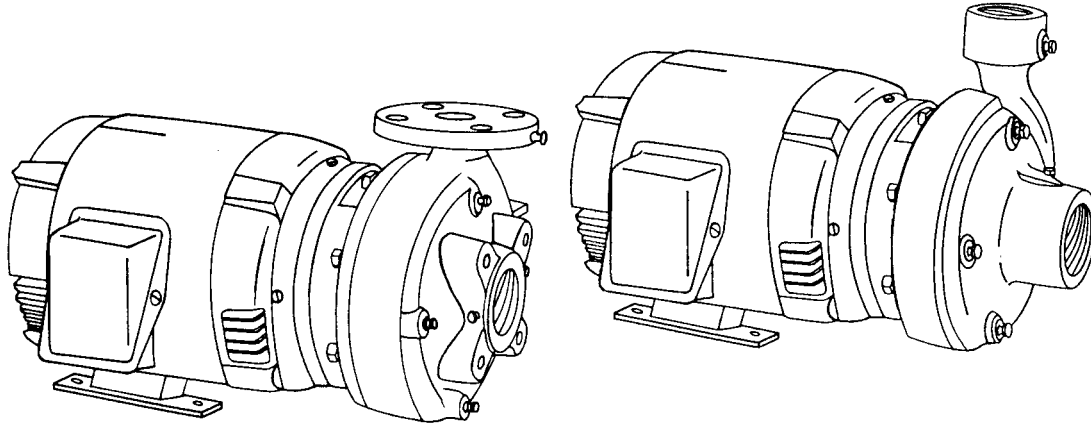


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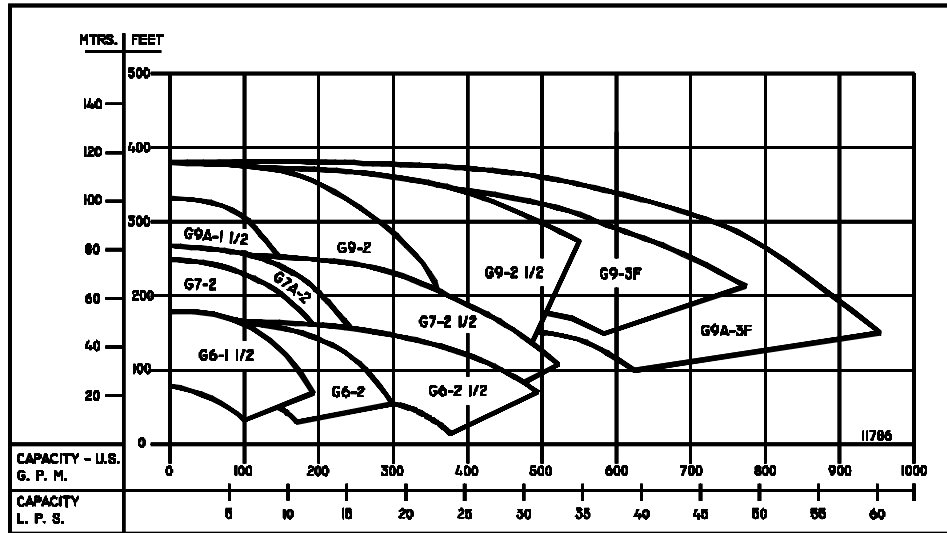
**SERIES: G6-1-1/2  
thru 4G9-4F**



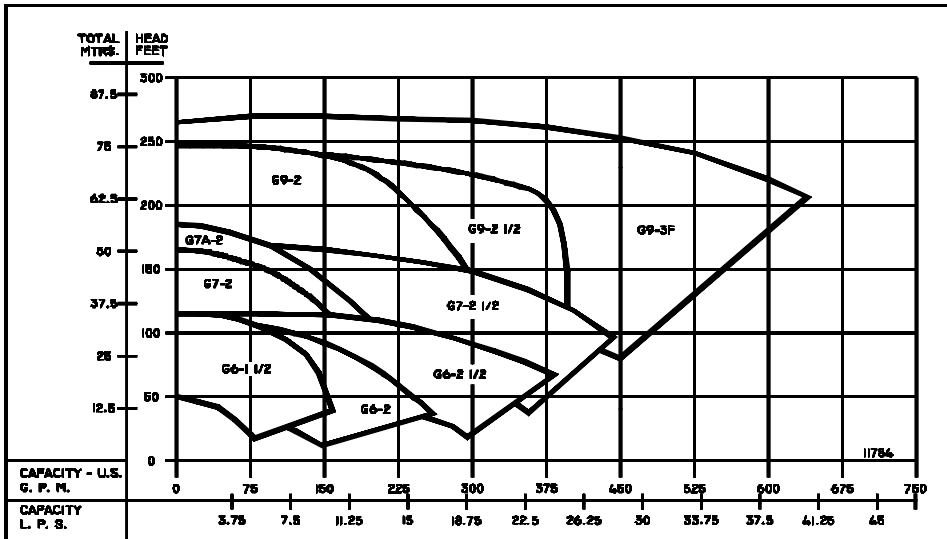
**CLOSED COUPLED CENTRIFUGAL PUMPS**



**3500RPM - 60Hz.**  
CAPACITIES TO 960GPM (60.6LPS)  
HEADS TO 380 FEET (116M)



**2900RPM - 50Hz.**  
CAPACITIES TO 630GPM (39.7LPS)  
HEADS TO 265 FEET (80.8M)



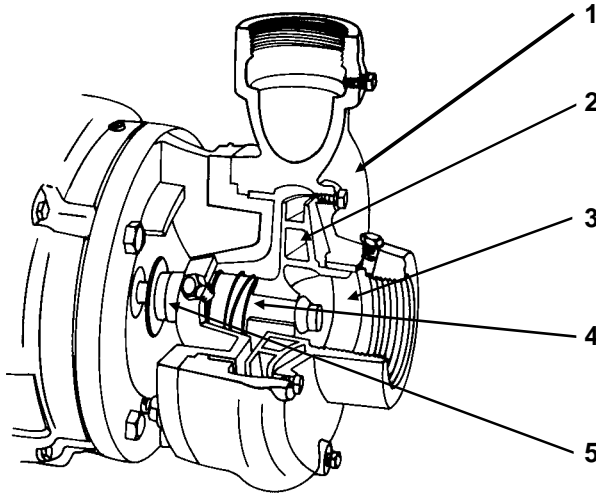
Individual performance curves should be checked for final selection.



PUMPS & SYSTEMS



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## PRODUCT FEATURES

### 1. RADIAL SPLIT CASING DESIGN

Casing is close grain iron of 30,000 p.s.i. minimum tensile strength. Back pull-out design eliminates the need to disturb piping should the pump ever require service - the casing stays in the line. Centerline discharge. Stud mounted casing assures positive alignment and allows rotation of discharge to eight different positions. Openings are provided for test gauges, for venting and for draining the pump.

### 2. ENCLOSED BRONZE IMPELLER

Enclosed bronze impeller is of latest hydraulic design for maximum efficiency. It is balanced for vibration free operation. Precision fit to shaft and double-locked with key and cap screw.

### 3. REPLACEABLE CASING WEAR RING

Prevents wear on casing and is easy to replace.

### 4. MECHANICAL SHAFT SEAL

Mechanical Shaft Seal is self-adjusting for temperatures up to 225°F (107°C) and pressures to 150 psi (1034kpa). Has ceramic seat and carbon seal faces for long trouble-free service. Special seals are available for higher temperatures and fluids other than water. Tapped opening is provided in the seal chamber for flushing seal faces.

### 5. BRONZE SHAFT SLEEVE

Gasketed and keyed hook-type sleeve protects shaft wear and corrosion in seal area.

### 6. MOTORS

The standard Type JM motors supplied with these pumps offer the advantages of quiet operation, controlled shaft deflection for longer mechanical seal life and bearings sized to provide good service life. All motors are supplied by manufacturers providing field service facilities.

### 7. INTERCHANGEABILITY

The complete liquid end of any size pump is interchangeable between motors on close-coupled pumps and the BURKS power frames of comparable size providing inventory flexibility, plus an option for handling emergency service.

### 8. FACTORY TESTED

After careful assembly and inspection, **EVERY** pump is factory tested and will meet Hydraulic Institute standards.

