



## Wilo-Economy-MHI 2../4../8../16..

- |  |   |
|--|---|
| <b>D</b> Einbau- und Betriebsanleitung                 | <b>CZ</b> Návod k montáži a obsluze             |
| <b>GB</b> Installation and operating instructions      | <b>PL</b> Instrukcja montażu i obsługi          |
| <b>F</b> Notice de montage et de mise en service       | <b>RUS</b> Инструкция по монтажу и эксплуатации |
| <b>NL</b> Inbouw- en bedieningsvoorschriften           | <b>DK</b> Monterings- og driftsvejledning       |
| <b>E</b> Instrucciones de instalación y funcionamiento | <b>NO</b> Monterings- og driftsveiledningen     |
| <b>I</b> Istruzioni di montaggio, uso e manutenzione   |   |
| <b>FIN</b> Huolto- ja käyttöohje                       |   |
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| <b>H</b> Beépítési és üzemeltetési utasítás            |   |
| <b>GR</b> Οδηγίες εγκατάστασης και λειτουργίας         |   |

bomnuocwilo.com

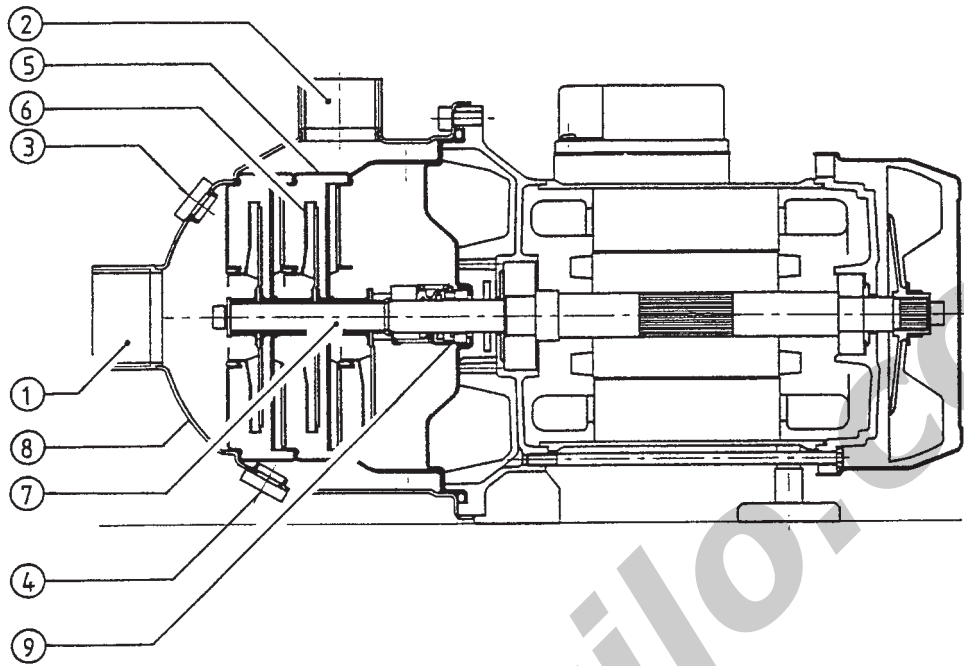


Fig. 1

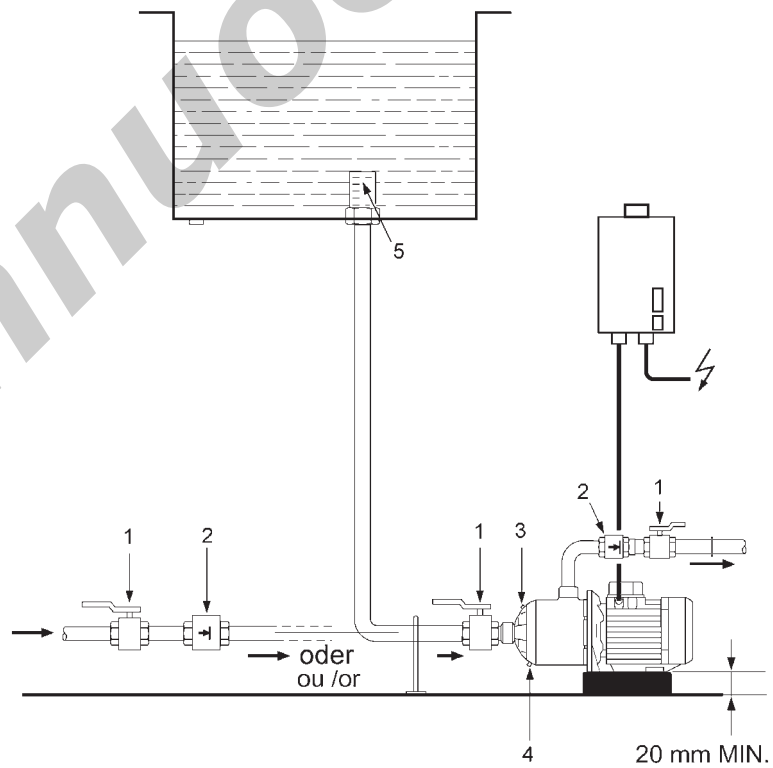


