

MGE 71, MGE 80 MGE 90 - MGE 132

Basic

Installation and operating instructions



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1. Symbols used in this document



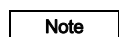
Warning

If these safety instructions are not observed, it may result in personal injury.



Caution

If these safety instructions are not observed, it may result in malfunction or damage to the equipment.



Note

Notes or instructions that make the job easier and ensure safe operation.

2. General description

Grundfos MGE 71, MGE 80, MGE 90, MGE 100, MGE 112 and MGE 132 are fan-cooled, asynchronous, squirrel-cage motors designed according to current IEC, DIN and VDE guidelines and standards. A frequency converter is integrated in the terminal box.

The motors can be used for an open-loop system in which the setpoint signal is used as a control signal.

The motor speed and thus the motor output can be remote-controlled by means of an external 0-10 V signal or by a potentiometer.

The motors incorporate

- inputs for external potential-free contacts for start/stop and an external setpoint signal
- an output for a potential-free signal.

The motors are only intended for machines with a square torque characteristic, e.g. ventilators or centrifugal pumps.

3. Identification

The motor can be identified by means of the nameplate on the terminal box.

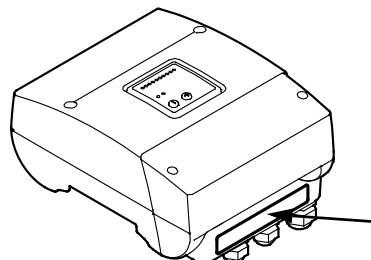


Fig. 1 Nameplate

TM03 0001 3704



Warning

Prior to installation, read these installation and operating instructions. Installation and operation must comply with local regulations and accepted codes of good practice.

3.1 Type key

Example	MG	E	80	-	B	2	-19	FT	100	-C	1
Motor Grundfos											
Electronic control											
Frame size (centre line height of motor shaft in mm, foot-mounted motor)											
Size of foot: S (small) M (medium) L (large)											
Length of stator core: A B C											
Number of poles: 2 4 6											
Shaft end diameter [mm]											
Flange version: [] (B3) FF (free holes, B5) FT (tapped holes, B14)											
Pitch circle diameter [mm]											
Model designation											
Efficiency class: 1 = IE2 motor 3 = IE3 motor [] = No efficiency defined (single phase motors)											

4. Installation

The motor must be secured to a solid foundation by bolts through the holes in the flange or the base plate.

Note

In order to maintain the UL/cURus approval, additional installation procedures must be followed. See page 11.

4.1 Handling

Always use the eyebolts fitted in the bores when lifting the motor.

Caution

Never lift the motor in the terminal box.

4.2 Motor cooling

To ensure sufficient cooling of motor and electronics, the following must be observed:

- Place the motor in such a way that sufficient cooling is ensured.
- The temperature of the cooling air must not exceed 40 °C.
- Cooling fins and fan blades must be kept clean.

4.3 Outdoor installation

When installed outdoors, the motor must be provided with a suitable cover to avoid condensation on the electronic components. See fig. 2.

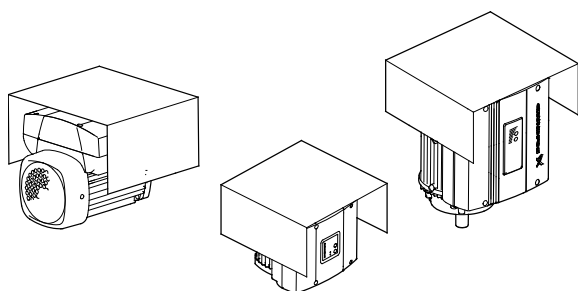


Fig. 2 Examples of covers

TM00 8622 0101 - TM02 8514 0304

4.4 Drain holes

When the motor is installed in moist surroundings, the bottom drain hole should be open. The enclosure class of the motor is then changed from IP55 to IP44. The function of the drain holes is to drain off water which has entered the stator housing, e.g. condensed water.

MGE 71 and MGE 80

The motor has a plugged drain hole on the drive side. The flange can be turned 90 ° to both sides or 180 °.

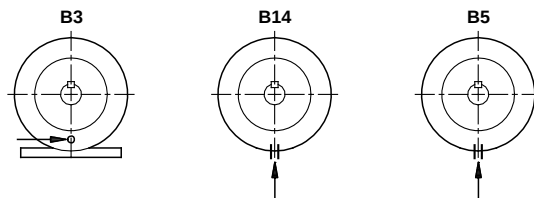


Fig. 3 Drain holes

TM02 9037 1604

MGE 90 to MGE 132

B3 mounting

The motor has two plugged drain holes on the drive side. The flange can be turned 180 °.

B14 and B5 mounting

The motor has three plugged drain holes on the drive side. The flange can be turned 180 °.

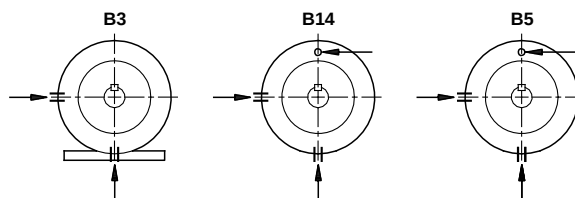


Fig. 4 Drain holes

TM02 9050 1604

4.5 Cable entries

MGE 71 and MGE 80

- 2 M16/8 screwed cable entries, cable diameter Ø4 to Ø10.
- 1 M20/10 screwed cable entry, cable diameter Ø10 to Ø14.

MGE 90 to MGE 132

- 2 M16/8 screwed cable entries, cable diameter Ø4 to Ø10.
- 1 M25/6 screwed cable entry, cable diameter Ø9 to Ø17.

