

MTH

Installation and operating instructions



English (GB) Installation and operating instructions

Original installation and operating instructions

These installation and operating instructions describe Grundfos MTH.

Sections 1-3 give the information necessary to be able to unpack, install and start up the product in a safe way.

Sections 4-8 give important information about the product, as well as information on service, fault finding and disposal of the product.

CONTENTS

	Page
1. General information	2
1.1 Hazard statements	2
1.2 Notes	3
2. Installing the product	3
2.1 Mechanical installation	3
2.2 Tank mounting	3
2.3 Inlet conditions	5
2.4 Electrical connection	5
3. Starting up the product	7
3.1 Operating the product	7
4. Product introduction	7
4.1 Applications	7
4.2 Identification	7
5. Servicing the product	8
5.1 Contaminated products	9
5.2 Maintaining the product	9
5.3 Filters	9
5.4 Periodic checks	9
6. Fault finding the product	10
7. Technical data	11
7.1 Operating conditions	11
7.2 Sound pressure level	11
8. Disposing of the product	11

1. General information

1.1 Hazard statements

The symbols and hazard statements below may appear in Grundfos installation and operating instructions, safety instructions and service instructions.

DANGER



Indicates a hazardous situation which, if not avoided, will result in death or serious personal injury.

WARNING



Indicates a hazardous situation which, if not avoided, could result in death or serious personal injury.

CAUTION



Indicates a hazardous situation which, if not avoided, could result in minor or moderate personal injury.

The hazard statements are structured in the following way:

SIGNAL WORD



Description of hazard

Consequence of ignoring the warning.
- Action to avoid the hazard.



Read this document before installing the product. Installation and operation must comply with local regulations and accepted codes of good practice.

1.2 Notes

The symbols and notes below may appear in Grundfos installation and operating instructions, safety instructions and service instructions.



Observe these instructions for explosion-proof products.



A blue or grey circle with a white graphical symbol indicates that an action must be taken.



A red or grey circle with a diagonal bar, possibly with a black graphical symbol, indicates that an action must not be taken or must be stopped.



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



Tips and advice that make the work easier.

2. Installing the product

2.1 Mechanical installation

2.2 Tank mounting



CAUTION

Hot or cold surface

- Minor or moderate personal injury
- Make sure that no one can accidentally come into contact with hot or cold surfaces.



The pump is designed for tank mounting in vertical position. The pump is positioned in a hole cut into the cover of the tank (upper side) and is secured to the tank by four hexagon head screws through the holes in the mounting flange. We recommend that you fit a sealing gasket between the pump flange and tank.



MTH pumps must only be mounted vertically.

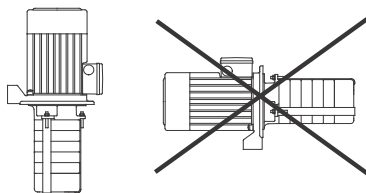


Fig. 1 Pump mounting position

2.2.1 Filtration requirements

A filtration system must be installed in the tank system to avoid that impurities in the liquid block the pump.

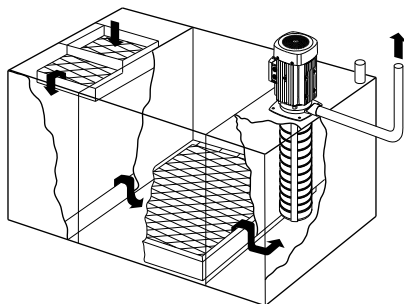


Fig. 2 Example of a filtration system

TM07 0452 5117

TM07 0521 0118

2.2.2 Bypass pipe



To reduce the risk of water hammer damaging the pump, we recommend that you install a bypass line.

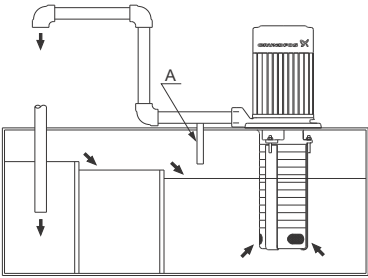


Fig. 3 Example of a bypass pipe (A)

2.2.3 Installation dimensions

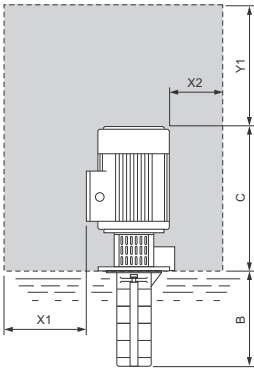


Fig. 4 Installation dimensions

Measurement	Dimension
B	Depending on pump type.
C	Depending on motor type.
X1	200 mm
X2	150 mm
Y1	This measurement must be at least 30 mm longer than measurement B to allow sufficient space for removing the pump in case of service and maintenance.

Pump mounting flange dimensions

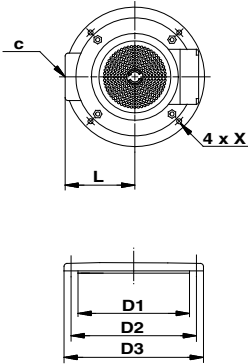


Fig. 5 Dimensional sketch

Pump type	D1	D2	D3	L	C	X
MTH 2, 4 and 8	140	160	180	121	Rp 3/4	Ø7.5
MTH 10 and 15	180	210	250	132	Rp/G 1 1/4	Ø9

2.3 Inlet conditions

The bottom of the pump strainer must be at least 25 mm above the bottom of the tank. See fig. 6 or 7.

MTH pumps must be installed vertically, and the drain hole in the motor stool must have access to the tank.

The pumps are designed to provide full performance down to a level of A mm above the bottom of the strainer.

At a liquid level between A and B mm above the bottom of the strainer, the built-in priming screw will protect the pump against dry running.