Fig. 2

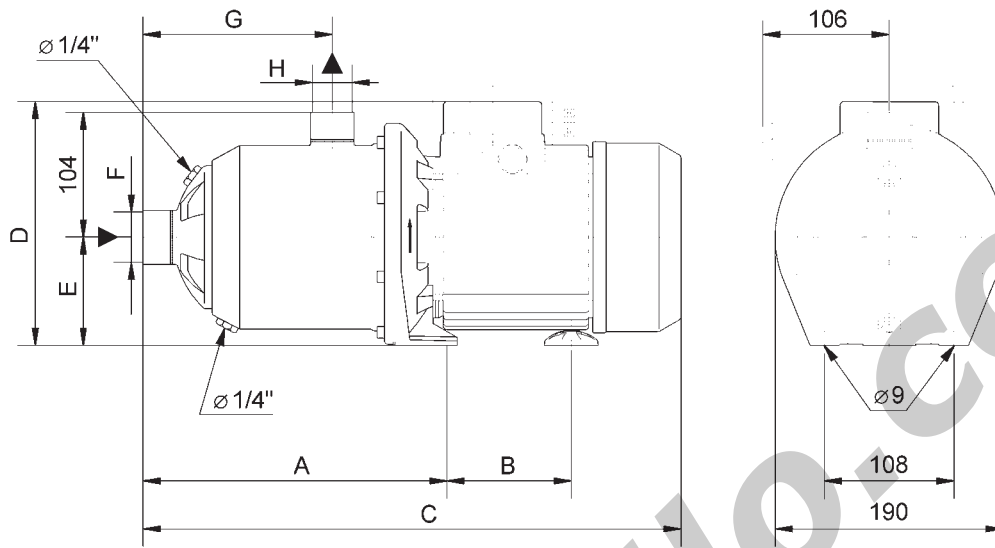
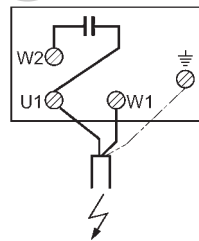


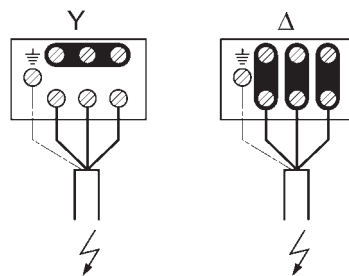
Fig. 3

**MOT. 230V**  
(220V / 240V)



**1 x 230V**  
( 1 x 220V / 1 x 240V )

**MOT. 230 - 400V** (220-380V / 240-415V)



**3 x 400V** (3 x 380V / 3 x 415V) **3 x 230V** ( 3 x 220V / 3 x 240V )

Fig. 4

## ENGLISH

**1. General****Installation and service by qualified personnel only****1.1 Applications**

The pump is suitable for drinking water, heating water, industrial water, condensate, water/glycol mixtures up to a ratio of 40% glycol as well as other liquids free from mineral oil and without abrasives or long-fibred substances.

The main areas of use are in water supply installations, as a booster pump, as a boiler feed pump, in industrial circulation systems, in process technology, in cooling water systems, in fire extinguishers and in washing and sprinkler installations.

Approval from the manufacturer must be obtained beforehand if corrosive chemicals are to be pumped.