4.6 Terminal box position

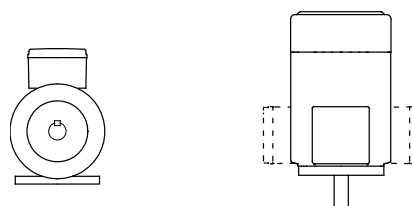


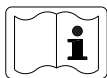
Fig. 5 Permissible terminal box positions

TM02 9343 2404

5. Electrical connection - single-phase motors

Caution

The user or the installer is responsible for the installation of the correct earthing and protection according to valid national and local standards. All operations must be carried out by a qualified electrician.



Warning

All electric supply circuits must be interrupted before working in the motor terminal box.



Warning

Never make any connections in the motor terminal box unless the power supply has been switched off for at least 5 minutes.

5.1 Mains switch

The motor must be connected to an external all-pole mains switch with a contact separation of at least 3 mm in each pole according to IEC 364.

5.2 Protection against electric shock - indirect contact



Warning

The motor must be earthed and protected against indirect contact in accordance with national regulations.

Protective earth conductors must always have a yellow/green (PE) or yellow/green/blue (PEN) colour marking.

5.3 Additional protection

If the motor is connected to an electric installation where an earth leakage circuit breaker is used as additional protection, this circuit breaker must be marked with the following symbol:



ELCB

Note

When an earth leakage circuit breaker is selected, the total leakage current of all the electrical equipment in the installation must be taken into account.

The leakage current of the motor can be found in section [11.2 Leakage current](#).

5.4 Motor protection

The motor requires no external motor protection. The motor incorporates thermal protection against slow overloading and blocking (IEC 34-11: TP 211).

5.5 Protection against mains voltage transients

The motor is protected against mains voltage transients in accordance with EN 61800-3.

5.6 Supply voltage

- 1 x 230-240 V - 10 %/+ 10 %, 50/60 Hz, PE
- 1 x 200-220 V - 10 %/+ 10 %, 50/60 Hz, PE
- 1 x 220-240 V - 10 %/+ 10 %, 50/60 Hz, PE (MGFlex)
- 110-415 VDC, PE (MGFlex).

The supply voltage and frequency are marked on the motor nameplate. Please make sure that the motor is suitable for the power supply on which it will be used.

The wires in the motor terminal box must be as short as possible. Excepted from this is the protective earth conductor which must be so long that it is the last one to be disconnected in case the cable is inadvertently pulled out of the cable entry.

For maximum backup fuse, see section [11.1 Supply voltage](#).

MGE 71 and MGE 80

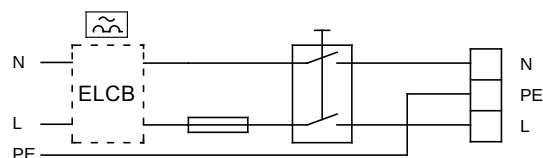


Fig. 6 Example of a mains-connected motor with mains switch, back-up fuses and additional protection

MGE 71 and MGE 80

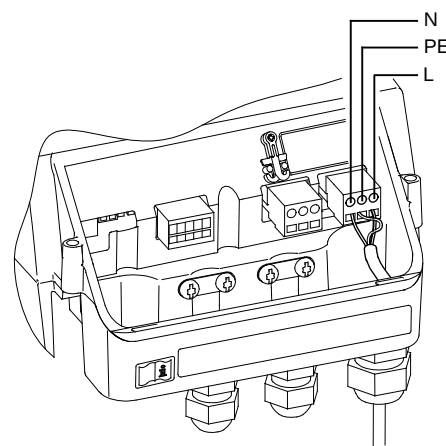


Fig. 7 Mains connection



Warning

If the supply cable is damaged, it must be replaced by the manufacturer, the manufacturer's service partner or similarly qualified persons in order to avoid a hazard.

5.7 Start/stop of motor

Caution

The number of starts and stops via the mains voltage must not exceed 4 times per hour.

When the motor is switched on via the mains, it will start after approx. 5 seconds.

If a higher number of starts and stops is desired, the input for external start/stop must be used when starting the motor.

When the motor is started via an external on/off switch, it will start immediately.

5.8 Other connections

The connection terminals of external potential-free contacts for start/stop, external setpoint signal and relay signal are shown in fig. 8.

Note If no external on/off switch is connected, short-circuit terminals 2 and 3 using a short wire.

Caution As a precaution, the wires to be connected to the following connection groups must be separated from each other by reinforced insulation in their entire lengths:

- **Inputs** (external start/stop and setpoint signal, terminals 2-6).
All inputs (group 1) are internally separated from the mains-conducting parts by reinforced insulation and galvanically separated from other circuits.
All control terminals are supplied by protective extra-low voltage (PELV), thus ensuring protection against electric shock.
- **Output** (signal relay, terminals NC, C, NO).
The output (group 2) is galvanically separated from other circuits. Therefore, the supply voltage or protective extra-low voltage can be connected to the output as desired.
- **Mains supply** (terminals N, PE, L).

A galvanically safe separation must fulfil the requirements for reinforced insulation including creepage distances and clearances specified in EN 61800-5-1.

MGE 71 and MGE 80

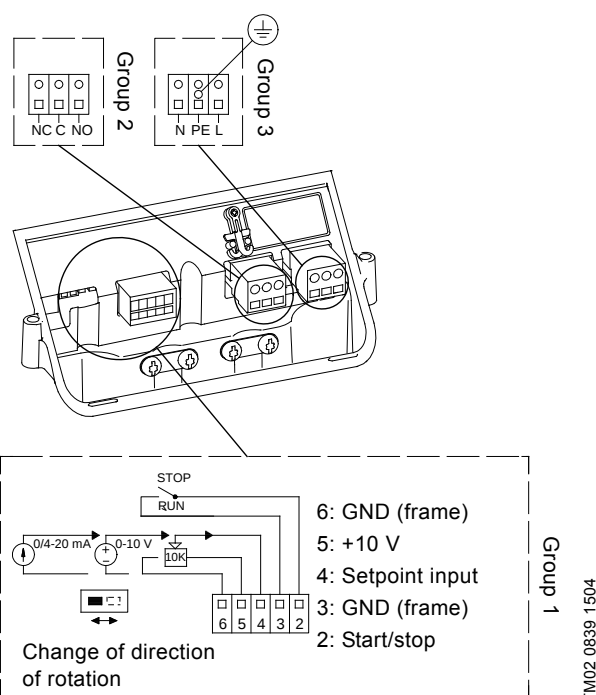
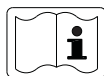


Fig. 8 Connection terminals

6. Electrical connection - three-phase motors

The user or the installer is responsible for the installation of the correct earthing and protection according to valid national and local standards. All operations must be carried out by a qualified electrician.