Pump type	A [mm]	B [mm]
MTH 2, 4 and 8	37	25
MTH 10 and 15	40	28

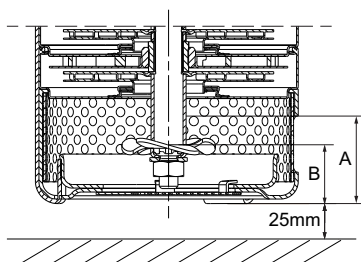


Fig. 6 MTH 2, 4 and 8

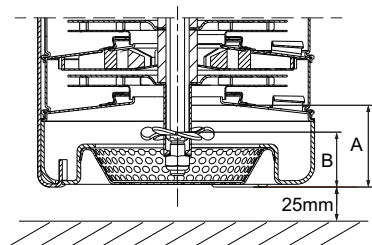


Fig. 7 MTH 10 and 15

2.4 Electrical connection

WARNING

Electric shock

Death or serious personal injury

- Before starting any work on the product, make sure that the power supply has been switched off and that it cannot be accidentally switched on. Connect the pump to an external main switch close to the pump and to a motor-protective circuit breaker or a CUE frequency converter.

- Make sure you can lock the main switch in OFF position (isolated). Type and requirements as specified in EN 60204-1, 5.3.2.



Operating voltage and operating frequency are stated on the motor nameplate. Check that the motor is suitable for the power supply available at the installation site.

The voltage quality for MG motors, measured at the motor terminals, must be $\pm 10\%$ of the rated voltage during continuous operation (including variation in the supply voltage and losses in cables).

The electrical installation must be carried out by authorised persons in accordance with local regulations.

The wiring diagram is located in the terminal box cover.

The terminal box of single-speed motors normally contains six winding terminals and at least one earth terminal.

Single-phase motor

Connect single-phase motors to the mains in accordance with the instructions located in the terminal box cover.

Three-phase motor

Three-phase motors can be connected in star (Y) or delta (D) according to IEC 60034-8. See the wiring diagram in the terminal box cover.

Voltage and connection are stated on the nameplate.

Example: 220-240 V D / 380-415 V Y

- If the voltage supply is 220-240 V, the motor must be connected in delta.
- If the voltage supply is 380-415 V, the motor must be connected in star.

TM07 0291 4717

TM07 0290 4717

2.4.1 Torque for terminal box cover screws

Torque: 1.6 - 2 Nm.

2.4.2 Motor protection

Single-phase motors

Single-phase motors are supplied with built-in thermal protection, according to IEC 60034-11, against thermal overload with both rapid and slow variation.

Three-phase motors

Three-phase motors must be protected by a motor-protective circuit breaker according to local regulations.

MG motors of 3.0 kW or up are supplied with thermal switches (PTC) as standard and are protected against thermal overload with both rapid and slow variation. The motor protection is stated on the nameplate.

2.4.3 Terminal box positions

The terminal box can be turned to three positions, in 90° steps, see fig. 8.

Proceed as follows:

1. Remove the four bolts securing the motor to the motor stool.
2. Turn the motor to the required position.
3. Replace and tighten the four bolts.

The electric motor must be connected to the supply as shown in the diagram inside the terminal box cover.

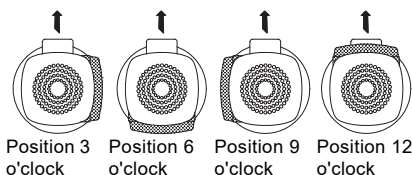


Fig. 8 Terminal box positions, top view

TM02 7777 2513

2.4.4 Plug connections

The pumps can be fitted with a 10-pin multiplug connection, type Han® 10 ES.

The purpose of a multiplug connection is to make the electrical installation and the service of the pump easier.

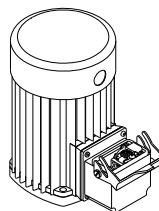


Fig. 9 Multiplug connection on a Grundfos motor

TM05 8900 2813

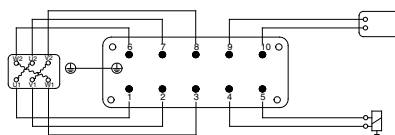


Fig. 10 Connections between motor terminals and plug terminals

TM01 8702 0700

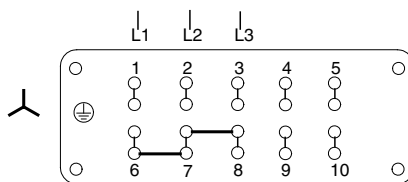


Fig. 11 Plug connections for star connection

TM01 8703 0700

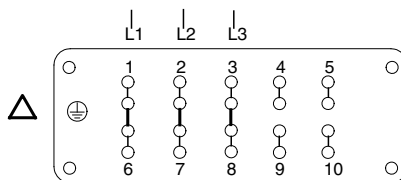


Fig. 12 Plug connections for delta connection, fishplates for connections are located in the plug

TM01 8704 0700

2.4.5 Frequency converter operation

Motors supplied by Grundfos

All three-phase motors supplied by Grundfos can be connected to a frequency converter.

Depending on the frequency converter type, this may cause increased acoustic noise from the motor. Furthermore, it may cause the motor to be exposed to detrimental voltage peaks.



Grundfos motors, types MG 71 and MG 80 as well as MG 90 (1.5 kW, 2-pole), for supply voltages up to and including 440 V (see motor nameplate), must be protected against voltage peaks higher than 650 V (peak value) between the supply terminals.

We recommend to protect all other motors against voltage peaks higher than 850 V.

The above disturbances, that is both increased acoustic noise and detrimental voltage peaks, can be eliminated by fitting an LC filter between the frequency converter and the motor.

