



INTELLIGENT EFFICIENCY BY GRUNDFOS

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GRUNDFOS 

RAISING THE BAR ABOVE NEMA PREMIUM

The renowned CRE pump has been upgraded with the latest motor technology to offer impressive energy efficiency that meets the IE5 levels.

When you choose the optimized CRE pump, you will not only be rewarded with superior reliability and impeccable performance. As part of the Grundfos iSOLUTIONs program, the pump also represents the ultimate in intelligent control and energy efficiency. The new MLE 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 optimize system performance.

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

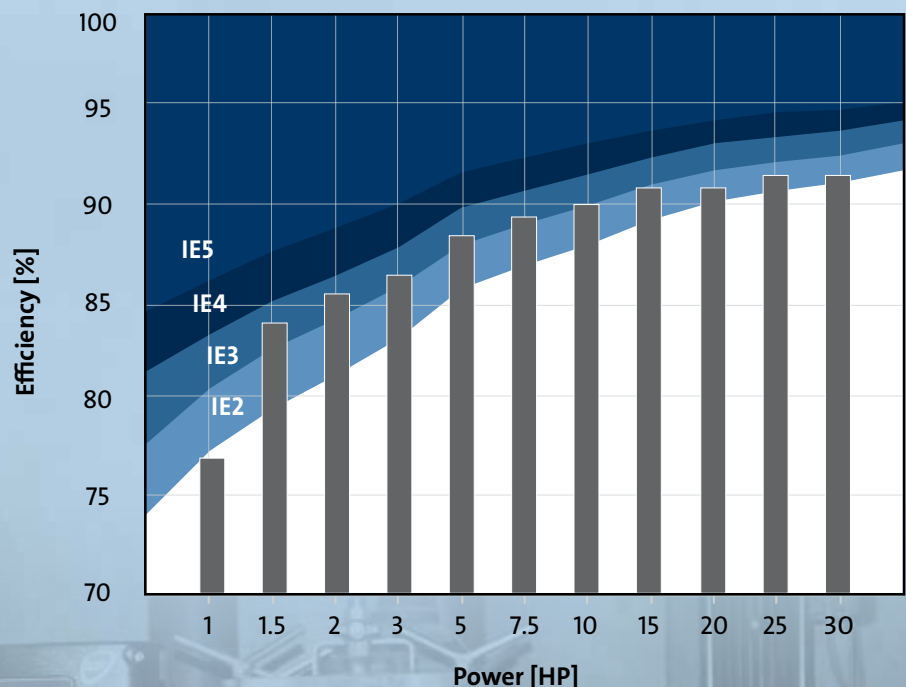
The CRE pump is now suitable for installation in more applications due to increased permissible ambient temperature and lower noise level.

Delivering an unprecedented level of performance, this ground-breaking MLE (motor only) exceeds the NEMA premium efficient legislative demands to meet the strictest criteria of IE5. IE5 is the highest energy efficiency level for electrical motors.

The new Grundfos MLE motors (motor only) from 1.0 Hp through 15 Hp have attained IE5 status.

Grundfos MLE motors (motor only) from 20 Hp through 30 Hp meet NEMA premium efficient.

The new MLE motor offers 10% energy savings and up to 25% reduction in payback time compared to the NEMA premium efficient solution.



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

Stabilizes unstable pump and load curves

Activation and de-activation delay

Timer delay on digital inputs and outputs

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 Pt100/1000 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

Ambient temperature	Full load continuous 122 °F (50 °C) maximum allowed 140 °F (60 °C)
Enclosure class	IP55 and IP66
Maximum speed	5900 rpm
Wide supply voltage	Single-phase: 200-240 V Three-phase: 440-480 V
Approvals	CE, R CM, cUR us, EAC

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 fieldbuses

The CRE pump supports the following serial based communication standards:

- Modbus RTU
- PROFIBUS DP
- BACnet MS/TP
- LON



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.

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 hereby monitor and control electronic pumps on-site.



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.