Caution



Warning

All electric supply circuits must be interrupted before working in the motor terminal box.



Warning

Never make any connections in the motor terminal box unless the power supply has been switched off for at least 5 minutes.

6.1 Mains switch

The motor must be connected to an external all-pole mains switch with a contact separation of at least 3 mm in each pole according to IEC 364.

6.2 Protection against electric shock - indirect contact



Warning

The motor must be earthed and protected against indirect contact in accordance with national regulations.

Protective earth conductors must always have a yellow/green (PE) or yellow/green/blue (PEN) colour marking.

Caution

As the leakage current of 4 kW to 7.5 kW motors is > 3.5 mA, these motors must be connected to especially reliable/sturdy earth connections.

The leakage current of the motor can be found in section [12.2 Leakage current](#).

EN 50178 and BS 7671 specify the following:

Leakage current > 3.5 mA

The motor must be stationary and installed permanently. Furthermore, it must be connected permanently to the power supply.

- The earth connection must be carried out as duplicate conductors.

Leakage current > 10 mA

If the installation includes several mains-connected units and the total leakage may be > 10 mA, the demands on the earth connection are tightened.

The motor must be stationary and installed permanently. Furthermore, it must be connected permanently to the power supply.

In addition, tightened precautions as regards earth connection must be observed.

One of the following installation examples must be used:

- A single protective earth conductor having a cross-sectional area of 10 mm².
- Separate duplicate conductors each having a minimum cross-sectional area of 4 mm².
- A protective earth conductor contained in a cable conduit, trunking or cable tray so forming a duplicate conductor.

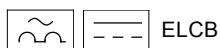
6.3 Additional protection

If the motor is connected to an electric installation where an earth leakage circuit breaker is used as additional protection, this circuit breaker must be of the type:

- which is suitable for handling leakage currents and cutting-in with short pulse-shaped leakage.
- which trips out when alternating fault currents and fault currents with DC content, i.e. pulsating DC and smooth DC fault currents, occur.

For these motors an earth leakage circuit breaker **type B** must be used.

This circuit breaker must be marked with the following symbols:



ELCB

Note

When an earth leakage circuit breaker is selected, the total leakage current of all the electrical equipment in the installation must be taken into account.

The leakage current of the motor can be found in section [12.2 Leakage current](#).

6.4 Motor protection

The motor requires no external motor protection. The motor incorporates thermal protection against slow overloading and blocking (IEC 34-11: TP 211).

6.5 Protection against mains voltage transients

The motor is protected against mains voltage transients in accordance with EN 61800-3.

6.6 Protection against phase unbalance

The motor must be connected to an power supply with a quality corresponding to IEC 60146-1-1, class C, to ensure correct motor operation at a phase unbalance. This also ensures long life of the components.

6.7 Supply voltage

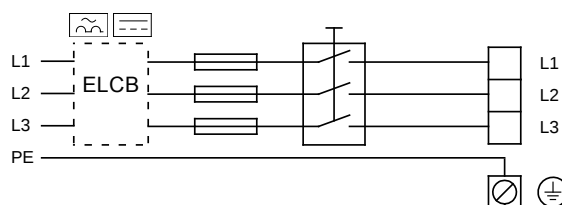
- 3 x 380-480 V - 10 %/+ 10 %, 50/60 Hz, PE.

The supply voltage and frequency are marked on the motor nameplate. Please make sure that the motor is suitable for the power supply on which it will be used.

The wires in the motor terminal box must be as short as possible. Excepted from this is the protective earth conductor which must be so long that it is the last one to be disconnected in case the cable is inadvertently pulled out of the cable entry.

For maximum backup fuse, see section [12.1 Supply voltage](#).

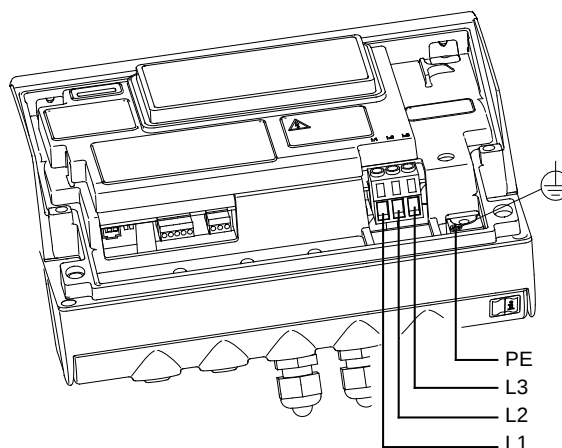
MGE 90 to MGE 132



TM00 9270 4696

Fig. 9 Example of a mains-connected motor with mains switch, back-up fuses and additional protection

MGE 90 to MGE 132



TM02 9035 1504

Fig. 10 Mains connection



Warning

If the supply cable is damaged, it must be replaced by the manufacturer, the manufacturer's service partner or similarly qualified persons in order to avoid a hazard.

6.8 Start/stop of motor

Caution

The number of starts and stops via the mains voltage must not exceed 4 times per hour.

When the motor is switched on via the mains, it will start after approx. 5 seconds.