For further information, please contact the frequency converter supplier or Grundfos.

3. Starting up the product

Before starting the pump, make sure:

- that all pipe connections are tight
- that the pump body is partly filled with liquid (partly submerged)
- that the strainer is not blocked by impurities.

Start the pump as follows:

1. Close the isolating valve on the outlet side of the pump.
2. See the correct direction of rotation of the pump on the motor fan cover. When seen from the top, the pump must rotate counterclockwise.
3. Start the pump and check the direction of rotation.
4. Slowly open the outlet valve until it is completely open.

The pump has now been vented and is ready for operation.

3.1 Operating the product

CAUTION



Fire and explosion

- Minor or moderate personal injury
- Do not use the pump for flammable, combustible or explosive liquids.

CAUTION



Hot liquid

- Minor or moderate personal injury
- Do not run the pump against a closed valve for more than approximately 5 minutes.



The pump is not allowed to run against a closed outlet valve for more than approximately 5 minutes as this will cause an increase in temperature and formation of steam in the pump which may cause damage to the pump.

4. Product introduction

4.1 Applications

Grundfos pumps, type MTH, are multistage centrifugal pumps designed for pumping liquids for machine tools, condensate transfer, liquid transfer in industrial washing machines and similar applications.

The pumps are designed for pumping liquids with a density and viscosity corresponding to those of water. The pumped liquid must not contain abrasive particles or fibres.

When pumping liquids with a density or viscosity higher than that of water, the motor size must be taken into consideration.

4.2 Identification

4.2.1 Type designation

The standard range consists of pumps with several impeller and chamber combinations. On request, other pump lengths can be supplied by fitting empty intermediate chambers in combination with standard impellers and chambers.

The type key on the pump nameplate indicates the number of chambers and impellers fitted to the pump.

4.2.2 Type key

Example	MTH 2 -6 /3 -A -W -A -A QQ V
Pump type	
Rated flow rate [m ³ /h]	
Number of chambers	
Number of impellers	
Pump version	
A Basic version	
C Inlet pipe	
X Special version	
Pipe connection	
W Internal thread	
WB NPT internal thread	
Materials	
A Basic version	
I Stainless steel pump head	
Shaft seal	
A O-ring seal with fixed seal driver	
B Bellows seal, rubber	
C O-ring seal with spring as seal driver	
R O-ring seal, type A, with reduced seal faces	
A Carbon, metal-impregnated	
B Carbon, resin-impregnated	
Q Silicon carbide	
U Tungsten carbide	
V Metal oxides, ceramic	
E EPDM	
V FKM	

5. Servicing the product

WARNING

Electric shock

Death or serious personal injury

- Before starting any work on the product, make sure that the power supply has been switched off and that it cannot be accidentally switched on.
- Connect the pump to an external main switch close to the pump and to a motor-protective circuit breaker or a CUE frequency converter.
- Make sure you can lock the main switch in OFF position (isolated). Type and requirements as specified in EN 60204-1, 5.3.2.



CAUTION

Toxic liquids

Death or serious personal injury

- Wear personal protective equipment.



CAUTION

Hot or cold liquid

Minor or moderate personal injury

- Wear personal protective equipment.



CAUTION

Hot or cold surface

Minor or moderate personal injury

- Make sure that no one can accidentally come into contact with hot or cold surfaces.



5.1 Contaminated products

The product will be classified as contaminated if it has been used for a liquid which is injurious to health or toxic.

If you request Grundfos to service the product, contact Grundfos with details about the liquid before returning the product for service. Otherwise, Grundfos can refuse to accept the product for service.

Any application for service must include details about the liquid.

Clean the product in the best possible way before you return it.

5.2 Maintaining the product

Pumps installed in accordance with these instructions require very little maintenance.

Shaft seal

The mechanical shaft seal is self-adjusting and has wear-resistant seal rings which are lubricated and cooled by the pumped liquid.

Pump bearings

The pump bearings are also lubricated by the pumped liquid.

Motor bearings

The motor ball bearings are grease packed and sealed for life. No further lubrication is necessary.

Pumps from 4 kW and up have angular contact bearings.

5.3 Filters

Chip trays, filters, etc. must be cleaned at regular intervals to ensure a correct flow of liquid.

5.4 Periodic checks

At regular intervals, depending on the conditions and time of operation, the following checks must be made:

- Check the quantity of liquid and operating pressure.
- Check that there are no leaks.
- Check that the motor is not overheating.
- Check the tripping of the motor-protective circuit breaker.
- Check that all controls are operating satisfactorily.

If the above checks do not reveal any abnormal operating details, no further checks are necessary.

Should any faults be found, check the symptoms in section [6. Fault finding the product](#).

6. Fault finding the product

WARNING

Electric shock

- Death or serious personal injury
- Before starting any work on the product, make sure that the power supply has been switched off and that it cannot be accidentally switched on.
 - Connect the pump to an external main switch close to the pump and to a motor-protective circuit breaker or a CUE frequency converter.
 - Make sure you can lock the main switch in OFF position (isolated). Type and requirements as specified in EN 60204-1, 5.3.2.



CAUTION

Toxic liquids

- Death or serious personal injury
- Wear personal protective equipment.



CAUTION

Hot or cold liquid

- Minor or moderate personal injury
- Wear personal protective equipment.



CAUTION

Hot or cold surface

- Minor or moderate personal injury
- Make sure that no one can accidentally come into contact with hot or cold surfaces.