### FOR TEMPERATURES TO 500°F (260°C).

All models, with the exception of the G7-2-1/2 and all G9 series pumps are available in a Jacketed Seal Cavity design for pumping hot oil, hot water and heat transfer fluids in common use in high temperature heating or cooling applications. This feature greatly extends seal life in high temperature applications. To order, add suffix "MJ" to pump catalog number for temperatures below 400°F (204°C) and add suffix "MJK" to pump catalog number for temperatures over 400°F (204°C). Example: G6-1-1/2MJ. See Section on High Temperature Pumps for more information.

| MAXIMUM OPERATING CONDITIONS  |                   |
|-------------------------------|-------------------|
| Maximum Pumping Temperature*  | 225°F (107°C)     |
| Maximum Inlet Pressure        | 100 PSI (690kpa)  |
| Maximum Case Working Pressure | 200 PSI (1379kpa) |

\* FOR STANDARD BUNA-N SEAL

| SUCTION & DISCHARGE SIZES |         |           |
|---------------------------|---------|-----------|
| * SERIES                  | SUCTION | DISCHARGE |
| G6-1-1/2                  | 2"      | 1-1/2"    |
| G6-2 & 2F                 | 2-1/2"  | 2"        |
| G6-2-1/2 & 2-1/2F         | 3"      | 2-1/2"    |
| G7-2 & 2F                 | 2-1/2"  | 2"        |
| G7A-2 & 2F                | 2-1/2"  | 2"        |
| G7-2-1/2 & 2-1/2F         | 3"      | 2-1/2"    |
| G9-1-1/2                  | 2"      | 1-1/2"    |
| G9-2 & 2F                 | 2-1/2"  | 2"        |
| G9-2-1/2 & 2-1/2F         | 3"      | 2-1/2"    |
| G9-3F & G9A-3F            | 4"      | 3"        |
| G9-4F                     | 5"      | 4"        |

\*F Suffix Denotes ANSI 125# Flat Face Flanges

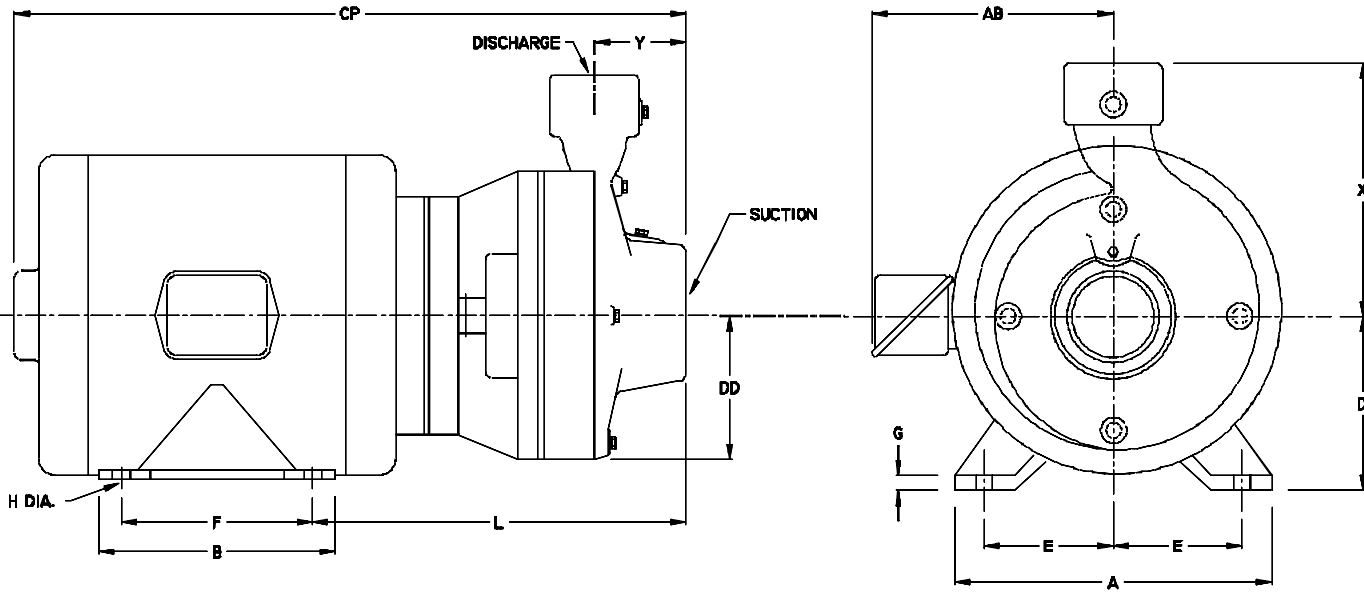
| MATERIALS OF CONSTRUCTION |                                   |                                   |                                   |
|---------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Part                      | Bronze Fitted                     | All Bronze                        | All Iron                          |
| Adapter                   | Cast Iron                         | Bronze                            | Cast Iron                         |
| Casing                    | Cast Iron                         | Bronze                            | Cast Iron                         |
| Casing wear ring          | Bronze                            | Bronze                            | Steel                             |
| Shaft                     | Steel                             | Steel                             | Steel                             |
| Shaft sleeve              | Bronze                            | Bronze                            | #316 S. Steel                     |
| Impeller                  | Bronze                            | Bronze                            | Cast Iron                         |
| Shaft seal                | Carbon-Ceramic<br>S. Steel-Buna-N | Carbon-Ceramic<br>S. Steel-Buna-N | Carbon-Ceramic<br>S. Steel-Buna-N |