**1.2 Technical description****1.2.1 Performance and electrical data**

AC voltage: 1 ~ 230 V ( $\pm 10\%$ ) / 50Hz or  
Rotary current voltage: 3 ~ 230 / 400 V ( $\pm 10\%$ ) / 50 Hz;

Motor power: see rating plate,  
Maximum current: see rating plate,  
Fluid temperature:  $-15\text{ }^{\circ}\text{C}$  to  $110\text{ }^{\circ}\text{C}$   
with gaskets – EPDM  
(KTW/WRAS),  
 $-15\text{ }^{\circ}\text{C}$  to  $80\text{ }^{\circ}\text{C}$  version with  
with gaskets – VITON

Max. permissible working pressure: 10 bar,  
Max. permissible inlet pressure: 6 bar,  
Max. ambient temperature:  $40\text{ }^{\circ}\text{C}$ ,  
Protective system: IP 54.  
Other voltages/frequencies and material properties are optional and/or available on request.

When pumping viscous fluids (e.g. water/glycol mixtures) adjust the pump data to allow for the higher viscosity.

Only use branded glycol mixtures with corrosion inhibitors and follow the manufacturers instructions.

For dimensions see table and Fig. 3.

Pump	Pump unit												
	Model	Dimensions											
		A	B		C		D		E		F	G	H
	1~230 V	3~400 V	1~230 V	3~400 V	1~230 V	3~400 V	1~230 V	3~400 V	1~230 V	3~400 V			
MHI	mm												
202	205	88	88	375	375	216	192	90	90	Rp1	110	Rp1	
203	205	88	88	375	375	216	192	90	90	Rp1	110	Rp1	
204	253	88	88	423	423	216	192	90	90	Rp1	158	Rp1	
205	253	88	88	423	423	216	192	90	90	Rp1	158	Rp1	
206	277	104	104	472	472	224	206	90	90	Rp1	182	Rp1	
402	205	88	88	375	375	216	192	90	90	Rp1 <sup>1/4</sup>	110	Rp1	
403	205	88	88	375	375	216	192	90	90	Rp1 <sup>1/4</sup>	110	Rp1	
404	253	88	88	423	423	216	192	90	90	Rp1 <sup>1/4</sup>	158	Rp1	
405	253	104	104	448	448	224	206	90	90	Rp1 <sup>1/4</sup>	158	Rp1	
406	277	137	104	511	472	239	206	100	90	Rp1 <sup>1/4</sup>	182	Rp1	
802	217	88	88	387	387	216	192	90	90	Rp1 <sup>1/2</sup>	122	Rp1 <sup>1/4</sup>	
803	217	104	88	412	387	224	192	90	90	Rp1 <sup>1/2</sup>	122	Rp1 <sup>1/4</sup>	
804	277	104	104	472	472	224	206	90	90	Rp1 <sup>1/2</sup>	182	Rp1 <sup>1/4</sup>	
805	277	-	104	-	472	-	206	-	90	Rp1 <sup>1/2</sup>	182	Rp1 <sup>1/4</sup>	
1602	237	-	103,5	-	432	-	206	-	90	Rp2	138	Rp1 <sup>1/2</sup>	
1603	237	-	103,5	-	432	-	206	-	90	Rp2	138	Rp1 <sup>1/2</sup>	
1604	282	-	136,5	-	515	-	221	-	100	Rp2	183	Rp1 <sup>1/2</sup>	

When ordering spare parts, please give all the information on the rating plate.

**1.2.2 Series specifications**

	MHI 4 06 1 / E / 3 ~ 400 - 50 - 2/XX/X
MHI (Multistage Horizontal stainless steel (Inox) centrifugal pump) design	4 06 1
Flow rate [m <sup>3</sup> /h]	E
Number of impellers	3
Steel grade: 1 → 1.4301 (AISI 304) 2 → 1.4404 (AISI 316 L)	~ 400 - 50
gaskets – EPDM (KTW/WRAS) gaskets – VITON	2/XX/X
Mains voltage 3 ~ 230/400 V 1 ~ 230 V	
50Hz or 60Hz frequency	
2 or 4 pole motor	
Manufacturer's key	

**2. Safety precautions**

These instructions contain important information which must be followed when installing and operating the pump. It is therefore imperative that they be read by both the installer and the operator before the pump is installed or started up.