Fault	Cause	Remedy
1. The motor does not run when started.	a) Supply failure.	Connect the electricity supply.
	b) The fuses are blown.	Replace fuses.
	c) The motor-protective circuit breaker overload has tripped.	Reactivate the motor-protective circuit breaker.
	d) The main contacts in the motor-protective circuit breaker are not making contact or the coil is faulty.	Replace contacts or magnetic coil.
	e) The control circuit is defective.	Repair the control circuit.
	f) The motor is defective.	Replace the pump.
2. The motor-protective circuit breaker overload trips immediately when the supply is switched on.	a) One fuse is blown or the motor-protective circuit breaker has tripped.	Replace the fuse or reactivate the motor-protective circuit breaker.
	b) The contacts in the motor-protective circuit breaker overload are faulty.	Replace the motor-protective circuit breaker contacts.
	c) The cable connection is loose or faulty.	Fasten or replace the cable connection.
	d) The motor winding is defective.	Replace the pump.
	e) The pump is mechanically blocked.	Remove the mechanical blocking of the pump.
	f) The overload setting of the motor-protective circuit breaker is too low.	Set the motor-protective circuit breaker correctly.
3. The motor-protective circuit breaker overload trips occasionally.	a) The overload setting of the motor-protective circuit breaker is too low.	Set the motor-protective circuit breaker correctly.
	b) The voltage is low at peak times.	Check the electricity supply.
4. The motor-protective circuit breaker has not tripped but the pump does not run.	a) Check 1 a), b), d) and e).	

Fault	Cause	Remedy
5. The pump runs but gives no liquid or the pump capacity is not constant.	a) The pump strainer is partly blocked by impurities.	Clean the strainer.
	b) The liquid level in the tank is too low.	Increase the liquid level.
	c) The pump rotates in the wrong direction.	Change the direction of rotation of the motor.

7. Technical data

7.1 Operating conditions

Pump type	MTH
Minimum liquid temperature [°C]	-10
Maximum liquid temperature [°C]	+90
Maximum ambient temperature [°C]	+40
Maximum operating pressure [bar]	10
Enclosure class	IP54

7.1.1 Minimum flow rate

Pump type	Minimum flow rate [l/min]	
	At a liquid temperature of 80 °C	At a liquid temperature between 80 and 90 °C
MTH 2 and 4	3	8
MTH 8	13	33
MTH 10 and 15	20	50

7.1.2 Maximum number of starts

Maximum number of starts per hour: 100.

7.2 Sound pressure level

The sound pressure level of the pumps is lower than 70 dB(A).

8. Disposing of the product

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.



The crossed-out wheellie bin symbol on a product means that it must be disposed of separately from household waste. When a product marked with this symbol reaches its end of life, take it to a collection point designated by the local waste disposal authorities. The separate collection and recycling of such products will help protect the environment and human health.

See also end-of-life information at www.grundfos.com/product-recycling.

Declaration of conformity

GB: EC/EU declaration of conformity

We, Grundfos, declare under our sole responsibility that the product MTH, to which the declaration below relates, is in conformity with the Council Directives listed below on the approximation of the laws of the EC/EU member states.

DE: EG-/EU-Konformitätserklärung

Wir, Grundfos, erklären in alleiniger Verantwortung, dass das Produkt MTH, auf das sich diese Erklärung bezieht, mit den folgenden Richtlinien des Rates zur Angleichung der Rechtsvorschriften der EG-/EU-Mitgliedsstaaten übereinstimmt.

ES: Declaración de conformidad de la CE/UE

Grundfos declara, bajo su exclusiva responsabilidad, que el producto MTH al que hace referencia la siguiente declaración cumple lo establecido por las siguientes Directivas del Consejo sobre la aproximación de las legislaciones de los Estados miembros de la CE/UE.

FR: Déclaration de conformité CE/UE

Nous, Grundfos, déclarons sous notre seule responsabilité, que le produit MTH, auquel se réfère cette déclaration, est conforme aux Directives du Conseil concernant le rapprochement des législations des États membres CE/UE relatives aux normes énoncées ci-dessous.

HU: EC/EU megfelelősségi nyilatkozat

Mi, a Grundfos vállalat, teljes felelősséggel kijelentjük, hogy a(z) MTH termék, amelyre az alábbi nyilatkozat vonatkozik, megfelel az Európai Unió tagállamainak jogi irányelveit összehangoló tanács alábbi előírásainak.

LV: EK/ES atbilstības deklarācija

Sabiedrība Grundfos ar pilnu atbildību paziņo, ka produkts MTH, uz kuru attiecas tālāk redzamā deklarācija, atbilst tālāk norādītajām Padomes direktīvām par EK/ES dalībvalstu normatīvo aktu tuvināšanu.

PL: Deklaracja zgodności WE/UE

My, Grundfos, oświadczamy z pełną odpowiedzialnością, że nasz produkt MTH, którego deklaracja niniejsza dotyczy, jest zgodny z następującymi dyrektywami Rady w sprawie zbliżenia przepisów prawnych państw członkowskich.

RO: Declarația de conformitate CE/UE

Noi Grundfos declarăm pe propria răspundere că produsul MTH, la care se referă această declarație, este în conformitate cu Directivele de Consiliu specificate mai jos privind armonizarea legilor statelor membre CE/UE.

SE: EG-/EU-försäkran om överensstämmelse

Vi, Grundfos, försäkrar under ansvar att produkten MTH, som omfattas av nedanstående försäkran, är i överensstämmelse med de rådordirektiv om inbördes närmande till EG-/EU-medlemsstaternas lagstiftning som listas nedan.

CZ: Prohlášení o shodě EU

My firma Grundfos prohlašujeme na svou plnou odpovědnost, že výrobek MTH, na který se toto prohlášení vztahuje, je v souladu s níže uvedenými ustanoveními směrnice Rady pro sbližení právních předpisů členských států Evropského společenství.

