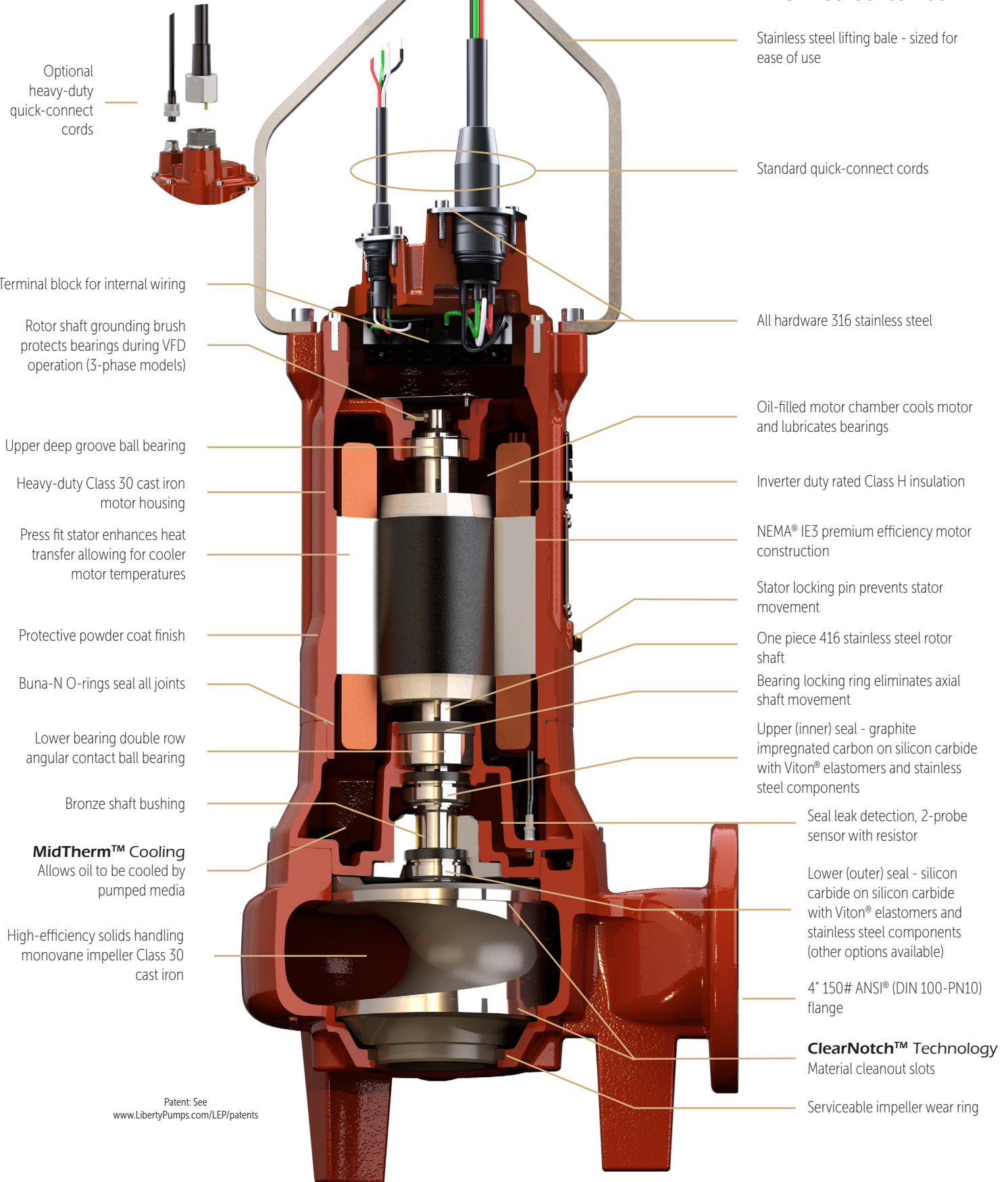


### 3LM05-Series - 60 Hz



Patent: See  
[www.LibertyPumps.com/LEP/patents](http://www.LibertyPumps.com/LEP/patents)

