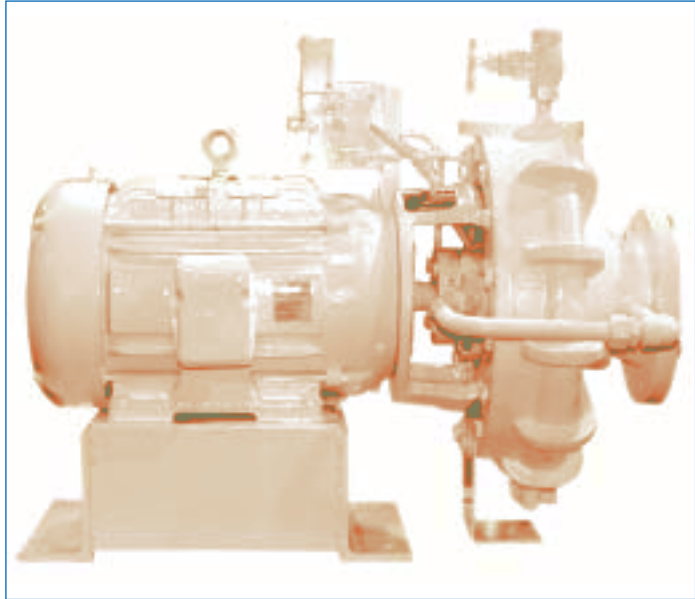


# GEMSTONE PUMP COMPANY

## Refrigerant Pump 3CB

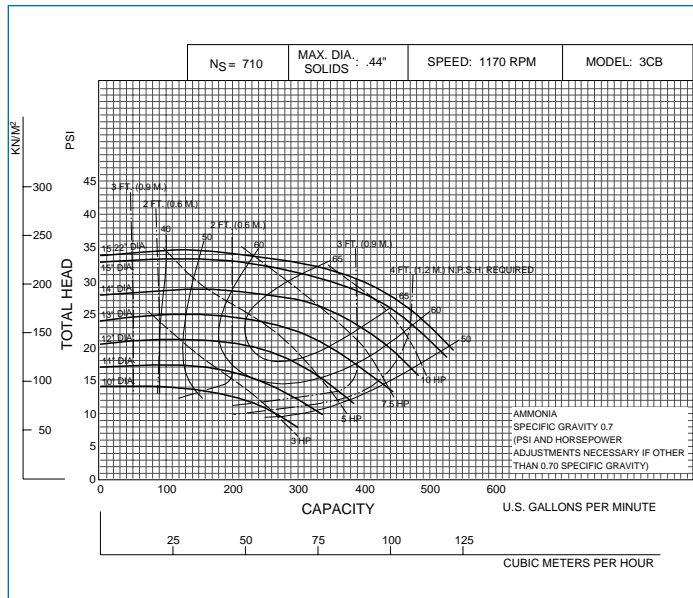
### PUMP SPECIFICATION

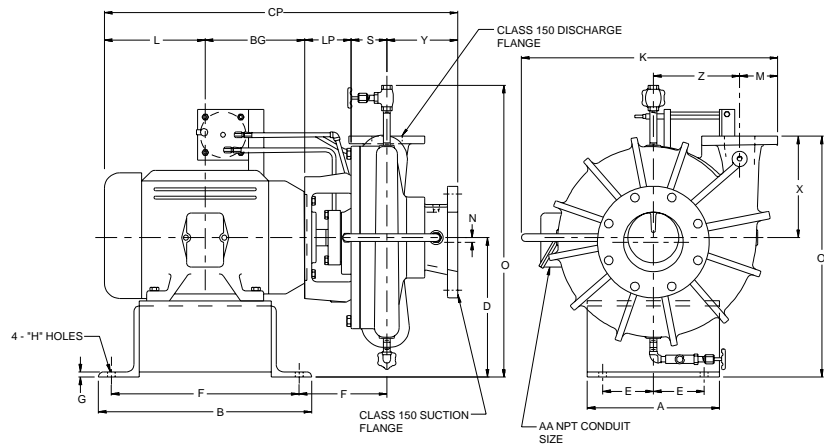
- 3CB Close coupled refrigerant pump
- 6" x 3" Class 150 Flanged suction & discharge
- Constructed of ASTM A536 60-40-18 Ductile Iron
- Industry leading two year warranty
- Six pole (1200/1000RPM) operating speed
- Optional mounting configurations available
- Polar white
- **Mechanical Seal:**  
John Crane, 1.62", T-2, double mechanical shaft seal with pressurized barrier fluid lubrication system, low oil limit switch, and seal chamber heater to maintain proper barrier oil viscosity
- **Motor Specification:**  
Close coupled to a totally enclosed fan cooled, refrigerant atmosphere, hostile environment, premium efficiency motor, with class "F" installation; suitable for VFD applications



