

CM Booster PM2

Installation and operating instructions
Supplement to Quick Guide



CM Booster PM2

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Declaration of Conformity

GB Declaration of Conformity

We, Grundfos, declare under our sole responsibility that the product CM Booster PM2, to which this declaration relates, is in conformity with these Council directives on the approximation of the laws of the EC member states:

- Machinery Directive (2006/42/EC).
Standards used: EN 809: 1998, EN 60204-1: 2006.
- Low Voltage Directive (2006/95/EC).
Standards used: EN 60335-1: 2002 and EN 60335-2-41: 2003.
- EMC Directive (2004/108/EC).
Standards used: EN 60730-1: 2000 and EN 60730-1, A16: 2007.

CZ Prohlášení o shodě

My firma Grundfos prohlašujeme na svou plnou odpovědnost, že výrobek CM Booster PM2, na nějž se toto prohlášení vztahuje, je v souladu s ustanoveními směrnice Rady pro sblížení právních předpisů členských států Evropského společenství v oblastech:

- Směrnice pro strojní zařízení (2006/42/ES).
Použité normy: EN 809: 1998, EN 60204-1: 2006.
- Směrnice pro nízkonapětové aplikace (2006/95/ES).
Použité normy: EN 60335-1: 2002 a EN 60335-2-41: 2003.
- Směrnice pro elektromagnetickou kompatibilitu (EMC) (2004/108/ES).
Použité normy: EN 60730-1: 2000 a EN 60730-1, A16: 2007.

DE Konformitätserklärung

Wir, Grundfos, erklären in alleiniger Verantwortung, dass das Produkt CM Booster PM2, auf das sich diese Erklärung bezieht, mit den folgenden Richtlinien des Rates zur Angleichung der Rechtsvorschriften der EU-Mitgliedsstaaten übereinstimmt:

- Maschinenrichtlinie (2006/42/EG).
Normen, die verwendet wurden: EN 809: 1998, EN 60204-1: 2006.
- Niederspannungsrichtlinie (2006/95/EG).
Normen, die verwendet wurden: EN 60335-1: 2002 und EN 60335-2-41: 2003.
- EMV-Richtlinie (2004/108/EG).
Normen, die verwendet wurden: EN 60730-1: 2000 und EN 60730-1, A16: 2007.

GR Δήλωση Συμμόρφωσης

Εμείς, η Grundfos, δηλώνουμε με αποκλειστικά δική μας ευθύνη ότι τα προϊόντα CM Booster PM2, στα οποία αναφέρεται η παρούσα δήλωση, συμμορφώνονται με τις εξής Οδηγίες του Συμβουλίου περί προσεγγίσης των νομοθεσιών των κρατών μελών της ΕΕ:

- Οδηγία για μηχανήματα (2006/42/ΕΚ).
Πρώτα που χρησιμοποιήθηκαν: EN 809: 1998, EN 60204-1: 2006.
- Οδηγία χαμηλής τάσης (2006/95/ΕΚ).
Πρώτα που χρησιμοποιήθηκαν: EN 60335-1: 2002 και EN 60335-2-41: 2003.
- Οδηγία Ηλεκτρομαγνητικής Συμβατότητας (EMC) (2004/108/ΕΚ).
Πρώτα που χρησιμοποιήθηκαν: EN 60730-1: 2000 και EN 60730-1, A16: 2007.

FR Déclaration de Conformité

Nous, Grundfos, déclarons sous notre seule responsabilité, que le produit CM Booster PM2, auquel se réfère cette déclaration, est conforme aux Directives du Conseil concernant le rapprochement des législations des Etats membres CE relatives aux normes énoncées ci-dessous :

- Directive Machines (2006/42/CE).
Normes utilisées : EN 809 : 1998, EN 60204-1 : 2006.
- Directive Basse Tension (2006/95/CE).
Normes utilisées : EN 60335-1 : 2002 et EN 60335-2-41 : 2003.
- Directive Compatibilité Electromagnétique CEM (2004/108/CE).
Normes utilisées : EN 60730-1 : 2000 et EN 60730-1, A16 : 2007.