Both the general safety instructions in the 'Safety precautions' section and those in subsequent sections indicated by danger symbols should be carefully observed.

**2.1 Danger symbols used in these operating instructions**

Safety precautions in these operating instructions which, if not followed, could cause personal injury are indicated by the symbol:



Safety precautions warning of danger due to electricity are indicated by the symbol:



Safety precautions which, if not followed, could damage the pump or installation and cause it to malfunction are indicated by the word:

**WARNING!**

**2.2 Qualified Personnel**

The personnel installing the pump must have the appropriate qualifications for this work.

**2.3 Risks incurred by failure to comply with the safety precautions**

Failure to comply with the safety precautions could result in personal injury or damage to the pump or installation. Failure to comply with the safety precautions could also invalidate any claim for damages.

In particular, failure to comply with these safety precautions could give rise, for example, to the following risks:

- the failure of important parts of the pump or installation,
- personal injury due to electrical and mechanical causes.

**2.4 Safety precautions for the operator**

Existing regulations for the prevention of accidents must be followed. To prevent the risk of electric shock or electrocution, VDE regulations and those of the local supply company must be followed.

**2.5 Safety precautions for inspection and installation**

The operator must ensure that all inspection and installation work is carried out by authorized and qualified specialists who have carefully studied these instructions. In principle, work should not be carried out on a running pump or installation.

**2.6 Unauthorized alterations and manufacture of spare parts**

Alterations to the pump or installation may only be carried out with the manufacturer's consent. The use of original spare parts and accessories authorized by the manufacturer will ensure safety. The use of other parts may invalidate claims invoking the manufacturer's liability for any consequences.

**2.7 Improper use**

The operational safety of the pump or installation supplied can only be guaranteed if it is used in accordance with paragraph 1 of the operating instructions. The limits given in the catalogue or data sheet must under no circumstances be exceeded.

**3. Transport and storage****WARNING!**

During transport and in storage the pump must be protected against moisture, frost and mechanical damage.

**4. Description of product and accessories****4.1 Pump description (Fig. 1)**

The pump is a multistage (2-6 stage) normal suction, horizontal high pressure centrifugal pump with a block design with horizontal inlet (1) and vertical pressure glands (2).

The hydraulic section is equipped with the given number of stage housings (5) and impellers (6) in a modular construction. The impellers are fitted on a single motor-pump shaft (7). The pressure casing (8) surrounding the hydraulic section guarantees a fail-safe seal. All parts in contact with the fluid, such as stage chambers, impellers and the pressure casing, are made of chromium nickel steel. The shaft hole through the pump casing is sealed to the motor with an axial face seal (9). E = All parts in contact with the fluid have been cleared by KTW and/or WRAS and are therefore suitable for use with drinking water.

The AC motors are equipped with a thermal cut-out. This switches off the motor when the permissible temperature of the motor coil is exceeded and switches it back on again automatically once it has cooled down.

Low-water protection. The pump and in particular the axial face seal must not run dry. Low-water protection should be provided by the customer by fitting the relevant parts from the WILO range of accessories.

The speed of the pump can be controlled when connected to a frequency converter or motor filter (see paragraph 5.3)

**4.2 Components supplied**

- EM or DM version of pump,
- Installation and Operating Instructions

**4.3 Accessories**

Accessories must be ordered separately.

- WV/COL switching unit with relevant accessories for automation,
- CO-ER switching unit with relevant accessories for automation,
- Low-water protection:
  - WMS kit for direct connection to the supply pipe,
  - WAEK 65 float switch with small switching unit (only for EM version),
  - WA 65 float switch,
  - SK 277 with 3 dipped electrodes,
- WVA pressure switch,
- WILO fluid control (EK),
- Installation switching:
  - WA 065 float switch
  - WA OEK 65 float switch with small switching unit (only for EM version).