| Model Number                        | 3LM052A      | 3LM053A       | 3LM054A       | 3LM055A       |
|-------------------------------------|--------------|---------------|---------------|---------------|
| HP                                  | 5            | 5             | 5             | 5             |
| Volts                               | 230          | 200/230*      | 460           | 575           |
| Phase                               | 1**          | 3             | 3             | 3             |
| Hz                                  | 60           | 60            | 60            | 60            |
| RPM                                 | 1750         | 1750          | 1750          | 1750          |
| FLA                                 | 24.5         | 17.6/16       | 8.0           | 6.5           |
| SFA                                 | 28           | 21.2/19.2     | 9.4           | 7.8           |
| LRA                                 | 129          | 120           | 59.3          | 38.9          |
| Max kW Input                        | 5.4          | 5.2           | 5.2           | 5.2           |
| NEMA Code                           | —            | A             | A             | A             |
| Service Factor                      | 1.3          | 1.3           | 1.3           | 1.3           |
| Power Factor (%)                    | 98           | 80            | 80            | 80            |
| KVA Code                            | F            | M             | M             | K             |
| Motor Efficiency @ Full Load (%)    | 85.6         | 89.5          | 89.5          | 88.7          |
| Std Impeller Diameter (in)          | 7.25         | 7.25          | 7.25          | 7.25          |
| Shut-Off Head w/Std Impeller (ft)   | 54           | 54            | 54            | 54            |
| Max Usable Head w/Std Impeller (ft) | 46           | 46            | 46            | 46            |
| Min Head w/Std Impeller (ft)        | 12           | 12            | 12            | 12            |
| Max Flow @ Min Head (GPM)           | 630          | 630           | 630           | 630           |
| Power Cord Type & Diameter          | Type W, 1 in | SOOW, 0.72 in | SOOW, 0.72 in | SOOW, 0.72 in |

\* System voltages: 208 and 240 volts with utilization voltages: 200 and 230 volts. These pumps are able to be rewired to 460 volts in the field.

\*\* Single-phase motors require capacitors. Liberty Pumps control panel or capacitor kits are recommended for proper operation and warranty. Refer to "Control Panel" section.

|                                                 |                                                                                             |
|-------------------------------------------------|---------------------------------------------------------------------------------------------|
| <b>Motor Insulation Class</b>                   | H 180°C                                                                                     |
| <b>Impeller Type</b>                            | Precision Balanced Monovane                                                                 |
| <b>Impeller Material</b>                        | Class 30 Cast Iron                                                                          |
| <b>Control Cord Type &amp; Diameter</b>         | 18/5 SOOW, 0.375 in                                                                         |
| <b>Power Cord Length (Options)</b>              | 35, 50, 100 ft                                                                              |
| <b>Standard Quick-connect Cords</b>             | Standard                                                                                    |
| <b>Heavy-duty Quick-connect Cords</b>           | Optional                                                                                    |
| <b>Upper (Inner) Seal Material</b>              | Graphite Impregnated Carbon - Rotating<br>Silicon Carbide - Stationary<br>Viton® Elastomers |
| <b>Lower (Outer) Seal Material (Standard)</b>   | Silicon Carbide on Silicon Carbide<br>Viton® Elastomers                                     |
| <b>Lower (Outer) Seal Material (Optional)</b>   | Tungsten Carbide on Tungsten Carbide<br>Viton® Elastomers                                   |
| <b>Max Water Temp for Continuous Duty</b>       | 40°C                                                                                        |
| <b>Min Fluid Level for Continuous Operation</b> | Motor Housing Fully Submerged                                                               |
| <b>Fluid pH Range</b>                           | 4–10                                                                                        |
| <b>Starts Per Hour</b>                          | 30                                                                                          |
| <b>Shaft Material</b>                           | 416 Stainless Steel                                                                         |

|                                   |                                                                                                                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Fastener Material</b>          | 316 Stainless Steel                                                                                                                                                               |
| <b>O-Ring Elastomers</b>          | Buna-N                                                                                                                                                                            |
| <b>Upper Bearing</b>              | Single Row Deep Groove                                                                                                                                                            |
| <b>Lower Bearing</b>              | Double Row Angular Contact                                                                                                                                                        |
| <b>Oil Type</b>                   | ISO® VG10 Turbine Oil                                                                                                                                                             |
| <b>Max Submersion Depth</b>       | 75 ft                                                                                                                                                                             |
| <b>Solids Handling</b>            | 3 in                                                                                                                                                                              |
| <b>Discharge</b>                  | Horizontal 4 in 150# ANSI® (DIN 100-PN10)                                                                                                                                         |
| <b>Protective External Finish</b> | Powder Coat                                                                                                                                                                       |
| <b>Seal Fail Detection</b>        | Dual Probe - 2 Wire with Resistor<br>200K ohm Resistance                                                                                                                          |
| <b>Thermal Protection</b>         | 1-phase - 2 Hermetically Sealed Thermostats<br>3-phase - 3 Hermetically Sealed Thermostats<br>125°C Opening Temperature<br>105°C Closing Temperature<br>3A @ 120VAC, 1A @ 240 VAC |
| <b>Volute Material</b>            | Class 30 Cast Iron                                                                                                                                                                |
| <b>Pump Weight</b>                | 340 lbs (approx)                                                                                                                                                                  |
| <b>Certifications</b>             | CSA Certified to CSA and UL® Standards<br>CAN/CSA C22.2 No. 108-14<br>ANSI/UL 778 6th Ed                                                                                          |

Specifications are subject to change without notice.