IT Dichiarazione di Conformità

Grundfos dichiara sotto la sua esclusiva responsabilità che il prodotto CM Booster PM2, al quale si riferisce questa dichiarazione, è conforme alle seguenti direttive del Consiglio riguardanti il riavvicinamento delle legislazioni degli Stati membri CE:

- Direttiva Macchine (2006/42/CE).
Norme applicate: EN 809: 1998, EN 60204-1: 2006.
- Direttiva Bassa Tensione (2006/95/CE).
Norme applicate: EN 60335-1: 2002 e EN 60335-2-41: 2003.
- Direttiva EMC (2004/108/CE).
Norme applicate: EN 60730-1: 2000 e EN 60730-1, A16: 2007.

BG Декларация за съответствие

Ние, фирма Grundfos, заявяваме с пълна отговорност, че продукта CM Booster PM2, за който се отнася настоящата декларация, отговаря на следните указания на Съвета за уеднаквяване на правните разпоредби на държавите членки на ЕС:

- Директива за машините (2006/42/EC).
Приложени стандарти: EN 809: 1998, EN 60204-1: 2006.
- Директива за нисковолтови системи (2006/95/EC).
Приложени стандарти: EN 60335-1: 2002 и EN 60335-2-41: 2003.
- Директива за електромагнитна съвместимост (2004/108/EC).
Приложени стандарти: EN 60730-1: 2000 и EN 60730-1, A16: 2007.

DK Overensstemmelseserklæring

Vi, Grundfos, erklærer under ansvar at produktet CM Booster PM2 som denne erklæring omhandler, er i overensstemmelse med disse af Rådets direktiver om indbyrdes tilnærmelse til EF-medlemsstaternes lovgivning:

- Maskindirektiv (2006/42/EF).
Anvendte standarder: EN 809: 1998, EN 60204-1: 2006.
- Lavspændingsdirektiv (2006/95/EF).
Anvendte standarder: EN 60335-1: 2002 og EN 60335-2-41: 2003.
- EMC-direktiv (2004/108/EF).
Anvendte standarder: EN 60730-1: 2000 og EN 60730-1, A16: 2007.

EE Vastavusdeklaratsioon

Meie, Grundfos, deklareerime enda ainuvastutusel, et toode CM Booster PM2, mille kohta kaesolev juhend käib, on vastavuses EÜ Nõukogu direktiividega EMJ liikmesriikide seaduste ühitamise kohta, mis käsitlevad:

- Masinate ohutus (2006/42/EC).
Kasutatud standardid: EN 809: 1998, EN 60204-1: 2006.
- Madalpinge direktiiv (2006/95/EC).
Kasutatud standardid: EN 60335-1: 2002 ja EN 60335-2-41: 2003.
- Elektromagnetiline ühilduvus (EMC direktiiv) (2004/108/EC).
Kasutatud standardid: EN 60730-1: 2000 ja EN 60730-1, A16: 2007.

ES Declaración de Conformidad

Nosotros, Grundfos, declaramos bajo nuestra propia responsabilidad que el producto CM Booster PM2, al cual se refiere esta declaración, está conforme con las Directivas del Consejo en la aproximación de las leyes de los Estados Miembros del EM:

- Directiva de Maquinaria (2006/42/CE).
Normas aplicadas: EN 809: 1998, EN 60204-1: 2006.
- Directiva de Baja Tensión (2006/95/CE).
Normas aplicadas: EN 60335-1: 2002 y EN 60335-2-41: 2003.
- Directiva EMC (2004/108/CE).
Normas aplicadas: EN 60730-1: 2000 y EN 60730-1, A16: 2007.

HR Izjava o usklađenosti

Mi, Grundfos, izjavljujemo pod vlastitom odgovornošću da je proizvod CM Booster PM2, na koji se ova izjava odnosi, u skladu s direktivama ovog Vijeća o usklađivanju zakona država članica EU:

- Direktiva za strojeve (2006/42/EZ).
Korištene norme: EN 809: 1998, EN 60204-1: 2006.
- Direktiva za niski napon (2006/95/EZ).
Korištene norme: EN 60335-1: 2002 i EN 60335-2-41: 2003.
- Direktiva za elektromagnetsku kompatibilnost (2004/108/EZ).
Korištene norme: EN 60730-1: 2000 i EN 60730-1, A16: 2007.

