

CRE, CRIE, CRNE

MGE/MLE motor update



TM06 4866 3115

Fig. 1 CRIE pump fitted with the new MGE/MLE motor

Product changes in relation to the new MGE/MLE motors

Improved overall energy efficiency

The new MGE/MLE represents a new way of thinking about speed-controlled motors when it comes to efficiency.

The total efficiency of this new motor, including the frequency converter, is higher than the IE4 level defined by the IEC 60034-30-1, even though this standard only applies to the motor. This will make the CRE, CRIE, CRNE pumps unique in their class when it comes to efficiency.

Improved performance

- Permissible ambient temperature increased to 50 °C
- IP rating, now IP55 (optionally IP66)
- Lower acoustic noise level compared to competitors.

Pump control panel

Three types of control panels are available. A basic panel, a standard panel and an advanced panel with graphical display.

The standard control panel has been chosen as default on CRE, CRIE, CRNE pumps.

Functional module

Three different functional modules are available offering different possibilities of input and output signals. The most advanced functional module is default on CRE, CRIE, CRNE pumps.

Wireless communication (remote control)

The new MGE/MLE motors can communicate via radio signals and infrared light. It can thus be controlled and monitored by both the Grundfos GO and the R100 remote control.

The radio transmitter in the new MGE/MLE motor is globally approved, except for usage in China and Korea, due to local legislation.

Approvals

The same approvals as today will be available for the new version.

The CRE, CRIE, CRNE pumps offers the cURus approval from launch.

Supply voltages

The new MGE motors will be available for these supply voltages:

- 3 x 380-500 V, 3 to 11 kW (P2).
- 3 x 200-240 V, 1.1 to 7.5 kW (P2).

The new MLE motors will be available for these supply voltages:

- 3 x 440-480 V, 5 to 15 hp (P2).
- 3 x 200-230 V, 1.5 to 10 hp (P2).

Part numbers

The part numbers will change for the CRE, CRIE, CRNE pumps. The reason for this is to make sure whether you order a pump with the new MGE/MLE motor or a pump with the old MGE/MLE motor.

Sales release

Expected sales release of CRE, CRIE, CRNE pumps with the new motors is Q3 2016.

Technical data

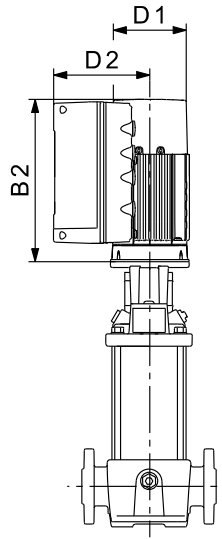


Fig. 2 Dimensional sketch

TM05 5289 3612

Dimensions and weight

Old MGE		New MGE		Change in dimensions [mm]			Change in weight [kg]
Three-phase (3 x 380-480 V)		Three phase (3 x 380-500 V)		D1	D2	B2	
P2 [kW]	Frame size	P2 [kW]	Frame size				
3	100	3	100	-6	24	-1	-8
4	112	4	112	-28	13	-38	-16
5.5	132	5.5	132	-28	13	-26	-12
7.5	132	7.5	132	-5	24	10	-32
11	160	11	160	-59	-71	-65	-55

The change in dimensions/weight should be added to or subtracted from the current values to get the new dimensions/weight.

Electrical data

Old MGE					New MGE				
P2 [kW]	Voltage [V]	I _{1/1} [A]	Power factor	η [%]	P2 [kW]	Voltage [V]	I _{1/1} [A]	Power factor	η [%]
3	3 x 380-480 V	6.2-5.0	0.94-0.92	87.1	3	3 x 380-500 V	5.6-5.3	0.90-0.73	90.0-90.7
4		8.1-6.6	0.94-0.92	88.1	4		7.3-6.0	0.90-0.84	91.5-92.4
5.5		11.0-8.8	0.94-0.93	89.2	5.5		9.9-8.4	0.91-0.82	92.2-93.3
7.5		14.8-11.6	0.94-0.95	90.1	7.5		14.1-11.2	0.88-0.84	91.9-92
11		22.5-18.8	0.9	91.2	11		19.8-15.8	0.91-0.87	92.9-92.8

Note: Data sheets for the following motors will be issued later:

- MGE: 3 x 200-240 V
- MLE: 3 x 200-230 V and 3 x 440-480 V.

98938661 0815

ECM: 1162365

Subject to alterations.