FACTS ABOUT THE GRUNDFOS CRE PUMP

The CRE pump is based on a modular design, easily adapted within the well-proven CR basic pump concept. The compact in-line pump design enables installation in horizontal one-pipe systems.

The multipurpose pump is designed for a variety of applications including:
- Water supply
- Washing and cleaning
- Water treatment
- Boiler feed
- Chemical and Pharmaceutical industries
- Temperature control
- Mining
- Industrial cooling
- Irrigation

All variants in the CRE range are available in cast iron, stainless steel and titanium.

For more information, please go to grundfos.com/cr
EXPERIENCE EFFICIENCY
FAR BEYOND REQUIREMENTS

The renowned CRE pump has been upgraded with the latest motor technology to offer impressive energy efficiency that meets the IES levels.

When you choose the optimised CRE pump, you will not only be rewarded with superior reliability and impeccable performance. As part of the Grundfos iSOLUTIONs programme, the pump also represents the ultimate in intelligent control and energy efficiency. The new MGE motor goes far beyond what regulations require in terms of energy efficiency just as the advanced built-in control system makes it possible to enable application-related functions to optimise system performance.

CRE is also available with built-in sensor and pre-configured to constant pressure for complete plug-n-pump in the installation.

The CRE pump is now suitable for installation in more applications due to increased permissible ambient temperature and lower noise level.

Extended input and output options
The CRE pump offers a variety of configurable input and output options, including:
- Three analogue inputs (0-10 V; 0/4-20 mA; 0.5-3.5 V)
- One analogue output (0-10 V; 0/4-20 mA)
- Two dedicated digital inputs
- Two configurable digital inputs or open-collector outputs
- Two Pt100/Pt1000 inputs for temperature measurement
- LiqTec sensor inputs – dry-running protection sensor
- Two signal relay outputs
- GENIbus connection
- Interface for CIM field bus modules

Extended specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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<tbody>
<tr>
<td>Ambient temperature</td>
<td>Full load continuous 50 °C, maximum allowed 60 °C</td>
</tr>
<tr>
<td>Enclosure class</td>
<td>IP55 and IP66</td>
</tr>
<tr>
<td>Maximum speed</td>
<td>5900 rpm</td>
</tr>
<tr>
<td>Wide supply voltage</td>
<td>Single-phase: 200-240 V; Three-phase: 380-500 V</td>
</tr>
<tr>
<td>Approvals</td>
<td>CE, RCM, cUR us, EAC</td>
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Extended communication
As part of the Grundfos iSOLUTIONs the CRE pumps allow a variety of Communication Interface Modules (CIM) built into the pump to enable direct communication with process control systems, PLC, SCADA or BMS.

As a result, installation is made easier and the initial cost lower because there is no need for gateways. Adjust operation and monitor operating performance remotely with your preferred field bus.

**Industrial Ethernet**
The CRE pump supports the following industrial Ethernet standards:
- Modbus TCP
- PROFINET IO
- BACnet/IP

**Serial fieldbusses**
The CRE pump supports the following serial based communication standards:
- Modbus RTU
- PROFIBUS DP
- BACnet MS/TP
- LON

NEW CRE FUNCTIONS
Run at power limit: Full load power output and optimal overload protection
Advanced stop function: Prevents operation against closed valve or low flow operation damage and heat up
Curve compensation: Stabilises unstable pump and load curves
Activation and de-activation delay: Timer delay on digital inputs and outputs

Grundfos GO
Grundfos GO is the industry’s most advanced mobile pump control solution, designed to be totally compatible with all Grundfos E-pumps, including the CRE. It gives you the possibility to communicate with the pump and thereby monitor and control electronic pumps on-site.

GENIbus
The CRE pump is equipped with a Grundfos GENIbus interface.

GSM
The GSM module enables remote data transmission from Grundfos pumps or controllers – via mobile phones or SCADA systems.

GRM
Grundfos Remote Management makes it possible to monitor and manage pump systems remotely to reduce the need for costly – and often unnecessary – on-site inspections.

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