If a higher number of starts and stops is desired, the input for external start/stop must be used when starting the motor.

When the motor is started via an external on/off switch, it will start immediately.

6.9 Other connections

The connection terminals of external potential-free contacts for start/stop, external setpoint signal and relay signal are shown in fig. 11.

Note If no external on/off switch is connected, short-circuit terminals 2 and 3 using a short wire.

Caution As a precaution, the wires to be connected to the following connection groups must be separated from each other by reinforced insulation in their entire lengths:

- **Inputs** (external start/stop and setpoint signal, terminals 2-6).
All inputs (group 1) are internally separated from the mains-conducting parts by reinforced insulation and galvanically separated from other circuits.
All control terminals are supplied by protective extra-low voltage (PELV), thus ensuring protection against electric shock.
- **Output** (relay signal, terminals NC, C, NO).
The output (group 2) is galvanically separated from other circuits. A maximum supply voltage of 250 V or protective extra-low voltage can be connected to the output as desired.
- **Mains supply** (terminals L1, L2, L3, PE).

A galvanically safe separation must fulfil the requirements for reinforced insulation including creepage distances and clearances specified in EN 61800-5-1.

MGE 90 to MGE 132

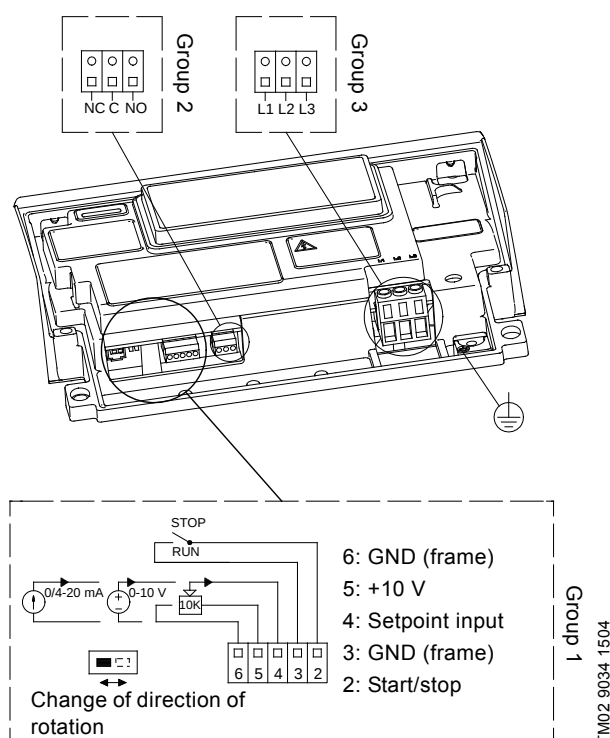


Fig. 11 Connection terminals

7. Signal cables

- Use screened cables having a cross-sectional area of min. 0.5 mm² and max. 1.5 mm² for external on/off switch and setpoint signal.
- The screens of the cables must be connected to frame at both ends with good frame connection. They must be as close as possible to the terminals. See fig. 12.

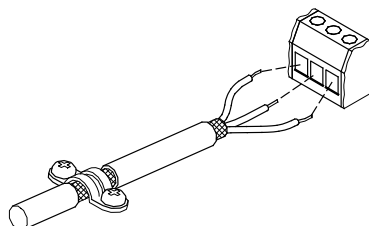


Fig. 12 Stripped cable with screen and wire connection

- Screws for frame connections must always be tightened whether a cable is fitted or not.
- The wires in the motor terminal box must be as short as possible.

8. Motor control

The motor can be connected to external signals for remote-control of the motor output.

8.1 Motor speed control

The motor speed can be set via the setpoint input, terminal 4. It is possible to use either a 0-10 V signal or a potentiometer. The motor speed can be set within the range from "minimum frequency" to the maximum setpoint of 100 %.

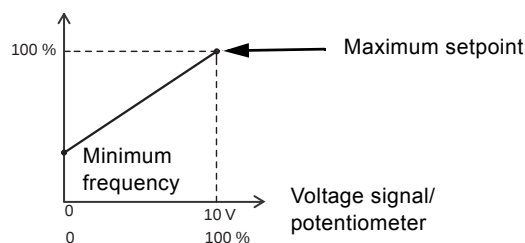
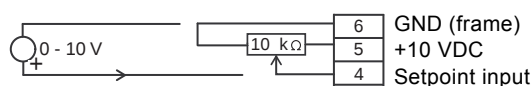
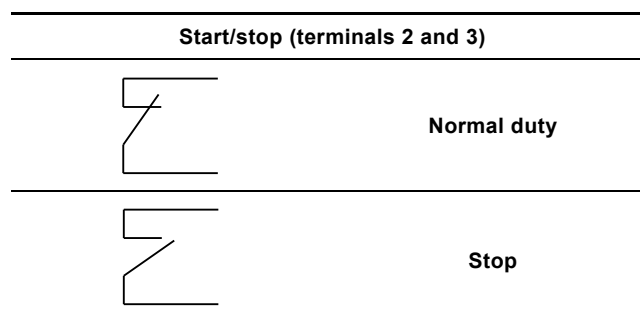


Fig. 13 Relation between output frequency and external setpoint signal

8.2 Start/stop input

The motor can be started and stopped via an external potential-free contact connected to terminals 2 and 3.

