Vertical Multistage Simplex Pumps

GRUNDFOS CRE PLUS

The CRE Plus is a simplex pump system that utilizes advanced pump technology to vary motor output according to demand so energy is not wasted on generating pump speed that is not required. The CRE Plus optimizes pumping efficiency at all times, saving energy, driving down costs and lessening system wear and tear. CRE pumps maintain constant pressure at any time, even with the most challenging variations in demand.

The Grundfos CRE represents the union of the well known Grundfos CR and variable speed MLE motors developed by Grundfos with optimum electronic control in mind. The CRE features a pump and motor with an integrated variable frequency drive, controller and sensor. The CRE offers a plug-and-pump solution.

The integrated variable frequency motor MLE is available with permanent magnet motors and exceed IE5 efficiency levels set by International Electro Technical Commission, currently the highest efficiency worldwide for electrical motors. Premium efficient motors equal IE3, making the MLE motors two levels above NEMA Premium Efficiency, and have higher combined motor + VFD efficiency, higher than NEMA Premium motor alone.

Key Features and Benefits

• Large, graphical display control interface (HMI) on MLE motor allows control of all settings without need of separate interface device (GO Remote) and provides user friendly operation
• Plug and pump, compact, single pump solution ensures quick and easy installation
• Advanced control capabilities including: soft pressure build up (i.e., pipefill), limit exceed (i.e., high system pressure), and set point influence (i.e., proportional pressure)
• Steep performance curve gives greater speed reduction at part load conditions
• Factory tested as a complete system
• Available with all popular SCADA communication options
• Best in class energy efficiency means low life cycle costs
• Quiet operation and no vibration
• Balanced cartridge mechanical seal design can be replaced in minutes, simplifying maintenance
• UL Listed (Category QCZJ - Packaged Pumping System)
• NSF 61 / UL 372 certified

CRE PLUS MOTOR RANGE

MLE Motors that include permanent magnet motors will be available in horsepower and voltage range as follows:

• 1 - 15 HP in 3 x 460-480V
• 1.5 - 7.5 HP in 3 x 208-230V (Spring ’18)
• 10 HP in 3 x 230V (Spring ’18)

APPLICATIONS

• Water supply
• Irrigation
• Water treatment
• Industrial plants
• Pressure boosting
CRE Plus Technical Data

**CRE Plus Information**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Flow, Q:</td>
<td>max. 450 gpm (102 m³/h)</td>
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<tr>
<td>Head, H:</td>
<td>max. 790 ft. (240 m)</td>
</tr>
<tr>
<td>Liquid temp:</td>
<td>max. +176 °F (80 °C)</td>
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<tr>
<td>Operating Pressure:</td>
<td>max. 362 psi (25 bar)</td>
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</tbody>
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The graph shows the relationship between flow rate (Q) and head (H) for CRE Plus pumps at 60 Hz. The shaded areas represent different model series, with each series indicated by a unique series name.