LV Paziņojums par atbilstību prasībām

Sabiedrība GRUNDFOS ar pilnu atbildību dara zināmu, ka produkts CM Booster PM2, uz kuru attiecas šīs paziņojums, atbilst šādām Padomes direktīvām par tuvināšanu EK dalībvalsts likumdošanas normām:

- Mašīnbūves direktīva (2006/42/EK).
Piemērotie standarti: EN 809: 1998, EN 60204-1: 2006.
- Zema sprieguma direktīva (2006/95/EK).
Piemērotie standarti: EN 60335-1: 2002 un EN 60335-2-41: 2003.
- Elektromagnētiskās saderības direktīva (2004/108/EK).
Piemērotie standarti: EN 60730-1: 2000 un EN 60730-1, A16: 2007.

LT Atitikties deklaracija

Mes, Grundfos, su visa atsakomybe pareiškiame, kad gaminys CM Booster PM2, kuriam skirta ši deklaracija, atitinka šias Tarybos Direktyvas dėl Europos Ekonominės Bendrijos šalių narių įstatymų suderinimo:

- Mašinų direktyva (2006/42/EB).
- Taikomi standartai: EN 809: 1998, EN 60204-1: 2006.
- Žemų įtamų direktyva (2006/95/EB).
- Taikomi standartai: EN 60335-1: 2002 ir EN 60335-2-41: 2003.
- EMS direktyva (2004/108/EB).
- Taikomi standartai: EN 60730-1: 2000 ir EN 60730-1, A16: 2007.

NL Overeenkomstigheidsverklaring

Wij, Grundfos, verklaren geheel onder eigen verantwoordelijkheid dat het product CM Booster PM2 waarop deze verklaring betrekking heeft, in overeenstemming is met de Richtlijnen van de Raad in zake de onderlinge aanpassing van de wetgeving van de EG lidstaten betreffende:

- Machine Richtlijn (2006/42/EC).
- Gebruikte normen: EN 809: 1998, EN 60204-1: 2006.
- Laagspannings Richtlijn (2006/95/EC).
- Gebruikte normen: EN 60335-1: 2002 en EN 60335-2-41: 2003.
- EMC Richtlijn (2004/108/EC).
- Gebruikte normen: EN 60730-1: 2000 en EN 60730-1, A16: 2007.

PL Deklaracja zgodności

My, Grundfos, oświadczamy z pełną odpowiedzialnością, że nasze wyroby CM Booster PM2, których deklaracja niniejsza dotyczy, są zgodne z następującymi wytycznymi Rady d/s ujednolicenia przepisów prawnych krajów członkowskich WE:

- Dyrektywa Maszynowa (2006/42/WE).
- Zastosowane normy: EN 809: 1998, EN 60204-1: 2006.
- Dyrektywa Niskonapięciowa (LVD) (2006/95/WE).
- Zastosowane normy: EN 60335-1: 2002 oraz EN 60335-2-41: 2003.
- Dyrektywa EMC (2004/108/WE).
- Zastosowane normy: EN 60730-1: 2000 oraz EN 60730-1, A16: 2007.

RU Декларация о соответствии

Мы, компания Grundfos, со всей ответственностью заявляем, что изделия CM Booster PM2, к которым относится настоящая декларация, соответствуют следующим Директивам Совета Евросоюза об унификации законодательных предписаний стран-членов ЕС:

- Механические устройства (2006/42/EC).
- Применяющиеся стандарты: EN 809: 1998, EN 60204-1: 2006.
- Низковольтное оборудование (2006/95/EC).
- Применяющиеся стандарты: EN 60335-1: 2002 и EN 60335-2-41: 2003.
- Электромагнитная совместимость (2004/108/EC).
- Применяющиеся стандарты: EN 60730-1: 2000 и EN 60730-1, A16: 2007.

SK Prehlásenie o konformite

My firma Grundfos prehlasujeme na svoju plnú zodpovednosť, že výrobok CM Booster PM2, na ktorý sa toto prehlásenie vzťahuje, je v súlade s ustanovením smernice Rady pre zblíženie právnych predpisov členských štátov Európskeho spoločenstva v oblastiach:

- Smernica pre strojové zariadenie (2006/42/EC).
- Použitá norma: EN 809: 1998, EN 60204-1: 2006.
- Smernica pre nízkonapäťové aplikácie (2006/95/EC).
- Použitá norma: EN 60335-1: 2002 a EN 60335-2-41: 2003.
- Smernica pre elektromagnetickú kompatibilitu (2004/108/EC).
- Použitá norma: EN 60730-1: 2000 a EN 60730-1, A16: 2007.