## 5. Assembly and Installation

### 5.1 Installation

Fig. 2 shows a typical pump installation. Installation and assembly instructions, which must be observed with this type of operation, are listed as follows:

- Before installing the pump, make sure that all welding and soldering on the pipe system has been completed and that the pipe system has been completely flushed out. Foreign bodies and dirt will damage the pump.
- Install the pump in a dry place free of frost.
- Leave room for maintenance work to be carried out.
- The motor ventilator inlet must be kept clear, at least 0.30 m from the wall to the rear.
- Install in a horizontal and flat position.
- The pump must be held in place with two 8 mm diameter screws, on a vibration-absorbing base. Commercially available rubber-metal connectors can also be used to hold it in place and absorb vibrations.
- To ensure that the drain valve can be accessed, the pump must be installed with the drain valve at least 20 mm above the floor.
- Isolating valves (1) should be installed in front of and behind the pump, so that the pump can be easily changed and/or maintenance work can be carried out more easily.
- A backflow preventer (2) should be installed immediately behind the outlet pressure gland of the pump.
- The inlet and outlet pipes should be connected to the pump without stress. Flexible lengths of pipe or bellow expansion joints of restricted length can be used to ensure a low-vibration connection. The weight of the pipework must be supported.
- The customer should take suitable measures to prevent low water levels and hence guard against the pump running dry in order to protect the axial face seal. The WILO range comprises various accessories which can be used for this purpose.
- The customer should protect the pump at the inlet pipe with a strainer (1mm mesh) or filter connection (5) to avoid the pipe being damaged by any dirt which may be sucked in.

### 5.2 Electrical installation



- Electrical work must be carried out by a qualified and licensed electrician in strict compliance with local regulations.

- The electricity supply must be connected via a rigid supply cable fitted with a coupler or an all-pole switch with a contact gap of at least 3 mm in accordance with the local regulations in force (e.g. in accordance with the latest edition of IEE wiring regulations).
- Check the mains current and voltage.
- Ensure compliance with the data on the pump rating plate.
- Make sure the pump is earthed.
- Mains fuse: 10A time-lag fuse.
- The customer should fit rotary current motors with a motor safety switch which should be adjusted to the nominal current given on the rating plate to prevent the motor from overheating. AC motors are fitted with a thermal motor cut-out in the factory. This cuts off the pump when the permissible temperature of the motor coil is exceeded and switches it back on again automatically once it has cooled down.
- A supply cable with an adequate ample external diameter (e.g. 05 VV-F 3/5 G 1.5 or AVMH-I 3/5x1.5) should be used to protect against damp and to secure the mains lead cleat of the stuffing box.
- Connection to the mains must be carried out in accordance with the plan of terminal connections for rotary or alternating current in the terminal box of the pump (see also Fig. 4).
- Heat-resistant cable must be used if the pump is fitted in installations in which the temperature of the fluids pumped exceeds 90 °C.
- The supply cable must be laid in such a way that it never touches the pipework and/or the pump and motor casing.



If necessary a fault current breaker (FI-switch) should be provided.

### 5.3 Operation with frequency converter

The speed of the pump can be controlled when connected to a frequency converter. Speed control limits:  $40\%n_{nom} \leq n \leq 100\%n_{nom}$ . See Installation and Operating Instructions of the frequency converter for connection and operation.

To avoid overloading the motor coil to the extent that it is damaged and to avoid increasing noise levels, the frequency converter must not produce speeds due to increased voltage of over 500 V/μs and spikes of  $\hat{u} > 650$  V. If such speeds due to increased voltage are possible, an LC filter (motor filter) should be installed between the frequency converter and the motor. The layout of the filter must be designed by the manufacturer of the frequency converter or filter.

In control devices with frequency converters supplied by WILO, the filter is already installed.

## 6. Commissioning

- Check that there is a sufficient level of water in the reservoir and/or check the inlet pressure.

### WARNING!

The pump must not run dry, as this would destroy the axial face seal.

- When used for the first time, if it is to be used to pump drinking water the system must be flushed through, so that any dirty water present will not contaminate the drinking water supply.
- Checking direction of rotation (only for rotary current motors): Check that the pump rotates in the direction indicated by the arrow on the pump casing by switching on for a short time. If this is not the case, interchange 2 phases in the pump terminal box.
- Only for rotary current motors: Adjust the motor cut-out to the nominal current given on the rating plate.
- If available, position float switches or electrodes for protection against low water levels in such a way that the pump cuts out if the water level is so low that air would begin to be sucked in.
- Open the isolating valve at the inlet, open the vent screw (Figs 1 & 2, 3, SW 19) until the pumped fluid comes out, close the vent screw, open the isolating valve at the outlet and switch on the pump.