DK: EF-/EU-overensstemmelseserklæring

Vi, Grundfos, erklærer under ansvar at produktet MTH som erklæringen nedenfor omhandler, er i overensstemmelse med Rådets direktiver der er nævnt nedenfor, om indbyrdes tilnærmelse til EF-/EU-medlemsstaternes lovgivning.

FI: EY-/EU-vaatimustenmukaisuusvakuutus

Grundfos vakuuttaa omalla vastuullaan, että tuote MTH, jota tämä vakuutus koskee, on EY-/EU:n jäsenvaltioiden lainsäädännön lähentämiseen tähtäävien Euroopan neuvoston direktiivien vaatimusten mukainen seuraavasti.

GR: Δήλωση συμμόρφωσης ΕΚ/ΕΕ

Εμείς, η Grundfos, δηλώνουμε με αποκλειστικά δική μας ευθύνη ότι το προϊόν MTH, στο οποίο αναφέρεται η παρακάτω δήλωση, συμμορφώνεται με τις παρακάτω Οδηγίες του Συμβουλίου περί προσέγγισης των νομοθεσιών των κρατών μελών της ΕΚ/ΕΕ.

IT: Dichiarazione di conformità CE/UE

Grundfos dichiara sotto la sua esclusiva responsabilità che il prodotto MTH, al quale si riferisce questa dichiarazione, è conforme alle seguenti direttive del Consiglio riguardanti il riavvicinamento delle legislazioni degli Stati membri CE/UE.

NL: EG-/EU-conformiteitsverklaring

Wij, Grundfos, verklaren geheel onder eigen verantwoordelijkheid dat product MTH, waarop de onderstaande verklaring betrekking heeft, in overeenstemming is met de onderstaande Richtlijnen van de Raad inzake de onderlinge aanpassing van de wetgeving van de EG-/EU-lidstaten.

PT: Declaração de conformidade CE/UE

A Grundfos declara sob sua única responsabilidade que o produto MTH, ao qual diz respeito a declaração abaixo, está em conformidade com as Directivas do Conselho sobre a aproximação das legislações dos Estados Membros da CE/UE.

RU: Декларация о соответствии нормам ЕЭС/ЕС

Мы, компания Grundfos, со всей ответственностью заявляем, что изделие MTH, к которому относится нижеприведенная декларация, соответствует нижеприведенным Директивам Совета Евросоюза о тождественности законов стран-членов ЕЭС/ЕС.

SK: EC/EU vyhlásenie o zhode

My, spoločnosť Grundfos, vyhlasujeme na svoju plnú zodpovednosť, že produkt MTH, na ktorý sa vyhlásenie uvedené nižšie vzťahuje, je v súlade s ustanoveniami nižšie uvedených smerníc Rady pre zblíženie právnych predpisov členských štátov EC/EU.

- Machinery Directive (2006/42/EC).
Standard used: EN 809:1998, A1:2009.
- Ecodesign Directive (2009/125/EC).
Electric motors:
Commission Regulation No 640/2009.
Applies only to three-phase Grundfos motors marked IE2 or IE3.
See motor nameplate.
Standard used: EN 60034-30:2009.
Water pumps:
Commission Regulation No 547/2012.
Applies only to water pumps marked with the minimum efficiency index MEI. See pump nameplate.
- RoHS Directives: (2011/65/EU and 2015/863/EU)
Standard used: EN IEC 63000:2018

This EC/EU declaration of conformity is only valid when published as part of the Grundfos installation and operating instructions (96440790).

Bjerringbro, 5th of January 2021



Erik Andersen
Senior Manager
GRUNDFOS Holding A/S
Poul Due Jensens Vej 7
8850 Bjerringbro, Denmark

Manufacturer and person empowered to sign the EC/EU declaration of conformity

Declaration of conformity

UK declaration of conformity

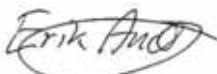
We, Grundfos, declare under our sole responsibility that the products **MTH** and **MTC**, to which this declaration relates, are in conformity with UK regulations, standards and specifications to which conformity is declared, as listed below:

- Supply of Machinery (Safety) Regulations 2008
Standard used: EN 809:1998, A1:2009.
- The Ecodesign for Energy-Related Products and Energy Information Regulations 2019
Electric motors:
Regulation (EC) No 640/2009 and Regulation (EU) No 4/2014
Applies only to three-phase Grundfos motors marked IE2 or IE3.
See motor nameplate.
Standard used: EN 60034-30-1:2009.
Water pumps:
Regulation (EU) No 547/2012
Applies only to water pumps marked with the minimum efficiency index MEI. See pump nameplate.
- The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2019
Standard used: EN IEC 63000:2018

This UK declaration of conformity is only valid when published as part of the Grundfos installation and operating instructions.

UK Importer: Grundfos Pumps Ltd. Grovebury Road, Leighton Buzzard, LU7 4TL.

Bjerringbro, January 1, 2021



Erik Andersen
Senior Manager
Grundfos Holding A/S
Poul Due Jensens Vej 7
8850 Bjerringbro, Denmark

Manufacturer and person empowered to sign the UK declaration of conformity.

10000335760

RUS

МТН

Руководство по эксплуатации



Руководство по эксплуатации на данное изделие является составным и включает в себя несколько частей:

Часть 1: настоящее «Руководство по эксплуатации».

Часть 2: электронная часть «Паспорт. Руководство по монтажу и эксплуатации» размещенная на сайте компании Грундфос. Перейдите по ссылке, указанной в конце документа.

Часть 3: информация о сроке изготовления, размещенная на фирменной табличке изделия.