Functional diagram: Start/stop input



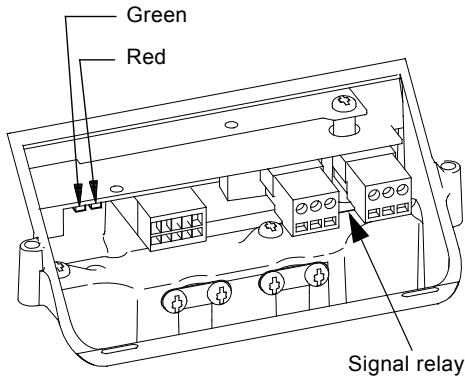
TM02 1325 0901

TM02 1326 0901

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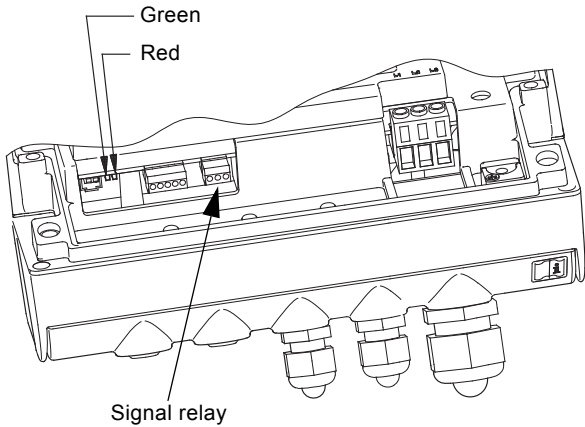
9. Indicator lights and signal relay

The operating condition of the motor is indicated by the green and red indicator lights in the motor terminal box. See figs 14 and 15.



TM02 0838 0301

Fig. 14 Indicator lights and signal relay in single-phase motors



TM02 9036 1504

Fig. 15 Indicator lights and signal relay in three-phase motors

The motor incorporates an output for a potential-free signal via an internal relay. The signal relay is factory-set to "operation". The factory setting can be changed by means of the PC Tool MGE.

The functions of the two indicator lights and the factory setting of the signal relay are as shown in the following table:

Indicator lights		Contact position of signal relay	Description
Fault (red)	Operation (green)		
Off	Off		The power supply has been switched off.
Off	Permanently on		The motor is operating.
Off	Flashing		The motor has been set to stop.
Permanently on	Off		The motor has stopped because of a fault. Restarting will be attempted (it may be necessary to restart the motor by resetting the fault indication).
Permanently on	Permanently on		The motor is operating, but it has been stopped because of a fault.
Permanently on	Flashing		The motor has been set to stop, but it has been stopped because of a fault.
Flashing	Flashing		Three-phase motors only: Internal communication fault. Manual restarting is necessary.

In case of a fault indication, the cause may be one of the following:

- too high motor temperature
- undervoltage
- overvoltage
- too many restarts (after faults)
- overload
- external fault (e.g. external equipment for dry-running detection)

A fault indication can be reset in one of the following ways:

- By briefly opening the connection between terminals 2 and 3 (stops the motor).
- By switching off the power supply until the indicator lights are off.

10. Megging

Note

Megging of an installation incorporating MGE motors is not allowed, as the built-in electronics may be damaged.

11. Technical data - single-phase motors

11.1 Supply voltage

- 1 x 230-240 V - 10 %/+ 10 %, 50/60 Hz, PE
- 1 x 200-220 V - 10 %/+ 10 %, 50/60 Hz, PE
- 1 x 220-240 V - 10 %/+ 10 %, 50/60 Hz, PE (MGFlex).
- 110-415 VDC, PE (MGFlex).

Cable: 1.5 mm² / 14-12 AWG.

See nameplate.

Recommended fuse size

Motor size [kW]	Min. [A]	Max. [A]
0.18 to 0.37	6	10
0.55 to 1.1	10	10

Standard as well as quick-blow or slow-blow fuses may be used.

11.2 Leakage current

Earth leakage current < 3.5 mA.

The leakage currents are measured in accordance with EN 60355-1.

11.3 Inputs/output

Start/stop

External potential-free switch.

Voltage: 5 VDC.

Current: < 5 mA.

Screened cable: 0.5 - 1.5 mm² / 28-16 AWG.

Setpoint signals

- Potentiometer
0-10 VDC, 10 kΩ (via internal voltage supply).
Screened cable: 0.5 - 1.5 mm² / 28-16 AWG.
Maximum cable length: 100 m.
- Voltage signal
0-10 VDC, R_i > 50 kΩ.
Tolerance: + 0 %/- 3 % at maximum voltage signal.
Screened cable: 0.5 - 1.5 mm² / 28-16 AWG.
Maximum cable length: 500 m.

Signal output

Potential-free changeover contact.

Maximum contact load: 250 VAC, 2 A.

Minimum contact load: 5 VDC, 10 mA.

Screened cable: 0.5 - 2.5 mm² / 28-12 AWG.

Maximum cable length: 500 m.

12. Technical data - three-phase motors

12.1 Supply voltage

- 3 x 380-480 V - 10 %/+ 10 %, 50/60 Hz, PE.

Cable: 6-10 mm² / 10-8 AWG.

See nameplate.

Recommended fuse size

Motor size [kW]	Min. [A]	Max. [A]
0.75 to 3.0	10	16
4.0 to 5.5	16	16
7.5	25	32

Standard as well as quick-blow or slow-blow fuses may be used.

12.2 Leakage current

Motor size [kW]	Leakage current [mA]
0.75 to 3.0 (supply voltage < 460 V)	< 3.5
0.75 to 3.0 (supply voltage > 460 V)	< 5
4.0 to 5.5	< 5
5.5, 4-pole	< 10
7.5	< 10

The leakage currents are measured in accordance with EN 60355-1.

12.3 Inputs/output

Start/stop

External potential-free switch.

Voltage: 5 VDC.

Current: < 5 mA.

Screened cable: 0.5 - 1.5 mm² / 28-16 AWG.

Setpoint signals

- Potentiometer
0-10 VDC, 10 kΩ (via internal voltage supply).
Screened cable: 0.5 - 1.5 mm² / 28-16 AWG.
Maximum cable length: 100 m.
- Voltage signal
0-10 VDC, R_i > 50 kΩ.
Tolerance: + 0 %/- 3 % at maximum voltage signal.
Screened cable: 0.5 - 1.5 mm² / 28-16 AWG.
Maximum cable length: 500 m.