RS Deklaracija o konformitetu

Mi, Grundfos, izjavljujemo pod vlastitom odgovornošću da je proizvod CM Booster PM2, na koji se ova izjava odnosi, u skladu sa direktivama Saveta za usklađivanje zakona država članica EU:

- Direktiva za mašine (2006/42/EC).
- Korišćeni standardi: EN 809: 1998, EN 60204-1: 2006.
- Direktiva niskog napona (2006/95/EC).
- Korišćeni standardi: EN 60335-1: 2002 i EN 60335-2-41: 2003.
- EMC direktiva (2004/108/EC).
- Korišćeni standardi: EN 60730-1: 2000 i EN 60730-1, A16: 2007.

HU Megfelelősségi nyilatkozat

Mi, a Grundfos, egyedüli felelősséggel kijelentjük, hogy a CM Booster PM2 termék, amelyre jelen nyilatkozik vonatkozik, megfelel az Európai Unió tagállamainak jogi irányelveit összehangoló tanács alábbi előírásainak:

- Gépek (2006/42/EK).
- Alkalmazott szabványok: EN 809: 1998, EN 60204-1: 2006.
- Kifeszültségségű Direktiva (2006/95/EK).
- Alkalmazott szabványok: EN 60335-1: 2002 és EN 60335-2-41: 2003.
- EMC Direktiva (2004/108/EK).
- Alkalmazott szabványok: EN 60730-1: 2000 és EN 60730-1, A16: 2007.

UA Свідчення про відповідність вимогам

Компанія Grundfos заявляє про свою виключну відповідальність за те, що продукт CM Booster PM2, на який поширюється дана декларація, відповідає таким рекомендаціям Ради з уніфікації правових норм країн членів ЕС:

- Механічні прилади (2006/42/EC).
- Стандарти, що застосовувалися: EN 809: 1998, EN 60204-1: 2006.
- Низька напруга (2006/95/EC).
- Стандарти, що застосовувалися: EN 60335-1: 2002 та EN 60335-2-41: 2003.
- Електромагнітна сумісність (2004/108/EC).
- Стандарти, що застосовувалися: EN 60730-1: 2000 та EN 60730-1, A16: 2007.

PT Declaração de Conformidade

A Grundfos declara sob sua única responsabilidade que o produto CM Booster PM2, ao qual diz respeito esta declaração, está em conformidade com as seguintes Directivas do Conselho sobre a aproximação das legislações dos Estados Membros da CE:

- Directiva Máquinas (2006/42/CE).
- Normas utilizadas: EN 809: 1998, EN 60204-1: 2006.
- Directiva Baixa Tensão (2006/95/CE).
- Normas utilizadas: EN 60335-1: 2002 e EN 60335-2-41: 2003.
- Directiva EMC (compatibilidade electromagnética) (2004/108/CE).
- Normas utilizadas: EN 60730-1: 2000 e EN 60730-1, A16: 2007.

RO Declarație de Conformitate

Noi, Grundfos, declarăm pe propria răspundere că produsele CM Booster PM2, la care se referă această declarație, sunt în conformitate cu aceste Directive de Consiliu asupra armonizării legilor Statelor Membre CE:

- Directiva Utilaje (2006/42/CE).
- Standarde utilizate: EN 809: 1998, EN 60204-1: 2006.
- Directiva Tensiune Joasă (2006/95/CE).
- Standarde utilizate: EN 60335-1: 2002 și EN 60335-2-41: 2003.
- Directiva EMC (2004/108/CE).
- Standarde utilizate: EN 60730-1: 2000 și EN 60730-1, A16: 2007.

SI Izjava o skladnosti

V Grundfosu s polno odgovornostjo izjavljamo, da so naši izdelki CM Booster PM2, na katere se ta izjava nanaša, v skladu z naslednjimi direktivami Sveta o približevanju zakonodaje za izenačevanje pravnih predpisov držav članic ES:

- Direktiva o strojih (2006/42/ES).
- Uporabljeni normi: EN 809: 1998, EN 60204-1: 2006.
- Direktiva o nizki napetosti (2006/95/ES).
- Uporabljeni normi: EN 60335-1: 2002 in EN 60335-2-41: 2003.
- Direktiva o elektromagnetni združljivosti (EMC) (2004/108/ES).
- Uporabljeni normi: EN 60730-1: 2000 in EN 60730-1, A16: 2007.