Сведения о сертификации:

Насосы типа МТН сертифицированы на соответствие требованиям Технических регламентов Таможенного союза: ТР ТС 004/2011 «О безопасности низковольтного оборудования»; ТР ТС 010/2011 «О безопасности машин и оборудования»; ТР ТС 020/2011 «Электромагнитная совместимость технических средств».

KAZ

МТН

Пайдалану бойынша нұсқаулық

Атаулы өнімге арналған пайдалану бойынша нұсқаулық құрамалы болып келеді және келесі бөлімдерден тұрады:

1 бөлім: атаулы «Пайдалану бойынша нұсқаулық»

2 бөлім: Грундфос компаниясының сайтында орналасқан электронды бөлім «Төлқұжат, Құрастыру және пайдалану бойынша нұсқаулық». Құжат соңында көрсетілген сілтеме арқылы өтіңіз.

3 бөлім: өнімнің фирмалық тақташасында орналасқан шығарылған уақыты жөніндегі мәлімет

Сертификаттау туралы ақпарат:

МТН типті сорғылары «Төмен вольтты жабдықтардың қауіпсіздігі туралы» (ТР ТС 004/2011), «Машиналар және жабдықтар қауіпсіздігі туралы» (ТР ТС 010/2011) «Техникалық заттардың электрлі магниттік сәйкестілігі» (ТР ТС 020/2011) Кеден Одағының техникалық регламенттерінің талаптарына сәйкес сертифицираталды.

KG

МТН

Пайдалануу боюнча колдонмо

Аталган жабдууну пайдалануу боюнча колдонмо курамдык жана өзүнө бир нече бөлүкчөнү камтыйт:

1-Бөлүк: «Пайдалануу боюнча колдонмо»

2-Бөлүк: «Паспорт. Пайдалануу жана монтаж боюнча колдонмо» электрондук бөлүгү Грундфос компаниянын сайтында жайгашкан. Документтин аягында көрсөтүлгөн шилтемеге кайрылыңыз.

3-Бөлүк: жабдуунун фирмалык тактасында жайгашкан даярдоо мөөнөтү тууралуу маалымат.

Шайкештик жөнүндө декларация

МТН түрүндөгү соргучтар Бажы Биримдиктин Техникалык регламенттин талаптарына ылайыктуу тастыкталган:

ТР ТБ 004/2011 «Төмөн вольттук жабдуунун коопсуздугу жөнүндө»; ТР ТБ 010/2011 «Жабдуу жана машиналардын коопсуздугу жөнүндө»; ТР ТБ 020/2011 «Техникалык каражаттардын электрмагниттик шайкештиги».

ARM

MTH

Շահագործման ձեռնարկ

Տվյալ սարքավորման շահագործման ձեռնարկը բաղկացած է մի քանի մասերից.

Մաս 1. սույն «Շահագործման ձեռնարկ»:

Մաս 2. էլեկտրոնային մաս. այն է՝ «Անձնագիր: Մոնտաժման և

շահագործման ձեռնարկ» տեղադրված «Գրունդֆոս». Անցեք փաստաթղթի վերջում նշված հղումով.

Մաս 3. տեղեկություն արտադրման ամսաթվի վերաբերյալ՝ նշված սարքավորման պիտակի վրա:

Տեղեկություններ հավաստագրման մասին՝

MTH տիպի պոմպերը սերտիֆիկացված են համաձայն Մաքսային Միության տեխնիկական կանոնակարգի պահանջների՝ TP TC 004/2011 «Ցածրավոլտ սարքավորումների վերաբերյալ», TP TC 010/2011 «Մեքենաների և սարքավորումների անվտանգության վերաբերյալ» ; TP TC 020/2011 «Տեխնիկական միջոցների էլեկտրամագնիսական համատեղելիության վերաբերյալ»:



<http://net.grundfos.com/gr/i/99310686>

10000142884	0717
ECM: 1213061	

Argentina

Bombas GRUNDFOS de Argentina S.A.
Ruta Panamericana km. 37.500 Centro
Industrial Garin
1619 Garin Pcia. de B.A.
Phone: +54-3327 414 444
Telefax: +54-3327 45 3190

Australia

GRUNDFOS Pumps Pty. Ltd.
P.O. Box 2040
Regency Park
South Australia 5942
Phone: +61-8-8461-4611
Telefax: +61-8-8340 0155

Austria

GRUNDFOS Pumpen Vertrieb
Ges.m.b.H.
Grundfosstraße 2
A-5082 Grödig/Salzburg
Tel.: +43-6246-883-0
Telefax: +43-6246-883-30

Belgium

N.V. GRUNDFOS Bellux S.A.
Boomsesteenweg 81-83
B-2630 Aartselaar
Tel.: +32-3-870 7300
Télécopie: +32-3-870 7301

Belarus

Представительство ГРУНДФОС в
Минске
220125, Минск
ул. Шафарнянская, 11, оф. 56, БЦ
«Порт»
Тел.: +375 17 397 397 3
+375 17 397 397 4
Факс: +375 17 397 397 1
E-mail: minsk@grundfos.com

Bosnia and Herzegovina

GRUNDFOS Sarajevo
Zmaja od Bosne 7-7A,
BH-71000 Sarajevo
Phone: +387 33 592 480
Telefax: +387 33 590 465
www.ba.grundfos.com
e-mail: grundfos@bih.net.ba

Brazil

BOMBAS GRUNDFOS DO BRASIL
Av. Humberto de Alencar Castelo
Branco, 630
CEP 09850 - 300
São Bernardo do Campo - SP
Phone: +55-11 4393 5533
Telefax: +55-11 4343 5015

Bulgaria

Grundfos Bulgaria EOOD
Slatina District
Iztocna Tangenta street no. 100
BG - 1592 Sofia
Tel. +359 2 49 22 200
Fax. +359 2 49 22 201
email: bulgaria@grundfos.bg