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### DIMENSIONS



### SERIES 4G7-2, 4G7A-2, 4G7-2<sup>1</sup>/<sub>2</sub>, G7-2, G7A-2 & G7-2<sup>1</sup>/<sub>2</sub>

| Catalog Number                      |                                      | HP    | Motor Frame Size | Disc. NPT                      | Suct. NPT                       | DIMENSIONS IN INCHES           |                                  |                                |                                  |                               |                               |                               |                                 |                                 |                                 |                                 |                               |                               |
|-------------------------------------|--------------------------------------|-------|------------------|--------------------------------|---------------------------------|--------------------------------|----------------------------------|--------------------------------|----------------------------------|-------------------------------|-------------------------------|-------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|-------------------------------|-------------------------------|
| 1 Phase                             | 3 Phase                              |       |                  |                                |                                 | A                              | AB                               | B                              | CP                               | D                             | DD                            | E                             | F                               | G                               | H                               | L                               | X                             | Y                             |
| <b>1750 &amp; 1450 RPM</b>          |                                      |       |                  |                                |                                 |                                |                                  |                                |                                  |                               |                               |                               |                                 |                                 |                                 |                                 |                               |                               |
| 104G7-2                             | 3104G7-2                             | 1     | 143JM            | 2                              | 2 1/2                           | 7                              | 8 <sup>15</sup> / <sub>16</sub>  | 5                              | 16 <sup>7</sup> / <sub>8</sub>   | 3 1/2                         | 5                             | 2 <sup>3</sup> / <sub>4</sub> | 4                               | 3/8                             | 11 <sup>1</sup> / <sub>32</sub> | 10 <sup>7</sup> / <sub>16</sub> | 8 <sup>1</sup> / <sub>4</sub> | 3 <sup>3</sup> / <sub>4</sub> |
| 154G7-2                             | 3154G7-2                             | 1 1/2 | 145JM            |                                |                                 | 7                              | 8 <sup>15</sup> / <sub>16</sub>  | 6                              | 17 <sup>7</sup> / <sub>8</sub>   | 3 1/2                         | 5                             | 2 <sup>3</sup> / <sub>4</sub> | 5                               | 3/8                             | 11 <sup>1</sup> / <sub>32</sub> | 10 <sup>7</sup> / <sub>16</sub> | 8 <sup>1</sup> / <sub>4</sub> | 3 <sup>3</sup> / <sub>4</sub> |
| 204G7-2                             | -----                                | 2     | 182JM            | 2                              | 2 1/2                           | 8 <sup>3</sup> / <sub>4</sub>  | 9 <sup>7</sup> / <sub>8</sub>    | 5 <sup>3</sup> / <sub>4</sub>  | 18 <sup>11</sup> / <sub>16</sub> | 4 <sup>1</sup> / <sub>2</sub> | 5                             | 3 <sup>3</sup> / <sub>4</sub> | 4 <sup>1</sup> / <sub>2</sub>   | 1/2                             | 13 <sup>1</sup> / <sub>32</sub> | 11 <sup>3</sup> / <sub>16</sub> | 8 <sup>1</sup> / <sub>4</sub> | 3 <sup>3</sup> / <sub>4</sub> |
| -----                               | 3204G7-2                             | 2     | 145JM            |                                |                                 | 7                              | 8 <sup>15</sup> / <sub>16</sub>  | 6                              | 17 <sup>7</sup> / <sub>8</sub>   | 3 1/2                         | 5                             | 2 <sup>3</sup> / <sub>4</sub> | 5                               | 3/8                             | 11 <sup>1</sup> / <sub>32</sub> | 10 <sup>7</sup> / <sub>16</sub> | 8 <sup>1</sup> / <sub>4</sub> | 3 <sup>3</sup> / <sub>4</sub> |
| 104G7A-2                            | 3104G7A-2                            | 1     | 143JM            | 2                              | 2 1/2                           | 7                              | 8 <sup>15</sup> / <sub>16</sub>  | 5                              | 16 <sup>7</sup> / <sub>8</sub>   | 3 1/2                         | 5                             | 2 <sup>3</sup> / <sub>4</sub> | 4                               | 3/8                             | 11 <sup>1</sup> / <sub>32</sub> | 10 <sup>7</sup> / <sub>16</sub> | 8 <sup>1</sup> / <sub>4</sub> | 3 <sup>3</sup> / <sub>4</sub> |
| 154G7A-2                            | 3154G7A-2                            | 1 1/2 | 145JM            |                                |                                 | 7                              | 8 <sup>15</sup> / <sub>16</sub>  | 6                              | 17 <sup>7</sup> / <sub>8</sub>   | 3 1/2                         | 5                             | 2 <sup>3</sup> / <sub>4</sub> | 5                               | 3/8                             | 11 <sup>1</sup> / <sub>32</sub> | 10 <sup>7</sup> / <sub>16</sub> | 8 <sup>1</sup> / <sub>4</sub> | 3 <sup>3</sup> / <sub>4</sub> |
| 204G7A-2                            | -----                                | 2     | 182JM            | 2                              | 2 1/2                           | 8 <sup>3</sup> / <sub>4</sub>  | 9 <sup>7</sup> / <sub>8</sub>    | 5 <sup>3</sup> / <sub>4</sub>  | 18 <sup>11</sup> / <sub>16</sub> | 4 <sup>1</sup> / <sub>2</sub> | 5                             | 3 <sup>3</sup> / <sub>4</sub> | 4 <sup>1</sup> / <sub>2</sub>   | 1/2                             | 13 <sup>1</sup> / <sub>32</sub> | 11 <sup>3</sup> / <sub>16</sub> | 8 <sup>1</sup> / <sub>4</sub> | 3 <sup>3</sup> / <sub>4</sub> |
| -----                               | 3204G7A-2                            | 2     | 145JM            |                                |                                 | 7                              | 8 <sup>15</sup> / <sub>16</sub>  | 6                              | 17 <sup>7</sup> / <sub>8</sub>   | 3 1/2                         | 5                             | 2 <sup>3</sup> / <sub>4</sub> | 5                               | 3/8                             | 11 <sup>1</sup> / <sub>32</sub> | 10 <sup>7</sup> / <sub>16</sub> | 8 <sup>1</sup> / <sub>4</sub> | 3 <sup>3</sup> / <sub>4</sub> |
| 154G7-2 <sup>1</sup> / <sub>2</sub> | 3154G7-2 <sup>1</sup> / <sub>2</sub> | 1 1/2 | 145JM            | 2 1/2                          | 3                               | 7                              | 8 <sup>15</sup> / <sub>16</sub>  | 6                              | 17 <sup>7</sup> / <sub>8</sub>   | 3 1/2                         | 5 <sup>1</sup> / <sub>2</sub> | 2 <sup>3</sup> / <sub>4</sub> | 5                               | 3/8                             | 11 <sup>1</sup> / <sub>32</sub> | 10 <sup>7</sup> / <sub>16</sub> | 9 <sup>1</sup> / <sub>4</sub> | 3 <sup>1</sup> / <sub>2</sub> |
| 204G7-2 <sup>1</sup> / <sub>2</sub> | -----                                | 2     | 182JM            |                                |                                 | 8 <sup>3</sup> / <sub>4</sub>  | 9 <sup>7</sup> / <sub>8</sub>    | 5 <sup>3</sup> / <sub>4</sub>  | 18 <sup>11</sup> / <sub>16</sub> | 4 <sup>1</sup> / <sub>2</sub> | 5 <sup>1</sup> / <sub>2</sub> | 3 <sup>3</sup> / <sub>4</sub> | 4 <sup>1</sup> / <sub>2</sub>   | 1/2                             | 13 <sup>1</sup> / <sub>32</sub> | 11 <sup>3</sup> / <sub>16</sub> | 9 <sup>1</sup> / <sub>4</sub> | 3 <sup>1</sup> / <sub>2</sub> |
| -----                               | 3204G7-2 <sup>1</sup> / <sub>2</sub> | 2     | 145JM            | 7                              | 8 <sup>15</sup> / <sub>16</sub> | 6                              | 17 <sup>7</sup> / <sub>8</sub>   | 3 1/2                          | 5 <sup>1</sup> / <sub>2</sub>    | 2 <sup>3</sup> / <sub>4</sub> | 5                             | 3/8                           | 11 <sup>1</sup> / <sub>32</sub> | 10 <sup>7</sup> / <sub>16</sub> | 9 <sup>1</sup> / <sub>4</sub>   | 3 <sup>1</sup> / <sub>2</sub>   |                               |                               |