FI Vaatimustenmukaisuusvakuutus

Me, Grundfos, vakuutamme omalla vastuullamme, että tuote CM Booster PM2, jota tämä vakuutus koskee, on EY:n jäsenvaltioiden lainsäädännön yhdenmukaistaminen tähtävällisen Euroopan neuvoston direktiivien vaatimusten mukainen seuraavasti:

- Konedirektiivi (2006/42/EY).
- Sovellettavat standardit: EN 809: 1998, EN 60204-1: 2006.
- Pienjännitedirektiivi (2006/95/EY).
- Sovellettavat standardit: EN 60335-1: 2002 ja EN 60335-2-41: 2003.
- EMC-direktiivi (2004/108/EY).
- Sovellettavat standardit: EN 60730-1: 2000 ja EN 60730-1, A16: 2007.

SE Försäkran om överensstämmelse

Vi, Grundfos, försäkrar under ansvar att produkten CM Booster PM2, som omfattas av denna försäkran, är i överensstämmelse med rådets direktiv om inbördes närmande till EU-medlemsstaternas lagstiftning, avseende:

- Maskindirektivet (2006/42/EG).
Tillämpade standarder: EN 809: 1998, EN 60204-1: 2006.
- Lågspänningsdirektivet (2006/95/EG).
Tillämpade standarder: EN 60335-1: 2002 och EN 60335-2-41: 2003.
- EMC-direktivet (2004/108/EG).
Tillämpade standarder: EN 60730-1: 2000 och EN 60730-1, A16: 2007.

TR Uygunluk Bildirgesi

Grundfos olarak bu beyannameye konu olan CM Booster PM2 ürünlerinin, AB Üyesi Ülkelerin kanunlarını birbirine yaklaştırma üzerine Konsey Direktifleriyle uyumlu olduğunun yalnızca bizim sorumluluğumuz altında olduğunu beyan ederiz:

- Makineler Yönetmeliği (2006/42/EC).
Kullanılan standartlar: EN 809: 1998, EN 60204-1: 2006.
- Düşük Voltaj Yönetmeliği (2006/95/EC).
Kullanılan standartlar: EN 60335-1: 2002 ve EN 60335-2-41: 2003.
- EMC Direktifi (2004/108/EC).
Kullanılan standartlar: EN 60730-1: 2000 ve EN 60730-1, A16: 2007.

Bjerringbro, 1st January 2011



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Person authorised to compile technical file
and empowered to sign the EC declaration.

English (GB) Installation and operating instructions

Original supplement to Quick Guide.

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Warning

Prior to installation, study the Quick Guide carefully. Installation and operation must comply with local regulations and accepted codes of good practice.



Warning

The use of this product requires experience with and knowledge of the product.

Persons with reduced physical, sensory or mental capabilities must not use this product, unless they are under supervision or have been instructed in the use of the product by a person responsible for their safety.

Children must not use or play with this product.

1. Symbols used in this document



Warning

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



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



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

2. System sizing



Warning

The system in which the CM Booster is incorporated must be designed for the maximum pump pressure.



The default setting will cause the pump not to stop until it reaches its maximum pressure.

3. Mechanical installation



Warning

Before starting any work on the CM Booster, make sure that the power supply has been switched off and that it cannot be accidentally switched on.

4. Electrical connection

The electrical connection should be carried out by an authorized electrician in accordance with local regulations.



Warning

Check that the supply voltage and frequency match the voltage and frequency on the nameplate.

Warning

Before making any connections in the unit, make sure that the power supply has been switched off and that it cannot be accidentally switched on.



The unit must be connected to an external mains switch with a contact gap of at least 3 mm in all poles.

As a precaution, the unit must be connected to a socket with earth connection.

We recommend to fit the permanent installation with an earth leakage circuit breaker (ELCB) with a tripping current < 30 mA.

5. Start-up

Caution

Do not start the pump until it has been filled with liquid.

6. Alarms

Caution

If a dry-running alarm has been activated, find the cause before the pump is restarted in order to prevent damage to the pump.

6.1 Anti-cycling

Note

In case of a very small consumption, the anti-cycling function may detect this as cycling and stop the pump inadvertently. If this occurs, the function can be disabled.

Disabling the function

To disable the function, set DIP switch 7 to "OFF". See Quick Guide.

6.2 Auto reset

Caution

Set auto reset to "on" only if there is positive inlet pressure.