Signal output

Potential-free changeover contact.

Maximum contact load: 250 VAC, 2 A.

Minimum contact load: 5 VDC, 10 mA.

Screened cable: 0.5 - 2.5 mm² / 28-12 AWG.

Maximum cable length: 500 m.

13. Other technical data

EMC (electromagnetic compatibility)

EN 61800-3.

Residential areas - unlimited distribution, corresponding to CISPR 11, class B, group 1.

Industrial areas - unlimited distribution, corresponding to CISPR 11, class A, group 1.

Contact Grundfos for further information.

Enclosure class

Standard: IP55 (IEC 34-5).

Insulation class

F (IEC 85).

Ambient temperature

- During operation: -20 °C to +40 °C.
- During storage/transport: -40 °C to +60 °C.

Relative air humidity

Maximum 95 %.

13.1 Sound pressure level

Single-phase motors

< 70 dB(A).

Three-phase motors

Motor [kW]	Speed stated on nameplate [min ⁻¹]	Sound pressure level [dB(A)]
0.75	1400-1500	52
	2800-3000	63
1.1	1400-1500	52
	2800-3000	63
1.5	1400-1500	53
	2800-3000	63
2.2	1400-1500	52
	2800-3000	64
3.0	1400-1500	57
	2800-3000	64
4.0	1400-1500	59
	2800-3000	68
5.5	1400-1500	59
	2800-3000	68
7.5	2800-3000	68

14. Disposal

This product or parts of it must be disposed of in an environmentally sound way:

1. Use the public or private waste collection service.
2. If this is not possible, contact the nearest Grundfos company or service workshop.

Subject to alterations.

Appendix

1. Installation in the USA and Canada

Note

In order to maintain the UL/cURus approval, follow these additional installation instructions.
The UL approval is according to UL508C.

1.1 Electrical connection

1.1.1 Conductors

Use 140/167 °F (60/75 °C) copper conductors only.

1.1.2 Torques

Power terminals

Motor size [kW]	Thread size	Torque [Nm]
Up to 7.5 kW	M4	2.35
11-22 kW	M4	Min. 2.2 Max. 2.8

Relay, M2.5: 0.5 Nm.

Input control, M2: 0.2 Nm.

1.1.3 Line reactors

Max line reactor size must not exceed 2 mH.

1.1.4 Fuse size/circuit breaker

If a short circuit happens the pump can be used on a mains supply delivering not more than 5000 RMS symmetrical amperes, 600 V maximum.

Fuses

When the pump is protected by fuses they must be rated for 480 V. Maximum sizes are stated in table below.

Motors up to and including 7.5 kW require class K5 UL-listed fuses. Any UL-listed fuse can be used for motors from 11 to 22 kW.

Circuit breaker

When the pump is protected by a circuit breaker this must be rated for a maximum voltage of 480 V. The circuit breaker must be of the "Inverse time" type.

The interrupting rating (RMS symmetrical amperes) must not be less than the values stated in table below.

USA - hp

2-pole	4-pole	Fuse size	Circuit breaker type/model
1	1	25 A	25 A / Inverse time
1.5	1.5	25 A	25 A / Inverse time
2	2	25 A	25 A / Inverse time
3	3	25 A	25 A / Inverse time
5	5	40 A	40 A / Inverse time
7.5	–	40 A	40 A / Inverse time
10	7.5	50 A	50 A / Inverse time
15	15	80 A	80 A / Inverse time
20	20	110 A	110 A / Inverse time
25	25	125 A	125 A / Inverse time
30	–	150 A	150 A / Inverse time

Europe - kW

2-pole	4-pole	Fuse size	Circuit breaker type/model
–	0.55	25 A	25 A / Inverse time
0.75	0.75	25 A	25 A / Inverse time
1.1	1.1	25 A	25 A / Inverse time
1.5	1.5	25 A	25 A / Inverse time
2.2	2.2	25 A	25 A / Inverse time
3	3	25 A	25 A / Inverse time
4	4	40 A	40 A / Inverse time
5.5	–	40 A	40 A / Inverse time
7.5	5.5	50 A	50 A / Inverse time
11	11	80 A	80 A / Inverse time
15	15	110 A	110 A / Inverse time
18.5	18.5	125 A	125 A / Inverse time
22	–	150 A	150 A / Inverse time

1.1.5 Overload protection

Degree of overload protection provided internally by the drive, in percent of full-load current: 102 %.

1.2 General considerations

For installation in humid environment and fluctuating temperatures, it is recommended to keep the pump connected to the power supply continuously. This will prevent moisture and condensation build-up in the terminal box.

Start and stop must be done via the start/stop digital input (terminal 2-3).

Subject to alterations.

Declaration of conformity

GB: EU declaration of conformity

We, Grundfos, declare under our sole responsibility that the products MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, to which the declaration below relates, are in conformity with the Council Directives listed below on the approximation of the laws of the EU member states.

CZ: Prohlášení o shodě EU

My firma Grundfos prohlašujeme na svou plnou odpovědnost, že výrobky MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, na které se toto prohlášení vztahuje, jsou v souladu s níže uvedenými ustanoveními směrnice Rady pro sblížení právních předpisů členských států Evropského společenství.

DK: EU-overensstemmelseserklæring

Vi, Grundfos, erklærer under ansvar at produkterne MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132 som erklæringen nedenfor omhandler, er i overensstemmelse med Rådets direktiver der er nævnt nedenfor, om indbyrdes tilnærmelse til EU-medlemsstaternes lovgivning.

ES: Declaración de conformidad de la UE

Grundfos declara, bajo su exclusiva responsabilidad, que los productos MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132 a los que hace referencia la siguiente declaración cumplen lo establecido por las siguientes Directivas del Consejo sobre la aproximación de las legislaciones de los Estados miembros de la UE.