| 304G7-2 <sup>1</sup> / <sub>2</sub> | -----                                | 3     | 184JM            | 2 1/2                          | 3                               | 8 <sup>3</sup> / <sub>4</sub>  | 9 <sup>7</sup> / <sub>8</sub>    | 6 <sup>3</sup> / <sub>4</sub>  | 19 <sup>11</sup> / <sub>16</sub> | 4 <sup>1</sup> / <sub>2</sub> | 5 <sup>1</sup> / <sub>2</sub> | 3 <sup>3</sup> / <sub>4</sub> | 5 <sup>1</sup> / <sub>2</sub>   | 1/2                             | 13 <sup>1</sup> / <sub>32</sub> | 11 <sup>3</sup> / <sub>16</sub> | 9 <sup>1</sup> / <sub>4</sub> | 3 <sup>1</sup> / <sub>2</sub> |
| -----                               | 3304G7-2 <sup>1</sup> / <sub>2</sub> | 3     | 182JM            |                                |                                 | 8 <sup>3</sup> / <sub>4</sub>  | 9 <sup>7</sup> / <sub>8</sub>    | 5 <sup>3</sup> / <sub>4</sub>  | 18 <sup>11</sup> / <sub>16</sub> | 4 <sup>1</sup> / <sub>2</sub> | 5 <sup>1</sup> / <sub>2</sub> | 3 <sup>3</sup> / <sub>4</sub> | 4 <sup>1</sup> / <sub>2</sub>   | 1/2                             | 13 <sup>1</sup> / <sub>32</sub> | 11 <sup>3</sup> / <sub>16</sub> | 9 <sup>1</sup> / <sub>4</sub> | 3 <sup>1</sup> / <sub>2</sub> |
| <b>3500 &amp; 2900 RPM</b>          |                                      |       |                  |                                |                                 |                                |                                  |                                |                                  |                               |                               |                               |                                 |                                 |                                 |                                 |                               |                               |
| 50G7-2                              | -----                                | 5     | 184JM            | 2                              | 2 1/2                           | 8 <sup>3</sup> / <sub>4</sub>  | 9 <sup>7</sup> / <sub>8</sub>    | 6 <sup>3</sup> / <sub>4</sub>  | 19 <sup>11</sup> / <sub>16</sub> | 4 <sup>1</sup> / <sub>2</sub> | 5                             | 3 <sup>3</sup> / <sub>4</sub> | 5 <sup>1</sup> / <sub>2</sub>   | 1/2                             | 13 <sup>1</sup> / <sub>32</sub> | 11 <sup>3</sup> / <sub>16</sub> | 8 <sup>1</sup> / <sub>4</sub> | 3 <sup>3</sup> / <sub>4</sub> |
| -----                               | 350G7-2                              | 5     | 182JM            |                                |                                 | 8 <sup>3</sup> / <sub>4</sub>  | 9 <sup>7</sup> / <sub>8</sub>    | 5 <sup>3</sup> / <sub>4</sub>  | 18 <sup>11</sup> / <sub>16</sub> | 4 <sup>1</sup> / <sub>2</sub> | 5                             | 3 <sup>3</sup> / <sub>4</sub> | 4 <sup>1</sup> / <sub>2</sub>   | 1/2                             | 13 <sup>1</sup> / <sub>32</sub> | 11 <sup>3</sup> / <sub>16</sub> | 8 <sup>1</sup> / <sub>4</sub> | 3 <sup>3</sup> / <sub>4</sub> |
| -----                               | 375G7-2                              | 7 1/2 | 184JM            | 2                              | 2 1/2                           | 8 <sup>3</sup> / <sub>4</sub>  | 9 <sup>7</sup> / <sub>8</sub>    | 6 <sup>3</sup> / <sub>4</sub>  | 19 <sup>11</sup> / <sub>16</sub> | 4 <sup>1</sup> / <sub>2</sub> | 5                             | 3 <sup>3</sup> / <sub>4</sub> | 5 <sup>1</sup> / <sub>2</sub>   | 1/2                             | 13 <sup>1</sup> / <sub>32</sub> | 11 <sup>3</sup> / <sub>16</sub> | 8 <sup>1</sup> / <sub>4</sub> | 3 <sup>3</sup> / <sub>4</sub> |
| -----                               | 3100G7-2                             | 10    | 213JM            |                                |                                 | 10 <sup>3</sup> / <sub>8</sub> | 11 <sup>1</sup> / <sub>16</sub>  | 7 <sup>1</sup> / <sub>4</sub>  | 21 <sup>1</sup> / <sub>4</sub>   | 5 <sup>1</sup> / <sub>4</sub> | 5                             | 4 <sup>1</sup> / <sub>4</sub> | 5 <sup>1</sup> / <sub>2</sub>   | 5/8                             | 13 <sup>1</sup> / <sub>32</sub> | 12 <sup>5</sup> / <sub>16</sub> | 8 <sup>1</sup> / <sub>4</sub> | 3 <sup>3</sup> / <sub>4</sub> |
| 50G7A-2                             | -----                                | 5     | 184JM            | 2                              | 2 1/2                           | 8 <sup>3</sup> / <sub>4</sub>  | 9 <sup>7</sup> / <sub>8</sub>    | 6 <sup>3</sup> / <sub>4</sub>  | 19 <sup>11</sup> / <sub>16</sub> | 4 <sup>1</sup> / <sub>2</sub> | 5                             | 3 <sup>3</sup> / <sub>4</sub> | 5 <sup>1</sup> / <sub>2</sub>   | 1/2                             | 13 <sup>1</sup> / <sub>32</sub> | 11 <sup>3</sup> / <sub>16</sub> | 8 <sup>1</sup> / <sub>4</sub> | 3 <sup>3</sup> / <sub>4</sub> |
| -----                               | 350G7A-2                             | 5     | 182JM            |                                |                                 | 8 <sup>3</sup> / <sub>4</sub>  | 9 <sup>7</sup> / <sub>8</sub>    | 5 <sup>3</sup> / <sub>4</sub>  | 18 <sup>11</sup> / <sub>16</sub> | 4 <sup>1</sup> / <sub>2</sub> | 5                             | 3 <sup>3</sup> / <sub>4</sub> | 4 <sup>1</sup> / <sub>2</sub>   | 1/2                             | 13 <sup>1</sup> / <sub>32</sub> | 11 <sup>3</sup> / <sub>16</sub> | 8 <sup>1</sup> / <sub>4</sub> | 3 <sup>3</sup> / <sub>4</sub> |
| -----                               | 375G7A-2                             | 7 1/2 | 184JM            | 2                              | 2 1/2                           | 8 <sup>3</sup> / <sub>4</sub>  | 9 <sup>7</sup> / <sub>8</sub>    | 6 <sup>3</sup> / <sub>4</sub>  | 19 <sup>11</sup> / <sub>16</sub> | 4 <sup>1</sup> / <sub>2</sub> | 5                             | 3 <sup>3</sup> / <sub>4</sub> | 5 <sup>1</sup> / <sub>2</sub>   | 1/2                             | 13 <sup>1</sup> / <sub>32</sub> | 11 <sup>3</sup> / <sub>16</sub> | 8 <sup>1</sup> / <sub>4</sub> | 3 <sup>3</sup> / <sub>4</sub> |
| -----                               | 3100G7A-2                            | 10    | 213JM            |                                |                                 | 10 <sup>3</sup> / <sub>8</sub> | 11 <sup>1</sup> / <sub>16</sub>  | 7 <sup>1</sup> / <sub>4</sub>  | 21 <sup>1</sup> / <sub>4</sub>   | 5 <sup>1</sup> / <sub>4</sub> | 5                             | 4 <sup>1</sup> / <sub>4</sub> | 5 <sup>1</sup> / <sub>2</sub>   | 5/8                             | 13 <sup>1</sup> / <sub>32</sub> | 12 <sup>5</sup> / <sub>16</sub> | 8 <sup>1</sup> / <sub>4</sub> | 3 <sup>3</sup> / <sub>4</sub> |
| -----                               | 3150G7A-2                            | 15    | 215JM            | 2 1/2                          | 3                               | 10 <sup>3</sup> / <sub>8</sub> | 11 <sup>1</sup> / <sub>16</sub>  | 8 <sup>3</sup> / <sub>4</sub>  | 22 <sup>5</sup> / <sub>8</sub>   | 5 <sup>1</sup> / <sub>4</sub> | 5                             | 4 <sup>1</sup> / <sub>4</sub> | 7                               | 5/8                             | 13 <sup>1</sup> / <sub>32</sub> | 12 <sup>5</sup> / <sub>16</sub> | 8 <sup>1</sup> / <sub>4</sub> | 3 <sup>3</sup> / <sub>4</sub> |
| -----                               | 3150G7-2 <sup>1</sup> / <sub>2</sub> | 15    | 215JM            |                                |                                 | 10 <sup>3</sup> / <sub>8</sub> | 11 <sup>1</sup> / <sub>16</sub>  | 8 <sup>3</sup> / <sub>4</sub>  | 22 <sup>5</sup> / <sub>8</sub>   | 5 <sup>1</sup> / <sub>4</sub> | 5 <sup>1</sup> / <sub>2</sub> | 4 <sup>1</sup> / <sub>4</sub> | 7                               | 5/8                             | 13 <sup>1</sup> / <sub>32</sub> | 12 <sup>5</sup> / <sub>16</sub> | 9 <sup>1</sup> / <sub>4</sub> | 3 <sup>1</sup> / <sub>2</sub> |
| -----                               | 3200G7-2 <sup>1</sup> / <sub>2</sub> | 20    | 254JM            | 2 1/2                          | 3                               | 12                             | 11 <sup>9</sup> / <sub>16</sub>  | 10 <sup>1</sup> / <sub>4</sub> | 26 <sup>3</sup> / <sub>16</sub>  | 6 <sup>1</sup> / <sub>4</sub> | 5 <sup>1</sup> / <sub>2</sub> | 5                             | 8 <sup>1</sup> / <sub>4</sub>   | 7/8                             | 17 <sup>1</sup> / <sub>32</sub> | 13 <sup>7</sup> / <sub>8</sub>  | 9 <sup>1</sup> / <sub>4</sub> | 3 <sup>1</sup> / <sub>2</sub> |
| -----                               | 3250G7-2 <sup>1</sup> / <sub>2</sub> | 25    | 256JM            |                                |                                 | 12                             | 11 <sup>9</sup> / <sub>16</sub>  | 12                             | 27 <sup>15</sup> / <sub>16</sub> | 6 <sup>1</sup> / <sub>4</sub> | 5 <sup>1</sup> / <sub>2</sub> | 5                             | 10                              | 7/8                             | 17 <sup>1</sup> / <sub>32</sub> | 13 <sup>7</sup> / <sub>8</sub>  | 9 <sup>1</sup> / <sub>4</sub> | 3 <sup>1</sup> / <sub>2</sub> |
| -----                               | 3300G7-2 <sup>1</sup> / <sub>2</sub> | 30    | 284JM            | 13 <sup>3</sup> / <sub>4</sub> | 13                              | 11 <sup>1</sup> / <sub>2</sub> | 27 <sup>15</sup> / <sub>16</sub> | 7                              | 5 <sup>1</sup> / <sub>2</sub>    | 5 <sup>1</sup> / <sub>2</sub> | 9 <sup>1</sup> / <sub>2</sub> | 7/8                           | 17 <sup>1</sup> / <sub>32</sub> | 13 <sup>7</sup> / <sub>8</sub>  | 9 <sup>1</sup> / <sub>4</sub>   | 3 <sup>1</sup> / <sub>2</sub>   |                               |                               |