- Depending on the fluid temperature and the system pressure, if the vent screw is completely loosened hot liquid or gas can escape or even shoot out at high pressure.

**Beware of scalding.**



- Depending on the operating conditions of the pump or installation (fluid temperature), the entire pump may become very hot.

**Avoid touching the pipe owing to the risk of burning.**

### WARNING!

The pump must not run for longer than 10 minutes with a flow rate of  $Q = 0$  m<sup>3</sup>/h. We recommend that when running continuously the pump should be kept at a minimal flow of 10 % nominal flow.

## 7. Maintenance

- The pump is almost maintenance free.
- During the running-in period, there may be some dripping from the axial face seal. Should a more significant leak occur as a result of substantial wear, have the axial face seal replaced by a specialist.
- Increased bearing noise and unusual vibrations indicate a worn bearing. In this case, have the bearing replaced by a specialist.
- Before carrying out any maintenance work, switch off the pump and ensure that it cannot be switched on again by unauthorized people. Never carry out work on a running pump.
- When the pump is exposed to frost or is out of service for a long period, the pump and pipework must be emptied in the cold season. Empty the pump by releasing the drain valve (Figs 1 & 2, 4), the inlet pipe by releasing the vent screw, and the outlet pipe by opening the bleeding point.

## 8. Fault finding, causes and remedies

Fault	Cause	Remedy
Pump does not run	no power	check fuses, float switches and cables
	motor safety switch activated	eliminate motor overload
Pump runs but does not pump	wrong direction of rotation	interchange two phases of the mains connection
	pipe or pump components blocked by foreign body	check and clean pipe and pump
	air in inlet pressure gland	seal inlet pressure gland
	inlet pipe too narrow	fit a larger inlet pipe
Pump does not pump evenly	inlet too high	position the pump lower
Pressure is insufficient	wrong choice of pump	fit a more powerful pump
	wrong direction of rotation	interchange two phases of the mains connection
	flow is too small, inlet pipe blocked	clean filter and inlet pipe
	valve not sufficiently open	open valve
	foreign body blocking the pump	clean the pump
Pump vibrates	foreign body in the pump	remove foreign body
	pump not properly fixed to the base	tighten anchor bolts
	base is not sufficiently heavy	fit a heavier base
Motor overheats, motor cut-out activates	insufficient voltage	check voltage
	pump sluggish: foreign body bearing damaged	clean pump have pump repaired by customer services
	ambient temperature too high	provide cooling

If the fault cannot be remedied, please contact your local plumbing and heating specialist or WILO customer services.

### Figures:

1. Cross-section of the pump with reference numbers.
2. Positioning and pipework of the pump.
3. Drawing showing dimensions.
4. Plan of electrical connections.

**Subject to technical alterations.w**



**D EG – Konformitätserklärung**  
**GB EC – Declaration of conformity**  
**F Déclaration de conformité CE**

(gemäß Anhang/according annex/ conforme appendice 1A, 2006/42/EG)

Hiermit erklären wir, dass die Bauart der Baureihe :  
 Herewith, we declare that the product type of the series:  
 Par le présent, nous déclarons que l'agrégat de la série :

**MHI**

in der gelieferten Ausführung folgenden einschlägigen Bestimmungen entspricht:  
 in its delivered state complies with the following relevant provisions:  
 est conforme aux dispositions suivantes dont il relève:

**EG-Maschinenrichtlinie**  
**EC-Machinery directive**  
**Directives CE relatives aux machines**

**98/37/EG**  
 (gültig bis / valid up to /  
 valide jusqu'à 28.12.2009)

**Niederspannungsrichtlinie**  
**Low Voltage directive**  
**Directive basse-tension**

**2006/95/EG**  
 (gültig bis / valid up to /  
 valide jusqu'à 28.12.2009)

**EG-Maschinenrichtlinie**  
**EC-Machinery directive**  
**Directives CE relatives aux machines**

**2006/42/EG**  
 (gültig ab / valid from /  
 valide de 29.12.2009)

Die Schutzziele der Niederspannungsrichtlinie werden gemäß Anhang I, Nr. 1.5.1 der Maschinenrichtlinie 2006/42/EG eingehalten.  
 The protection objectives of the low-voltage directive are realized according annex I, No. 1.5.1  
 of the EC-Machinery directive 2006/42/EC.  
 Les objectifs protection de la directive basse-tension sont respectés conformément à appendice I, n° 1.5.1  
 de la directive CE relatives aux machines 2006/42/CE.