FR: Déclaration de conformité UE

Nous, Grundfos, déclarons sous notre seule responsabilité, que les produits MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, auxquels se réfère cette déclaration, sont conformes aux Directives du Conseil concernant le rapprochement des législations des États membres UE relatives aux normes énoncées ci-dessous.

HR: EU deklaracija sukladnosti

Mi, Grundfos, izjavljujemo s punom odgovornošću da su proizvodi MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, na koja se izjava odnosi u nastavku, u skladu s direktivama Vijeća dolje navedene o usklađivanju zakona država članica EU-a.

IT: Dichiarazione di conformità UE

Grundfos dichiara sotto la sua esclusiva responsabilità che i prodotti MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, ai quali si riferisce questa dichiarazione, sono conformi alle seguenti direttive del Consiglio riguardanti il riavvicinamento delle legislazioni degli Stati membri UE.

LV: ES atbilstības deklarācija

Sabiedrība Grundfos ar pilnu atbildību paziņo, ka produkti MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, uz kuru attiecas tālāk redzamā deklarācija, atbilst tālāk norādītajām Padomes direktīvām par ES dalībvalstu normatīvo aktu tuvināšanu.

PL: Deklaracja zgodności UE

My, Grundfos, oświadczamy z pełną odpowiedzialnością, że nasze produkty MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, których deklaracja niniejsza dotyczy, są zgodne z następującymi dyrektywami Rady w sprawie zbliżenia przepisów prawnych państw członkowskich.

RO: Declarația de conformitate UE

Noi Grundfos declarăm pe propria răspundere că produsele MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, la care se referă această declarație, sunt în conformitate cu Directivele de Consiliu specifice mai jos privind armonizarea legilor statelor membre UE.

RU: Декларация о соответствии нормам ЕС

Мы, компания Grundfos, со всей ответственностью заявляем, что изделия MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, к которым относится нижеприведённая декларация, соответствуют нижеприведённым Директивам Совета Евросоюза о тождественности законов стран-членов ЕС.

SI: Izjava o skladnosti EU

V Grundfosu s polno odgovornostjo izjavljamo, da je izdelek MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, na katerega se spodnja izjava nanaša, v skladu s spodnjimi direktivami Sveta o približevanju zakonodaje za izenačevanje pravnih predpisov držav članic EU.

TR: AB uygunluk bildirgesi

Grundfos olarak, aşağıdaki bildirim konusu olan MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132 ürünlerinin, AB Üye ülkelerinin direktiflerinin yakınlaştırılmasıyla ilgili durumun aşağıdaki Konsey Direktifleriyle uyumlu olduğunu ve bununla ilgili olarak tüm sorumluluğun bize ait olduğunu beyan ederiz.

BG: Декларация за съответствие на ЕС

Ние, фирма Grundfos, заявяваме с пълна отговорност, че продуктите MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, за които се отнася настоящата декларация, отговарят на следните директиви на Съвета за уеднавяване на правните разпоредби на държавите-членки на ЕС.

DE: EU-Konformitätserklärung

Wir, Grundfos, erklären in alleiniger Verantwortung, dass die Produkte MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, auf die sich diese Erklärung beziehen, mit den folgenden Richtlinien des Rates zur Angleichung der Rechtsvorschriften der EU-Mitgliedsstaaten übereinstimmen.

EE: EÜvastavusdeklaratsioon

Meie, Grundfos, kinnitame ja kanname ainuiskulist vastutust selle eest, et toode MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, mille kohta all olev deklaratsioon käib, on kooskõlas Nõukogu Direktiividega, mis on nimetatud all pool vastavalt vastuvõetud õigusaktidele ühtlustamise kohta EÜ liikmesriikides.

FI: EU-vaatimustenmukaisuusvakuutus

Grundfos vakuuttaa omalla vastuullaan, että tuotteet MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, joita tämä vakuutus koskee, ovat EU:n jäsenvaltioiden lainsäädännön lähentämiseen tähtävien Euroopan neuvoston direktiivien vaatimusten mukaisia seuraavasti.

GR: Δήλωση συμμόρφωσης ΕΕ

Εμείς, η Grundfos, δηλώνουμε με αποκλειστικά δική μας ευθύνη ότι τα προϊόντα MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, στα οποία αναφέρεται η παρακάτω δήλωση, συμμορφώνονται με τις παρακάτω Οδηγίες του Συμβουλίου περί προσέγγισης των νομοθεσιών των κρατών μελών της ΕΕ.

HU: EU megfelelőségi nyilatkozat

Mi, a Grundfos vállalat, teljes felelősséggel kijelentjük, hogy a(z) MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132 termékek, amelyre az alábbi nyilatkozat vonatkozik, megfelelnek az Európai Unió tagállamainak jogi irányelveit összehangoló tanács alábbi előírásainak.

LT: ES atitikties deklaracija

Mes, Grundfos, su visa atsakomybe pareiškiame, kad produktai MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, kuriems skirta ši deklaracija, atitinka žemiau nurodytas Tarybos Direktyvas dėl ES šalių narių įstatymų suderinimo.

NL: EU-conformiteitsverklaring

Wij, Grundfos, verklaren geheel onder eigen verantwoordelijkheid dat de producten MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, waarop de onderstaande verklaring betrekking heeft, in overeenstemming zijn met de onderstaande Richtlijnen van de Raad inzake de onderlinge aanpassing van de wetgeving van de EU-lidstaten.

PT: Declaração de conformidade UE

A Grundfos declara sob sua única responsabilidade que os produtos MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, aos quais diz respeito a declaração abaixo, estão em conformidade com as Directivas do Conselho sobre a aproximação das legislações dos Estados Membros da UE.

RS: Deklaracija o usklađenosti EU

Mi, kompanija Grundfos, izjavljujemo pod punom vlastitom odgovornošću da je proizvod MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, na koji se odnosi deklaracija ispod, u skladu sa dole prikazanim direktivama Saveta za usklađivanje zakona država članica EU.