DIMENSIONS SHOWN ABOVE ARE APPROXIMATE MAXIMUM DIMENSIONS FOR STANDARD PUMPS EQUIPPED WITH ODP MOTORS.



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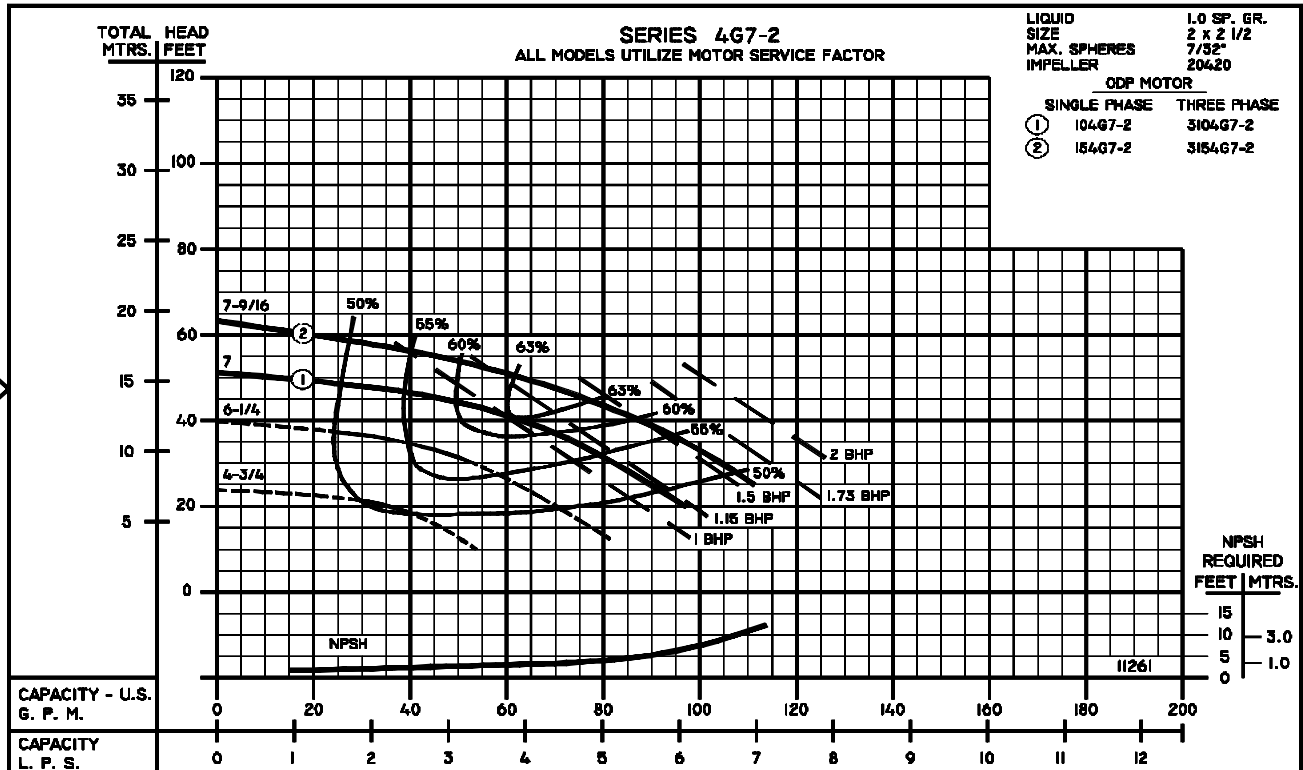
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| PAGE     | 28    |
| ISSUED   | 2/03  |
| REPLACES | 12/01 |

