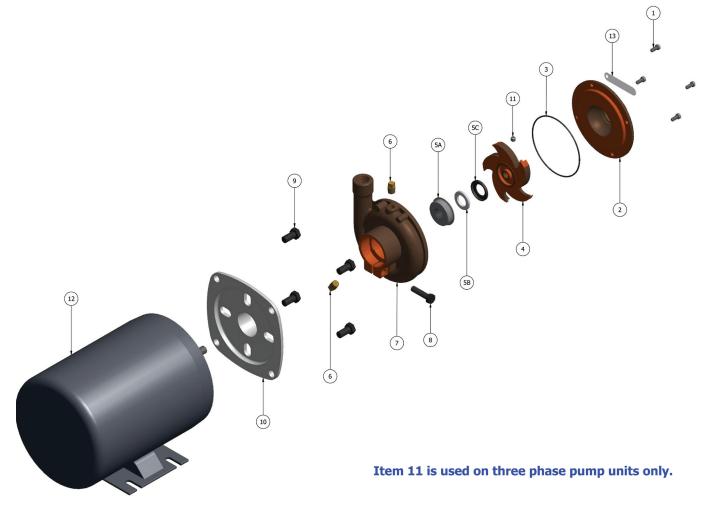
### **Parts List**

|          | 7      | 8      | 9      | 10      | 11*          | 12        | 13            |            |
|----------|--------|--------|--------|---------|--------------|-----------|---------------|------------|
|          | Body   | Screw  | Screw  | Adapter | Set<br>Screw | Motor     | Name<br>Plate | Repair Kit |
| Model    | Qty. 1 | Qty. 1 | Qty. 4 | Qty. 1  | Qty. 1       | Qty. 1    | Qty. 1        |            |
| 600      | 7515-2 | 5595   | 5411   | 7611    | NA           | See Chart | 7736          | 10696      |
| 600P     | 7515-2 | 5595   | 5411   | 7611    | 9849         | See Chart | 7736          | 10858      |
| 600S-10  | 7515-2 | 5595   | 5411   | 7611    | NA           | See Chart | 7736          | 10814      |
| 600PS-10 | 7515-2 | 5595   | 5411   | 7611    | 9849         | See Chart | 7736          | 12175      |
| 600S-11  | 6173-2 | 5595   | 5411   | 7611    | NA           | See Chart | 7736          | 10768      |
| 600PS-11 | 6173-2 | 5595   | 5411   | 7611    | 9849         | See Chart | 7736          | 11747      |

\* Repair kit contains items 3, 4, 5 (5a, 5b, 5c), & 11



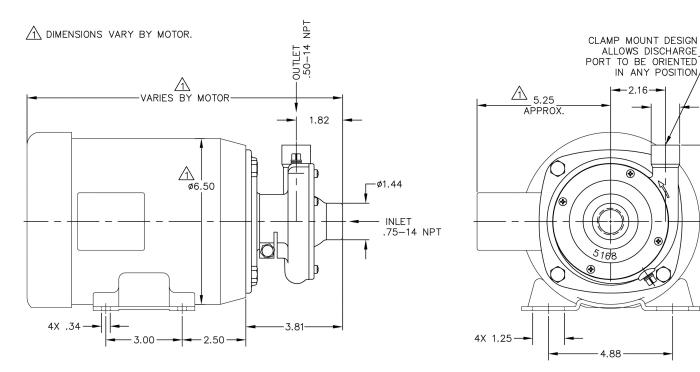
# **Exploded View**



## **Bronze Close Coupled Centrifugal Pump**

### **600 Series**

## **Dimensions**



| Model                    | Motor | Motor Specs                              | Motor<br>Item 12 |
|--------------------------|-------|------------------------------------------|------------------|
| 600, 600S-10, 600S-11    | F13   | 1/3 HP, 3450 RPM, 115v, Single, ODP      | 5859             |
| 600                      | F19   | 1/3 HP, 3450 RPM, 115/230v, Single, ODP  | 7957             |
| 600                      | F20   | 1/3 HP, 3450 RPM, 115/230v, Single, TEFC | 7986             |
| 600                      | F21   | 1/3 HP, 3450 RPM, 115/230v, Single, XP   | 8214             |
| 600                      | F22   | 1/3 HP, 2850 RPM, 115/230v, Single ODP   | 9758             |
| 600, 600S-10, 600S-11    | J19   | 1/2 HP, 3450 RPM, 115/230v, Single, ODP  | 5860             |
| 600, 600S-10, 600S-11    | J20   | 1/2 HP, 3450 RPM, 115/230v, Single, TEFC | 7976             |
| 600P, 600P-S10, 600PS-11 | F57   | 1/3 HP, 3450 RPM, 220/440v, Three, ODP   | 6996             |
| 600P                     | M57   | 3/4 HP, 3450 RPM, 220/440v, Three, ODP   | 6999             |
| 600P, 600P-S10, 600PS-11 | M58   | 3/4 HP, 3450 RPM, 220/440v, Three, TEFC  | 7967             |
| 600P-S10, 600PS-11       | F58   | 1/3 HP, 3450 RPM, 220/440v, Three, TEFC  | 7987             |
| 600P, 600P-S10, 600PS-11 | J58   | 1/2 HP, 3450 RPM, 220/440v, Three, TEFC  | 9214             |

NBR = Acrylonitrile-Butadiene PTFE = Polytetrafluorethylene FKM = Fluoroelastomer



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Due to ongoing product improvements, data shown here is subject to change without notice. Contact Oberdorfer Pumps for latest specifications.