Canada

GRUNDFOS Canada Inc.
2941 Brighton Road
Oakville, Ontario
L6H 6C9
Phone: +1-905 829 9533
Telefax: +1-905 829 9512

China

GRUNDFOS Pumps (Shanghai) Co. Ltd.
10F The Hub, No. 33 Suhong Road
Minhang District
Shanghai 201106
PRC
Phone: +86 21 612 252 22
Telefax: +86 21 612 253 33

COLOMBIA

GRUNDFOS Colombia S.A.S.
Km 1.5 vía Siberia-Cota Conj. Potrero
Chico,
Parque Empresarial Arcos de Cota Bod.
1A.
Cota, Cundinamarca
Phone: +57(1)-2913444
Telefax: +57(1)-8764586

Croatia

GRUNDFOS CROATIA d.o.o.
Buzinski prilaz 38, Buzin
HR-10010 Zagreb
Phone: +385 1 6595 400
Telefax: +385 1 6595 499
www.hr.grundfos.com

GRUNDFOS Sales Czechia and Slovakia s.r.o.

Čajkovského 21
779 00 Olomouc
Phone: +420-585-716 111

Denmark

GRUNDFOS DK A/S
Martin Bachs Vej 3
DK-8850 Bjerringbro
Tlf.: +45-87 50 50 50
Telefax: +45-87 50 51 51
E-mail: info_GDK@grundfos.com
www.grundfos.com/DK

Estonia

GRUNDFOS Pumps Eesti OÜ
Peterburi tee 92G
11415 Tallinn
Tel: + 372 606 1690
Fax: + 372 606 1691

Finland

OY GRUNDFOS Pumput AB
Trukkikuja 1
FI-01360 Vantaa
Phone: +358-(0) 207 889 500

France

Pompes GRUNDFOS Distribution S.A.
Parc d'Activités de Chesnes
57, rue de Malacombe
F-38290 St. Quentin Fallavier (Lyon)
Tél.: +33-4 74 82 15 15
Télécopie: +33-4 74 94 10 51

Germany

GRUNDFOS GMBH
Schlüterstr. 33
40699 Erkrath
Tel.: +49-(0) 211 929 69-0
Telefax: +49-(0) 211 929 69-3799
e-mail: infoservice@grundfos.de
Service in Deutschland:
e-mail: kundendienst@grundfos.de

Greece

GRUNDFOS Hellas A.E.B.E.
20th km. Athinon-Markopoulou Av.
P.O. Box 71
GR-19002 Peania
Phone: +0030-210-66 83 400
Telefax: +0030-210-66 46 273

Hong Kong

GRUNDFOS Pumps (Hong Kong) Ltd.
Unit 1, Ground floor
Siu Wai Industrial Centre
29-33 Wing Hong Street &
68 King Lam Street, Cheung Sha Wan
Kowloon
Phone: +852-27861706 / 27861741
Telefax: +852-27858664

Hungary

GRUNDFOS Hungária Kft.
Tópark u. 8
H-2045 Törökbálint,
Phone: +36-23 511 110
Telefax: +36-23 511 111

India

GRUNDFOS Pumps India Private
Limited
118 Old Mahabalipuram Road
Thoraipakkam
Chennai 600 096
Phone: +91-44 2496 6800

Indonesia

PT. GRUNDFOS POMPA
Graha Intirub Lt. 2 & 3
Jln. Cililitan Besar No.454. Makasar,
Jakarta Timur
ID-Jakarta 13650
Phone: +62 21-469-51900
Telefax: +62 21-460 6910 / 460 6901

Ireland

GRUNDFOS (Ireland) Ltd.
Unit A, Merrywell Business Park
Ballymount Road Lower
Dublin 12
Phone: +353-1-4089 800
Telefax: +353-1-4089 830

Italy

GRUNDFOS Pompe Italia S.r.l.
Via Gran Sasso 4
I-20060 Truccazzano (Milano)
Tel.: +39-02-95838112
Telefax: +39-02-95309290 / 95838461

Japan

GRUNDFOS Pumps K.K.
1-2-3, Shin-Miyakoda, Kita-ku,
Hamamatsu
431-2103 Japan
Phone: +81 53 428 4760
Telefax: +81 53 428 5005

Korea

GRUNDFOS Pumps Korea Ltd.
6th Floor, Aju Building 679-5
Yeoksam-dong, Kangnam-ku, 135-916
Seoul, Korea
Phone: +82-2-5317 600
Telefax: +82-2-5633 725

Latvia

SIA GRUNDFOS Pumps Latvia
Deglava biznesa centrs
Augusta Deglava ielā 60, LV-1035, Rīga,
Tālr.: + 371 714 9640, 7 149 641
Fakss: + 371 914 9646

Lithuania

GRUNDFOS Pumps UAB
Smolensko g. 6
LT-03201 Vilnius
Tel: + 370 52 395 430
Fax: + 370 52 395 431

Malaysia

GRUNDFOS Pumps Sdn. Bhd.
7 Jalan Peguam U1/25
Glenmarie Industrial Park
40150 Shah Alam
Selangor
Phone: +60-3-5569 2922
Telefax: +60-3-5569 2866

Mexico

Bombas GRUNDFOS de México S.A. de C.V.
Boulevard TLC No. 15
Parque Industrial Stiva Aeropuerto
Apodaca, N.L. 66600
Phone: +52-81-8144 4000
Telefax: +52-81-8144 4010

Netherlands

GRUNDFOS Netherlands
Veluwezoom 35
1326 AE Almere
Postbus 22015
1302 CA ALMERE
Tel.: +31-88-478 6336
Telefax: +31-88-478 6332
E-mail: info_gnl@grundfos.com