60Hz  
PERFORMANCE CURVE

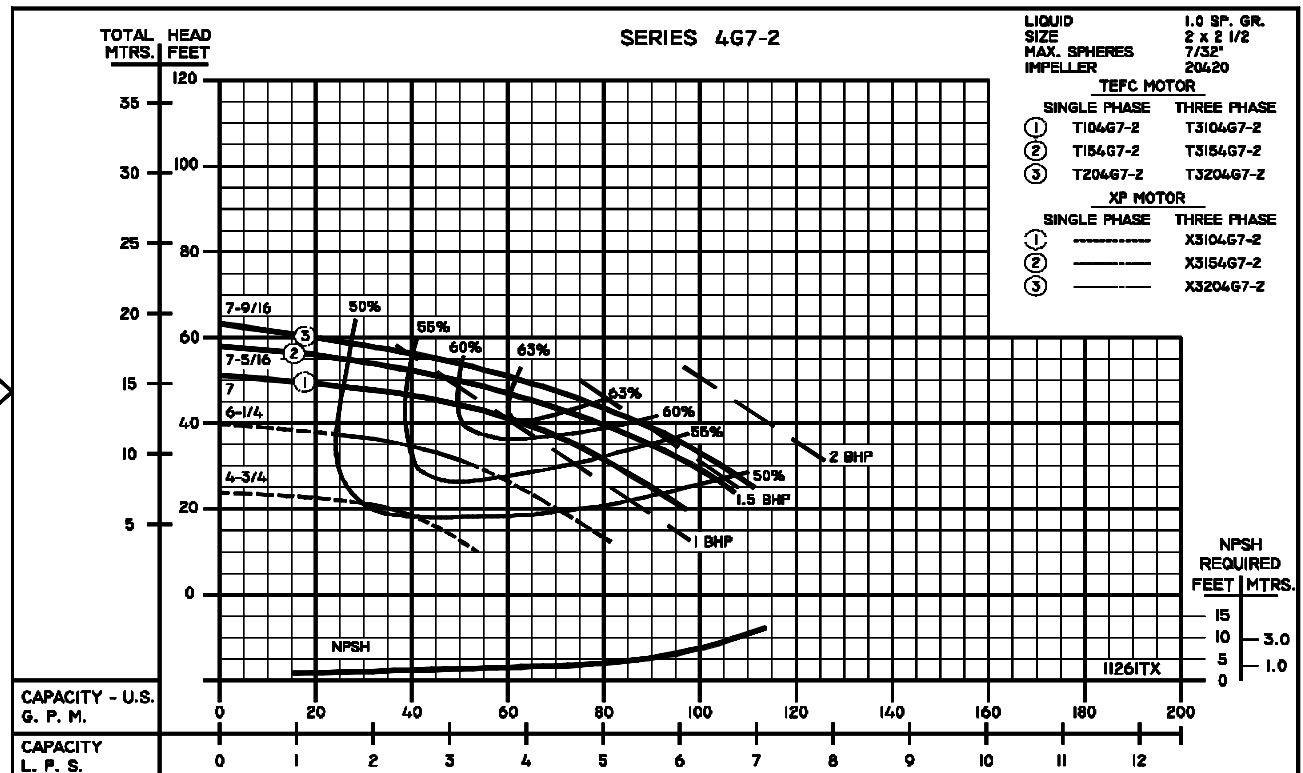


END SUCTION CENTRIFUGAL PUMPS

1750  
RPM



1750  
RPM



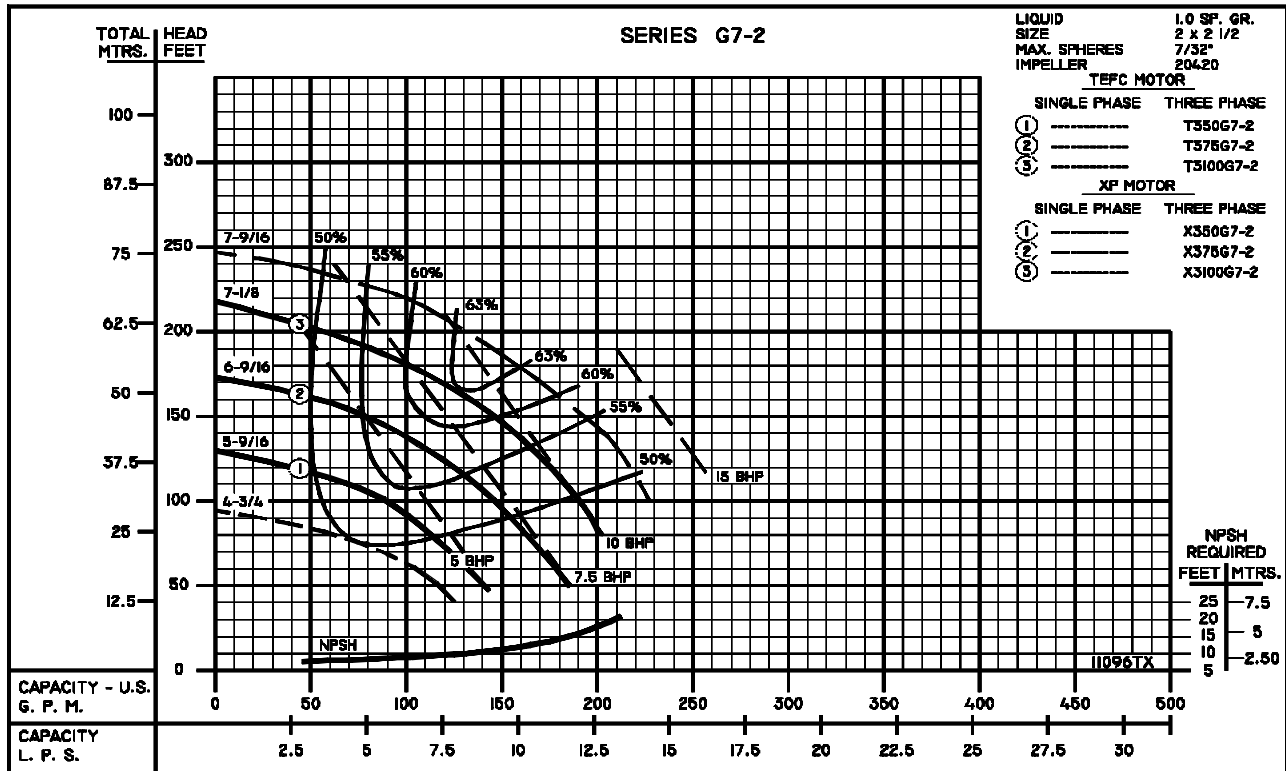
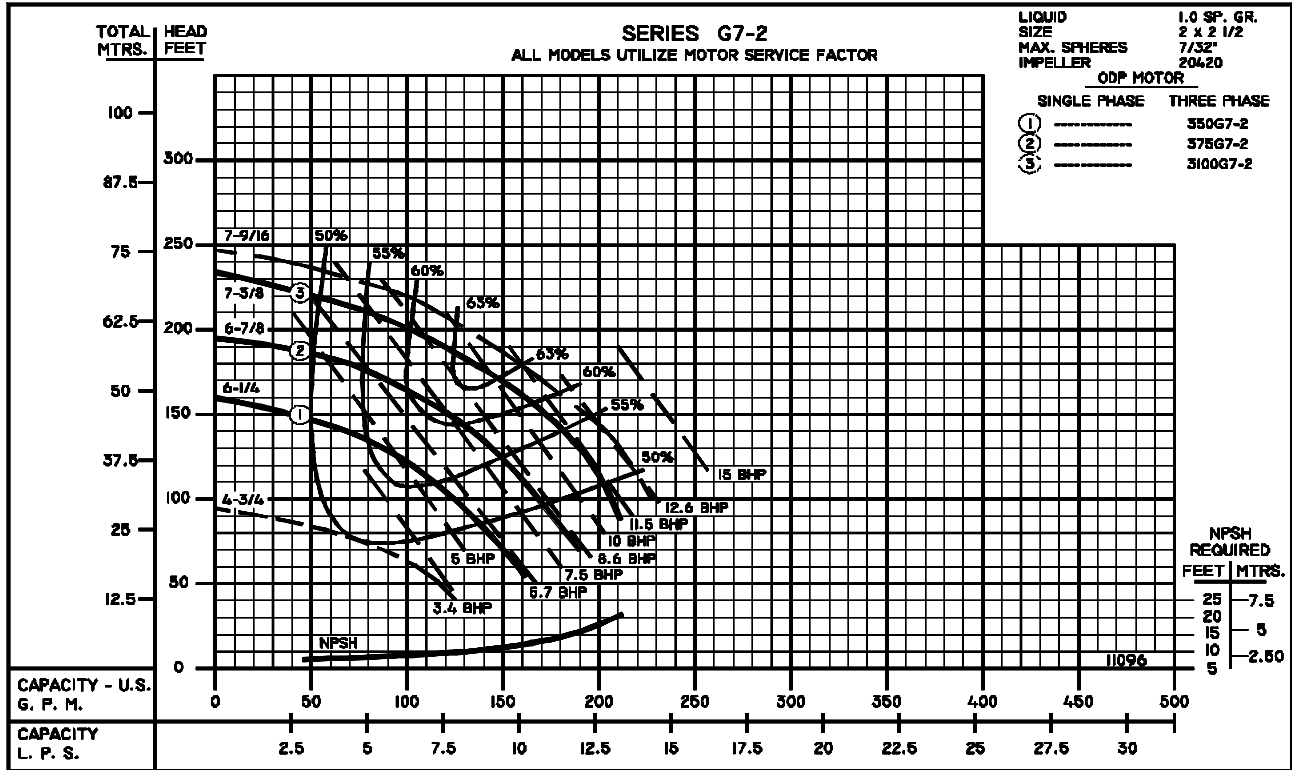
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60HZ  
PERFORMANCE CURVE

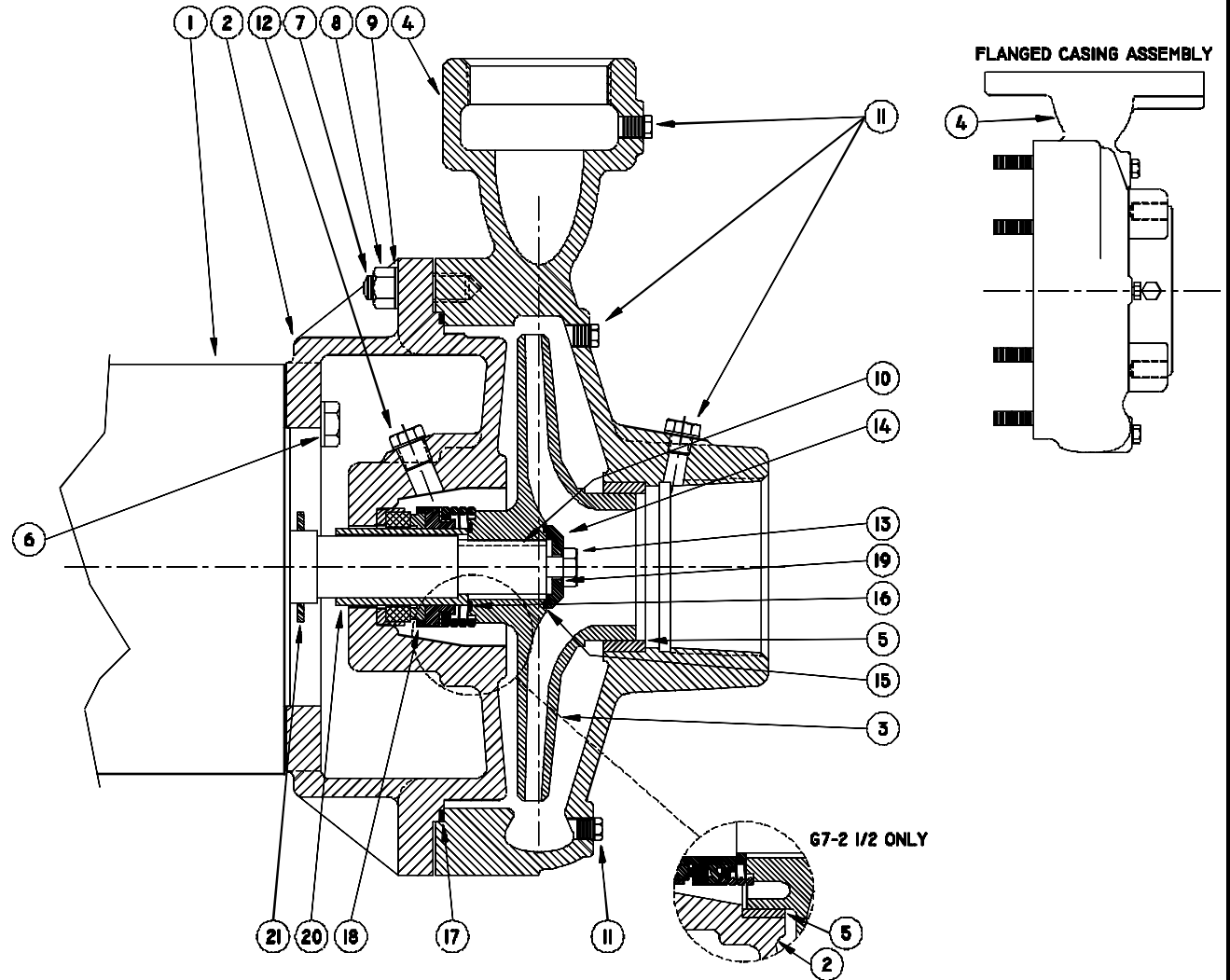
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| ISSUED   | 2/03  |
| REPLACES | 12/01 |