### FEATURES & BENEFITS

- **Refrigerant Emission Free™ Sealing Technology**
  - an ultra-reliable system consisting of two mechanical seals mounted back to back
  - inboard seal prevents escape of refrigerant from the pump casing
  - outboard seal acts as a fail-safe or backup, and provides containment of a system compatible barrier fluid.
- **NPSHR**
  - exceptional NPSHR characteristics
  - characteristics are enhanced throughout entire operating range due to the single stage impeller and six pole operating speed
- **Vapor Entrapment**
  - seals are oil lubricated, and do not rely on the presence of pumpage for lubrication or cooling
  - the double mechanical sealing system allows the pump to continue to run until the system stabilizes and the pump reprimed itself - nuisance-tripping is avoided





## PUMP DIMENSIONS

| Model | NEMA Frame | CONNECTION |       |      | A    | B    | D     | E   | F     | G    | H    | J    | K     | M    | N    | O     | R     | S    | X     | Y    | Z    | LP   | OP    |
|-------|------------|------------|-------|------|------|------|-------|-----|-------|------|------|------|-------|------|------|-------|-------|------|-------|------|------|------|-------|
|       |            | Disch.     | Suct. | Type |      |      |       |     |       |      |      |      |       |      |      |       |       |      |       |      |      |      |       |
| 3CB   | 213-215    | 3.00       | 6.0   | FLG. | 13.0 | 21.0 | 13.75 | 5.0 | 18.50 | 0.50 | 0.75 | 1.25 | 25.25 | 3.75 | 0.44 | 28.75 | 6.62  | 2.62 | 10.00 | 7.00 | 8.50 | 5.25 | 23.75 |
| 3CB   | 254-256    | 3.00       | 6.0   | FLG. | 13.0 | 21.0 | 13.75 | 5.0 | 18.50 | 0.50 | 0.75 | 1.25 | 25.25 | 3.75 | 0.44 | 28.75 | 8.62  | 2.62 | 10.00 | 7.00 | 8.50 | 5.25 | 23.75 |
| 3CB   | 284-286    | 3.00       | 6.0   | FLG. | 13.0 | 21.0 | 14.50 | 5.0 | 18.50 | 0.50 | 0.75 | 1.25 | 25.25 | 3.75 | 0.44 | 29.50 | 10.12 | 2.62 | 10.00 | 7.00 | 8.50 | 5.25 | 24.50 |

## MOTOR DIMENSIONS

| HORSEPOWER<br>1200 RPM | NEMA<br>Frame | L     | BG    | AA   | See Note<br>No. 3 |
|------------------------|---------------|-------|-------|------|-------------------|
| 5.0                    | 215           | 8.81  | 8.00  | 1.00 | CP=               |
| 7.5                    | 254           | 9.92  | 10.00 | 1.00 | CP=               |
| 10.0                   | 256           | 9.92  | 10.00 | 1.00 | CP=               |
| 15.0                   | 284           | 12.69 | 9.62  | 1.50 | CP=               |
| 20.0                   | 286           | 12.69 | 9.62  | 1.50 | CP=               |

**Notes:**

1. Motor dimensions are TEFC NEMA Standard
2. Motor dimensions are based on Baldor electric motors; motor dimensions L, BG, & AA may vary for other manufacturers.
3. Dimension "CP" to be filled in after selection of pump and motor.
4. Dimension "O" is 12.12 - inch for 1.5CB and 1.5CLB with 213 frame.

**Cornell Pump Company**

**ISO9001** CERTIFIED