New Zealand

GRUNDFOS Pumps NZ Ltd.
17 Beatrice Tinsley Crescent
North Harbour Industrial Estate
Albany, Auckland
Phone: +64-9-415 3240
Telefax: +64-9-415 3250

Norway

GRUNDFOS Pumper A/S
Strømsveien 344
Postboks 235, Leirdal
N-1011 Oslo
Tlf.: +47-22 90 47 00
Telefax: +47-22 32 21 50

Poland

GRUNDFOS Pompy Sp. z o.o.
ul. Klonowa 23
Baranowo k. Poznania
PL-62-081 Przeźmierowo
Tel: (+48-61) 650 13 00
Fax: (+48-61) 650 13 50

Portugal

Bombas GRUNDFOS Portugal, S.A.
Rua Calvet de Magalhães, 241
Apartado 1079
P-2770-153 Paço de Arcos
Tel.: +351-21-440 76 00
Telefax: +351-21-440 76 90

Romania

Grundfos Pompe România SRL
S-PARK BUSINESS CENTER, Clădirea A2,
etaj 2, Str. Tipografilor, Nr. 11-15, Sector 1,
Cod 013714, Bucuresti, Romania,
Tel: 004 021 2004 100
E-mail: romania@grundfos.ro
www.grundfos.ro

Russia

ООО Грундфос Россия
ул. Школьная, 39-41
Москва, RU-109544, Russia
Тел. (+7) 495 564-88-00 (495) 737-30-00
Факс (+7) 495 564 8811
E-mail grundfos.moscow@grundfos.com

Serbia

Grundfos Srbija d.o.o.
Omladinskih brigada 90b
11070 Novi Beograd
Phone: +381 11 2258 740
Telefax: +381 11 2281 769
www.rs.grundfos.com

Singapore

GRUNDFOS (Singapore) Pte. Ltd.
25 Jalan Tukang
Singapore 619264
Phone: +65-6681 9688
Telefax: +65-6681 9689

Slovakia

GRUNDFOS s.r.o.
Prievozská 4D
821 09 BRATISLAVA
Phona: +421 2 5020 1426
sk.grundfos.com

Slovenia

GRUNDFOS LJUBLJANA, d.o.o.
Leskoškova 9e, 1122 Ljubljana
Phone: +386 (0) 1 568 06 10
Telefax: +386 (0) 1 568 06 19
E-mail: tehnika-si@grundfos.com

South Africa

Grundfos (PTY) Ltd.
16 Lascelles Drive, Meadowbrook Estate
1609 Germiston, Johannesburg
Tel.: (+27) 10 248 6000
Fax: (+27) 10 248 6002
E-mail: lgradidge@grundfos.com

Spain

Bombas GRUNDFOS España S.A.
Camino de la Fuentecilla, s/n
E-28110 Algete (Madrid)
Tel.: +34-91-848 8800
Telefax: +34-91-628 0465

Sweden

GRUNDFOS AB
Box 333 (Lunnagårdsgatan 6)
431 24 Mölndal
Tel.: +46 31 332 23 000
Telefax: +46 31 331 94 60

Switzerland

GRUNDFOS Pumpen AG
Bruggacherstrasse 10
CH-8117 Fällanden/ZH
Tel.: +41-44-806 8111
Telefax: +41-44-806 8115

Taiwan

GRUNDFOS Pumps (Taiwan) Ltd.
7 Floor, 219 Min-Chuan Road
Taichung, Taiwan, R.O.C.
Phone: +886-4-2305 0868
Telefax: +886-4-2305 0878

Thailand

GRUNDFOS (Thailand) Ltd.
92 Chaloe Phrakiat Rama 9 Road,
Dokmai, Pravej, Bangkok 10250
Phone: +66-2-725 8999
Telefax: +66-2-725 8998

Turkey

GRUNDFOS POMPA San. ve Tic. Ltd. Sti.
Gebze Organize Sanayi Bölgesi
İhsan dede Caddesi,
2. yol 200. Sokak No. 204
41490 Gebze/ Kocaeli
Phone: +90 - 262-679 7979
Telefax: +90 - 262-679 7905
E-mail: satis@grundfos.com

Ukraine

Бізнес Центр Європа
Столичне шосе, 103
м. Київ, 03131, Україна
Телефон: (+38 044) 237 04 00
Факс.: (+38 044) 237 04 01
E-mail: ukraine@grundfos.com

United Arab Emirates

GRUNDFOS Gulf Distribution
P.O. Box 16768
Jebel Ali Free Zone
Dubai
Phone: +971 4 8815 166
Telefax: +971 4 8815 136

United Kingdom

GRUNDFOS Pumps Ltd.
Grovebury Road
Leighton Buzzard/Beds. LU7 4TL
Phone: +44-1525-850000
Telefax: +44-1525-850011

U.S.A.

GRUNDFOS Pumps Corporation
9300 Loiret Blvd.
Lenexa, Kansas 66219
Phone: +1-913-227-3400
Telefax: +1-913-227-3500

Uzbekistan

Grundfos Tashkent, Uzbekistan The
Representative Office of Grundfos
Kazakhstan in Uzbekistan
38a, Oybek street, Tashkent
Телефон: (+998) 71 150 3290 / 71 150 3291
Факс: (+998) 71 150 3292

Addresses Revised 09.09.2020

96440790	03.2021
ECM: 1303523	

Trademarks displayed in this material, including but not limited to Grundfos, the Grundfos logo and "be think innovate" are registered trademarks owned by The Grundfos Group. All rights reserved.
© 2021 Grundfos Holding A/S, all rights reserved.