END SUCTION CENTRIFUGAL PUMPS



CCCP-28

| 1 - MOTORS                         |             |       |            |
|------------------------------------|-------------|-------|------------|
| RPM & PHASE                        | PART NUMBER | HP    | FRAME SIZE |
| <b>OPEN DRIP PROOF</b>             |             |       |            |
| 1750 RPM<br>Single Phase<br>(ODP)  | 21393       | 1     | 143JM      |
|                                    | 21394       | 1-1/2 | 145JM      |
|                                    | 21395       | 2     | 182JM      |
|                                    | 21396       | 3     | 184JM      |
| 1750 RPM<br>Three Phase<br>(ODP)   | 21419       | 1     | 143JM      |
|                                    | 21420       | 1-1/2 | 145JM      |
|                                    | 21421       | 2     | 145JM      |
|                                    | 21422       | 3     | 182JM      |
| 3500 RPM<br>Single Phase<br>(ODP)  | 09902       | 5     | 184JM      |
|                                    | 21850       | 7-1/2 | 213JM      |
| 3500 RPM<br>Three Phase<br>(ODP)   | 09906       | 5     | 182JM      |
|                                    | 09907       | 7-1/5 | 184JM      |
|                                    | 09999       | 10    | 213JM      |
|                                    | 20002       | 15    | 215JM      |
|                                    | 21169       | 20    | 254JM      |
|                                    | 21170       | 25    | 256JM      |
|                                    | 21207       | 30    | 284JM      |
| <b>TOTALLY ENCLOSED</b>            |             |       |            |
| 1750 RPM<br>Single Phase<br>(TEFC) | 21399       | 1     | 143JM      |
|                                    | 21400       | 1-1/2 | 145JM      |
|                                    | 21401       | 2     | 182JM      |
|                                    | 21402       | 3     | 184JM      |
|                                    | 21403       | 5     | 213JM      |
| 1750 RPM<br>Three Phase<br>(TEFC)  | 21426       | 1     | 143JM      |
|                                    | 21427       | 1-1/2 | 145JM      |
|                                    | 21428       | 2     | 145JM      |
|                                    | 21429       | 3     | 182JM      |
|                                    | 21430       | 5     | 184JM      |
| 3500 RPM<br>Three Phase<br>(TEFC)  | 09950       | 5     | 184JM      |
|                                    | 09951       | 7-1/2 | 231JM      |
|                                    | 20000       | 10    | 215JM      |
|                                    | 20003       | 15    | 254JM      |
|                                    | 21195       | 20    | 256JM      |
|                                    | 21457       | 25    | 284JM      |
|                                    | 21215       | 30    | 286JM      |
| <b>EXPLOSION PROOF</b>             |             |       |            |
| 1750 RPM<br>Three Phase<br>(XP)    | 21433       | 1     | 143JM      |
|                                    | 21434       | 1-1/2 | 145JM      |
|                                    | 21435       | 2     | 145JM      |
|                                    | 21436       | 3     | 182JM      |
|                                    | 21437       | 5     | 184JM      |
| 3500 RPM<br>Three Phase<br>(XP)    | 09954       | 5     | 184JM      |
|                                    | 09955       | 7-1/2 | 213JM      |
|                                    | 20001       | 10    | 215JM      |
|                                    | 20004       | 15    | 254JM      |
|                                    | 21196       | 20    | 256JM      |
|                                    | 21458       | 25    | 284JM      |
|                                    | 21218       | 30    | 286JM      |



**SERIES: G7-2, G7A-2 & G7-2-1/2 CENTRIFUGAL PUMPS**

File: G7-200.dwg

| SYMBOL NUMBER | PART NUMBER     | QUANTITY | DESCRIPTION                                |
|---------------|-----------------|----------|--|
| 2             | 20650           | 1        | Adapter - 143-184 JM Motors                |
|               | 20419           | 1        | Adapter - 213-215 JM Motors                |
|               | 21086           | 1        | Adapter Assy. ★ - 254-256 JM Motors        |
|               | 21310           | 1        | Adapter Assy. ★ - 284-286 JM Motors        |
| 3             | <b>1750 RPM</b> |          |  |
|               | 20420-7.00      | 1        | Impeller - 104G7-2 & 3104G7-2              |
|               | 20420-7.56      | 1        | Impeller - 154G7-2 & 3154G7-2              |
|               | 20421-6.56      | 1        | Impeller - 104G7A-2 & 3104G7A-2            |
|               | 20421-7.06      | 1        | Impeller - 154G7A-2 & 3154G7A-2            |
|               | 20421-7.63      | 1        | Impeller - 204G7A-2 & 3204G7A-2            |
|               | 21087-1-6.13    | 1        | Impeller - 154G7-2-1/2 & 3154G7-2-1/2      |
|               | 21087-1-6.50    | 1        | Impeller - 204G7-2-1/2 & 3204G7-2-1/2      |
|               | 21087-1-7.25    | 1        | Impeller - 304G7-2-1/2 & 3304G7-2-1/2      |
|               | <b>3500 RPM</b> |          |  |
|               | 20420-6.25      | 1        | Impeller - 50G7-2 & 350G7-2                |
|               | 20420-6.88      | 1        | Impeller - 375G7-2                         |
|               | 20420-7.38      | 1        | Impeller - 3100G7-2                        |
|               | 20420-7.56      | 1        | Impeller - 3150G7-2                        |
|               | 20420-1         | 1        | Impeller - 254JM Motor                     |
|               | 20421-5.81      | 1        | Impeller - 50G7A-2 & 350G7A-2              |
|               | 20421-6.31      | 1        | Impeller - 375G7A-2                        |
|               | 20421-6.75      | 1        | Impeller - 3100G7A-2                       |
|               | 20421-7.56      | 1        | Impeller - 3150G7A-2                       |
|               | 20421-1-7.63    | 1        | Impeller - 3200G7A-2                       |
|               | 21087-6.75      | 1        | Impeller - 3200G7-2-1/2                    |
|               | 21087-7.38      | 1        | Impeller - 3250G7-2-1/2                    |
|               | 21087-7.56      | 1        | Impeller -                                 |
| * 4           | 22153           | 1        | Casing Assy. - G7-2 & G7A-2                |
|               | 22271           | 1        | Casing Assy. - G7-2F & G7A-2F (Flanged)    |
|               | 22154           | 1        | Casing Assy. - G7-2-1/2                    |
|               | 22272           | 1        | Casing Assy. - G7-2-1/2F (Flanged)         |
| 5             | 09915           | 1        | Wear Ring - G7-2 & G7A-2                   |
|               | 20680           | 2        | Wear Ring - G7-2-1/2                       |
| 6             | 04235           | 4        | Cap Screw - Use with 20650 Adapter         |
|               | 1-68-6          | 4        | Cap Screw - Use with 20419 & 21086 Adapter |
|               | 21289           | 4        | Cap Screw - Use with 21310 Adapter         |

| SYMBOL NUMBER                       | PART NUMBER                         | QUANTITY                            | DESCRIPTION                         |                              |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|------------------------------|
| 7                                   | 20424                               | 8                                   | Stud                                |                              |
| 8                                   | 15-6-6                              | 8                                   | Nut                                 |                              |
| 9                                   | 20059                               | 8                                   | Washer                              |                              |
| 10                                  | 23014                               | 1                                   | Key - 143-215 JM Motors             |                              |
|                                     | 22107                               | 1                                   | Key - 254-286 JM Motors             |                              |
| 11                                  | 01691-A                             | 6                                   | Pipe Plug 1/8", Bronze              |                              |
| 12                                  | 04236                               | 1                                   | Pipe Plug 1/4", Bronze              |                              |
| 13                                  | 1-529-1                             | 1                                   | Cap Screw, S.S. - 143-215 JM Motors |                              |
|                                     | 01638-A                             | 1                                   | Cap Screw, S.S. - 254-286 JM Motors |                              |
| 14                                  | 22105-C                             | 1                                   | Washer - Bronze - 143-215 JM Motors |                              |
|                                     | 22106                               | 1                                   | Washer - Bronze - 254-286 JM Motors |                              |
| + 15                                | <b>PUMPS With 143-215 JM Motors</b> |                                     |                                     |                              |
|                                     | 09933                               | 1                                   | Flat Gasket +                       |                              |
|                                     | 22083                               | 1                                   | O-Ring Gasket - Buna N (Std)        |                              |
|                                     | 22084                               | 1                                   | O-Ring Gasket - Viton               |                              |
|                                     | 22094                               | 1                                   | O-Ring Gasket - EPT**               |                              |
|                                     | 22085                               | 1                                   | O-Ring Gasket - Teflon              |                              |
|                                     | <b>PUMPS With 254-286 JM Motors</b> |                                     |                                     |                              |
|                                     | 21090                               | 1                                   | Flat Gasket +                       |                              |
|                                     | 22140                               | 1                                   | O-Ring Gasket - Buna N (Std)        |                              |
|                                     | 22141                               | 1                                   | O-Ring Gasket - Viton               |                              |
|                                     | 22143                               | 1                                   | O-Ring Gasket - EPT**               |                              |
|                                     | 22142                               | 1                                   | O-Ring Gasket - Teflon              |                              |
|                                     | + 16                                | <b>PUMPS With 143-215 JM Motors</b> |                                     |                              |
|                                     |                                     | 09911                               | 1                                   | Flat Gasket +                |
|                                     |                                     | 22083                               | 1                                   | O-Ring Gasket - Buna N (Std) |
| 22084                               |                                     | 1                                   | O-Ring Gasket - Viton               |                              |
| 22094                               |                                     | 1                                   | O-Ring Gasket - EPT**               |                              |
| 22085                               |                                     | 1                                   | O-Ring Gasket - Teflon              |                              |
| <b>PUMPS With 254-256 JM Motors</b> |                                     |                                     |                                     |                              |
| 21092                               |                                     | 1                                   | Flat Gasket +                       |                              |
| 22089                               |                                     | 1                                   | O-Ring Gasket - Buna N (Std)        |                              |
| 22090                               |                                     | 1                                   | O-Ring Gasket - Viton               |                              |
| 22096                               | 1                                   | O-Ring Gasket - EPT**               |                                     |                              |
| 22091                               | 1                                   | O-Ring Gasket - Teflon              |                                     |                              |