SE: EU-försäkran om överensstämmelse

Vi, Grundfos, försäkrar under ansvar att produkterna MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, som omfattas av nedanstående försäkran, är i överensstämmelse med de rättsdirektiv om inbördes närmande till EU-medlemsstaternas lagstiftning som listas nedan.

SK: ES vyhlásenie o zhode

My, spoločnosť Grundfos, vyhlasujeme na svoju plnú zodpovednosť, že produkty MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132 na ktoré sa vyhlásenie uvedené nižšie vzťahuje, sú v súlade s ustanoveniami nižšie uvedených smerníc Rady pre zblíženie právnych predpisov členských štátov EÚ.

UA: Декларация відповідності директивам ЕУ

Ми, компанія Grundfos, під нашу одноосібну відповідальність заявляємо, що вироби MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, до яких відноситься нижченаведена декларація, відповідають директивам ЕУ, переліченим нижче, щодо тотожності законів країн-членів ЄС.

CN: 欧盟符合性声明

我们，格兰富，在我们的全权责任下声明，产品 MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132，即该合格证所指之产品，欧盟使其成员国法律趋于一致的以下理事会指令。

KO: EU

Grundfos MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132 EU

ID: Deklarasi kesesuaian Uni Eropa

Kami, Grundfos, menyatakan dengan tanggung jawab kami sendiri bahwa produk MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, yang berkaitan dengan pernyataan ini, sesuai dengan Petunjuk Dewan berikut ini serta sedapat mungkin sesuai dengan hukum negara-negara anggota Uni Eropa.

МК: Декларация за сообразност на ЕУ

Ние, Grundfos, изјавуваме под целосна одговорност дека производите MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, на кои се однесува долунаведената декларација, се во согласност со овие директиви на Советот за приближување на законите на земјите-членки на ЕУ.

NO: EUs samsvarsærklæring

Vi, Grundfos, erklærer under vårt eneansvar at produktene MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132 som denne erklæringen gjelder, er i samsvar med styrets direktiver om tilnærming av forordninger i EU-landene.

TH: คำประกาศความสอดคล้องตามมาตรฐาน EU

เราในนามของบริษัท Grundfos ขอประกาศภายใต้ความรับผิดชอบของเราแต่เพียงผู้เดียวว่าผลิตภัณฑ์ MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132 ซึ่งเกี่ยวข้องกับคำประกาศนี้ มีความสอดคล้องกับระเบียบคำสั่งตามรายการด้านล่างนี้ของสภาวิชาชีพว่าด้วยค่าประมาณตามกฎหมายของรัฐที่เป็นสมาชิก EU

VI: Tuyen bố tuân thủ EU

Chúng tôi, Grundfos, tuyên bố trong phạm vi trách nhiệm duy nhất của mình rằng sản phẩm MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132 mà tuyên bố dưới đây có liên quan tuân thủ các Chỉ thị Hội đồng sau về việc áp dụng luật pháp của các nước thành viên EU.

JP: EU 適合宣言

Grundfos は、その責任の下に、MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132 製品が EU 加盟諸国の法規に関連する、以下の評議会指令に適合していることを宣言します。

BS: Izjava o usklađenosti EU

Mi, kompanija Grundfos, izjavljujemo pod vlastitom odgovornošću da je proizvod MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, na koji se odnosi izjava ispod, u skladu sa niže prikazanim direktivama Vijeća o usklađivanju zakona država članica EU.

KZ: Сәйкестік жөніндегі ЕО декларациясы

Біз, Grundfos, ЕО мүше елдерінің заңдарына жақын төменде көрсетілген Кеңес директиваларына сәйкес төмендегі декларацияға қатысты MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132 өнімдері біздің жеке жауапкершілігімізде екенін мәлімдейміз.

MY: Perisytiharan keakuran EU

Kami, Grundfos, mengisytiharkan di bawah tanggungjawab kami semata-mata bahawa produk MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, yang berkaitan dengan perisytiharan di bawah, akur dengan Perintah Majlis yang disenaraikan di bawah ini tentang penghampiran undang-undang negara ahli EU.

AR: إقرار مطابقة

نقرر نحن، جرونڨفوس، بمقتضى مسؤوليتنا الفردية بأن المنتجين MGE 71، MGE 80، MGE 90، MGE 100، MGE 112، MGE 132، اللذين يختص بهما لتقرير الإقرار أدناه، يكونان مطابقين لتوجيهات المجلس المذكورة أدناه بشأن بين قوانين الدول أعضاء المجموعة الأوروبية/الاتحاد الأوروبي (EU).

TW: EU 合格聲明

葛蘭富根據我們唯一的責任，茲聲明與以下聲明相關之 MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132 產品，符合下列近似 EU 會員國法律之議會指令。

AL: Deklara e konformitetit të BE

Ne, Grundfos, deklarojmë vetëm nën përgjegjësinë tonë se produktet MGE 71, MGE 80, MGE 90, MGE 100, MGE 112, MGE 132, me të cilat lidhet kjo deklaratë, janë në pajtueshmëri me direktivat e Këshillit të renditura më poshtë për përafrimin e ligjeve të shteteve anëtare të BE-së.

- Low Voltage Directive (2014/35/EU).
Standards used:
EN 61800-5-1:2007
- EMC Directive (2014/30/EU).
Standards used:
EN 61800-3:2004+A1:2012

These motors must not be put into service until the machinery into which they are to be incorporated has been declared in conformity with the provisions of the Directive 2006/95.
This EU declaration of conformity is only valid when published as part of the Grundfos safety instructions (publication number 96024246 0516).

Bjerringbro, 17/3/2016



Zoltán Lajtos
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Person authorised to compile the technical file and empowered to sign the EU declaration of conformity.

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