7. Fault finding chart



Warning

Before starting work on the pump, make sure that the power supply to the pump has been switched off and that it cannot be accidentally switched on.

Fault	Cause	Remedy
1. The green light field for "0 bar" is off even if the power supply has been switched on.	a) The fuses in the electric installation have burnt.	Replace the fuses. If the new fuses also burn, check the electric installation.
	b) The earth leakage circuit breaker or the voltage-operated circuit breaker has tripped out.	Cut in the circuit breaker.
	c) No power supply.	Contact the power supply authorities.
	d) The PM unit is defective.	Repair or replace the PM unit.
2. The green "Pump on" indicator light is on, but the pump does not start.	a) The power supply to the pump is disconnected after the PM unit.	Check the plug and cable connections, and check if the built-in circuit breaker of the pump is switched off.
	b) The motor protection of the pump has tripped out due to overload.	Check if the motor/pump is blocked.
	c) The pump is defective.	Repair or replace the pump.
	d) The PM unit is defective.	Repair or replace the PM unit.
3. The pump does not start when water is consumed. The "Pump on" indicator light is off.	a) Too big difference in height between the PM unit and the tapping point.	Adjust the installation, or increase the start pressure. See quick guide.
	b) The PM unit is defective.	Repair or replace the PM unit.
4. System without pressure tank: Frequent starts/stops.	a) DIP switch 5 set to "ON".	Set DIP switch 5 to "OFF". See quick guide
	b) Leakage in the pipework.	Check and repair the pipework.
	c) The non-return valve is stuck in open position.	Clean or replace the non-return valve.
5. System with pressure tank: Frequent starts/stops.	a) The pressure tank has no precharge pressure, or the tank size is insufficient.	Check the tank precharge pressure, and recharge the tank, if necessary. If the size of the pressure tank is insufficient, set DIP switch 5 to "OFF", or replace the pressure tank.
	b) Leaky non-return valve.	Clean or replace the non-return valve.
6. The pump does not stop.	a) The pump cannot deliver the necessary discharge pressure.	Replace the pump.
	b) The start pressure is set too high.	Decrease the start pressure.
	c) The PM unit is defective.	Repair or replace the PM unit.
	d) The non-return valve is stuck in open position.	Clean or replace the non-return valve.

Fault	Cause	Remedy
7. The red "Alarm" indicator light is permanently on.	a) Dry running. The pump needs water.	Check the pipework.
	b) The power supply to the pump is disconnected after the PM unit.	Check the plug and cable connections, and check if the built-in circuit breaker of the pump is switched off.
	c) The motor protection of the pump has tripped out due to overload.	Check if the motor/pump is blocked.
	d) The pump is defective.	Repair or replace the pump.
	e) The PM unit is defective.	Repair or replace the PM unit.
8. System without pressure tank: The red "Alarm" indicator light flashes once per period.	a) Cycling. A tap has not been closed entirely after use.	Check that all taps have been closed.
	b) Cycling. There is a minor leakage in the system.	Check the system for leakages.
9. System with pressure tank: The red "Alarm" indicator light flashes once per period.	a) Cycling. The pressure tank has no precharge pressure, or the tank size is insufficient.	Check the tank precharge pressure, and recharge the tank, if necessary. If the size of the pressure tank is insufficient, set DIP switch 5 to "OFF", or replace the pressure tank. See quick guide.
10. The red "Alarm" indicator light flashes twice per period.	a) Maximum continuous operating time (30 minutes). The pump has been running continuously for 30 minutes.	Check the system for leakages. Disable the function to allow the pump to run for 30 minutes. See quick guide.
11. The red "Alarm" indicator light flashes three times per period, and each pump start is delayed a few seconds.	a) Too many start/stop sequences within a short period. The pressure tank has no precharge pressure, or the tank size is insufficient.	Check the tank precharge pressure, and recharge the tank, if necessary. If the size of the pressure tank is insufficient, set DIP switch 5 to "OFF", or replace the pressure tank.
	b) Too many start/stop sequences within a short period. The PM 2 is set to start/stop with 1 bar differential pressure, i.e. DIP switch 5 is set to "ON", but no pressure tank has been installed in the system.	Set DIP switch 5 to "OFF".
12. The red "Alarm" indicator light flashes four times per period.	a) Pressure sensor fault.	Repair or replace the PM unit.

8. 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.

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