"CONTINUED ON NEXT PAGE"

CCCP-29

SERIES: G7-2, G7A-2 & G7-2-1/2

\*Casing Assy. includes Symbols 4, 9 & 14. \*\* For hot water or caustic service

+ Series G7-2, G7A-2 & G7-2-1/2 pumps have been manufactured with either flat or O ring type gaskets. Determine which type is required before ording. When in doubt, order flat gaskets.

★ Adapter Assy. includes symbol 5.

CCCP-30

| SYMBOL NUMBER                                      | PART NUMBER                         | QUANTITY                            | DESCRIPTION                              |                              |
|--|-------------------------------------|-------------------------------------|--|------------------------------|
| + 17   | 20418                               | 1                                   | Flat Gasket +                            |                              |
|  | 23003                               | 1                                   | O-Ring Gasket - Buna N (Std)             |                              |
|  | 23004                               | 1                                   | O-Ring Gasket - Viton                    |                              |
|  | 23005                               | 1                                   | O-Ring Gasket - EPT**                    |                              |
|  | 23006                               | 1                                   | O-Ring Gasket - Teflon                   |                              |
| 18   | <b>PUMPS With 143-215 JM Motors</b> |                                     |  |                              |
|  | 09917                               | 1                                   | Mechanical Seal - Buna N (Std)           |                              |
|  | 09926                               | 1                                   | Mechanical Seal - Viton                  |                              |
|  | 21271                               | 1                                   | Mechanical Seal - EPT **                 |                              |
|  | <b>PUMPS With 254-256 JM Motors</b> |                                     |  |                              |
|  | 21136                               | 1                                   | Mechanical Seal - Buna N (Std)           |                              |
|  | 21189                               | 1                                   | Mechanical Seal - Viton                  |                              |
|  | 21721                               | 1                                   | Mechanical Seal - EPT **                 |                              |
|  | 19                                  | <b>PUMPS With 143-215 JM Motors</b> |  |                              |
|  |                                     | 22080                               | 1  | O-Ring Gasket - Buna N (Std) |
| 2-31005-012  |                                     | 1                                   | O-Ring Gasket - Viton                    |                              |
| 22093  |                                     | 1                                   | O-Ring Gasket - EPT**                    |                              |
| 22082  |                                     | 1                                   | O-Ring Gasket - Teflon                   |                              |
| <b>PUMPS With 254-256 JM Motors</b>                |                                     |                                     |  |                              |
| 22086  |                                     | 1                                   | O-Ring Gasket - Buna N (Std)             |                              |
| 22087  |                                     | 1                                   | O-Ring Gasket - Viton                    |                              |
| 22095  |                                     | 1                                   | O-Ring Gasket - EPT**                    |                              |
| 22088  |                                     | 1                                   | O-Ring Gasket - Teflon                   |                              |
| 20   | 22063-C                             | 1                                   | Shaft Sleeve, Bronze - 143-215 JM Motors |                              |
|  | 22066                               | 1                                   | Shaft Sleeve, Bronze - 254-286 JM Motors |                              |
| 21   | 09918                               | 1                                   | Slinger Washer - 143-215 JM Motors       |                              |
|  | 21093                               | 1                                   | Slinger Washer - 254-286 JM Motors       |                              |
| <b>DIFFERING PARTS FOR ALL BRONZE CONSTRUCTION</b> |                                     |                                     |  |                              |
| 2  | 20650-A                             | 1                                   | Adapter - 143-184 JM Motors              |                              |
|  | 20419-B                             | 1                                   | Adapter - 213-215 JM Motors              |                              |
|  | 21086-A                             | 1                                   | Adapter Assy. ★ - 254-256 JM Motors      |                              |
|  | 21310-A                             | 1                                   | Adapter Assy. ★ - 284-286 JM Motors      |                              |
| * 4  | 22153-A                             | 1                                   | Casing Assy. - G7-2 & G7A-2              |                              |
|  | 22271-A                             | 1                                   | Casing Assy. - G7-2F & G7A-2F (Flanged)  |                              |
|  | 22154-A                             | 1                                   | Casing Assy. - G7-2-1/2                  |                              |
|  | 22272-A                             | 1                                   | Casing Assy. - G7-2-1/2F (Flanged)       |                              |
| 13   | 03289                               | 1                                   | Cap Screw, Bronze - 143-215 JM Motors    |                              |
|  | 01638-B                             | 1                                   | Cap Screw, Bronze - 254-286 JM Motors    |                              |

| SYMBOL NUMBER                                    | PART NUMBER | QUANTITY | DESCRIPTION                               |
|--|-------------|----------|---|
| <b>DIFFERING PARTS FOR ALL IRON CONSTRUCTION</b> |             |          |   |
| 2  | 21086-B     | 1        | Adapter Assy. ★ - 254-256 JM Motors       |
|  | 21310-B     | 1        | Adapter Assy. ★ - 284-286 JM Motors       |
| 3  | 20420-A     | 1        | Impeller - Iron                           |
|  | 20421-A     | 1        | Impeller - Iron                           |
|  | 20421-A1    | 1        | Impeller - Iron                           |
|  | 21087-A     | 1        | Impeller - Iron                           |
| Size Suffixes Same As Standard Bronze Impellers  |             |          |   |
| 6  | 03288       | 4        | Cap Screw - for 20650-A Adapter           |
| 8  | 01638-B     | 4        | Cap Screw - for 20419-B & 21086-A Adapter |
|  | 03160-A     | 8        | Nut                                       |
| * 4  | 22153-B     | 1        | Casing Assy. - G7-2 & G7A-2               |
|  | 22271-B     | 1        | Casing Assy. - G7-2F & G7A-2F (Flanged)   |
|  | 22154-B     | 1        | Casing Assy. - G7-2-1/2                   |
|  | 22272-B     | 1        | Casing Assy. - G7-2-1/2F (Flanged)        |
| 5  | 09915-A     | 1        | Wear Ring, Steel - G7-2 & G7A-2           |
|  | 20680-A     | 2        | Wear Ring, Steel - G7-2-1/2               |
| 11   | 00158       | 6        | Pipe Plug 1/8", Steel                     |
| 12   | 04236-A     | 1        | Pipe Plug 1/4", S.S.                      |
| 14   | 22105-A     | 1        | Washer - Steel - 143-215 JM Motors        |
|  | 22106-A     | 1        | Washer - Steel - 254-286 JM Motors        |
| 20   | 22063-A     | 1        | Shaft Sleeve, S.S. - 143-215 JM Motors    |
|  | 22066-A     | 1        | Shaft Sleeve, S.S. - 254-286 JM Motors    |

SERIES: G7-2, G7A-2 & G7-2-1/2

\*Casing Assy. includes Symbols 4, 9 & 14.

\*\* For hot water or caustic service

+ Series G7-2, G7A-2 & G7-2-1/2 pumps have been manufactured with either flat or O ring type gaskets. Determine which type is required before ording. When in doubt, order flat gaskets.

★ Adapter Assy. includes symbol 5.



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