**Elektromagnetische Verträglichkeit - Richtlinie**  
**Electromagnetic compatibility - directive**  
**Compatibilité électromagnétique- directive**

**2004/108/EG**

Angewendete harmonisierte Normen, insbesondere:  
 Applied harmonized standards, in particular:  
 Normes harmonisées, notamment:

**EN 809**  
**EN 60034-1**  
**EN 60204-1**

Bei einer mit uns nicht abgestimmten technischen Änderung der oben genannten Bauarten, verliert diese Erklärung ihre Gültigkeit.  
 If the above mentioned series are technically modified without our approval, this declaration shall no longer be applicable.  
 Si les gammes mentionnées ci-dessus sont modifiées sans notre approbation, cette déclaration perdra sa validité.

Bevollmächtigter für die Zusammenstellung der technischen Unterlagen ist:  
 Authorized representative for the completion of the technical documentation:  
 Mandataire pour le complément de la documentation technique est :

Cyrille Cornilleau  
 Pompes Salmson S.A. - Laval  
 80 Bd de l'Industrie  
 BP 0527  
 F-53005 Laval Cédex

Dortmund, 26.11.2009

  
 Oliver Breuing  
 Quality Manager



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 44263 Dortmund  
 Germany

Document: 2105110.1

**NL**  
**EG-verklaring van overeenstemming**  
Hiermede verklaren wij dat dit aggregaat in de geleverde uitvoering voldoet aan de volgende bepalingen:  
**EG-richtlijnen betreffende machines 2006/42/EG**  
De veiligheidsdoelstellingen van de laagspanningsrichtlijn worden overeenkomstig bijlage I, nr. 1.5.1 van de machinerichtlijn 2006/42/EG aangehouden.  
**Elektromagnetische compatibiliteit 2004/108/EG**  
gebruikte geharmoniseerde normen, in het bijzonder: zie vorige pagina

**P**  
**Declaração de Conformidade CE**  
Pela presente, declaramos que esta unidade no seu estado original, está conforme os seguintes requisitos:  
**Directivas CEE relativas a máquinas 2006/42/EG**  
Os objectivos de protecção da directiva de baixa tensão são cumpridos de acordo com o anexo I, nº 1.5.1 da directiva de máquinas 2006/42/CE.  
**Compatibilidade electromagnética 2004/108/EG**  
normas harmonizadas aplicadas, especialmente: ver página anterior

**FIN**  
**CE-standardinmukaususseleste**  
Ilmoitamme täten, että tämä laite vastaa seuraavia asiaankuuluvia määräyksiä:  
**EU-konedirektiivit: 2006/42/EG**  
Pienjännitedirektiivin suojatavoitteita noudatetaan konedirektiivin 2006/42/EY liitteen I, nro 1.5.1 mukaisesti.  
**Sähkömagneettinen soveltuvuus 2004/108/EG**  
käytetyt yhteensovitetut standardit, erityisesti: katso edellinen sivu.

**CZ**  
**Prohlášení o shodě ES**  
Prohlášíme tímto, že tento agregát v dodaném provedení odpovídá následujícím příslušným ustanovením:  
**Směrnice ES pro strojní zařízení 2006/42/ES**  
Cíle týkající se bezpečnosti stanovené ve směrnici o elektrických zařízeních nízkého napětí jsou dodrženy podle přílohy I, č. 1.5.1 směrnice o strojních zařízeních 2006/42/ES.  
**Směrnice o elektromagnetické kompatibilitě 2004/108/ES**  
použité harmonizační normy, zejména: viz předchozí strana

**GR**  
**Δήλωση συμμόρφωσης της ΕΕ**  
Δηλώνουμε ότι το προϊόν αυτό ο' αυτή την κατάσταση παράδοσης ικανοποιεί τις ακόλουθες διατάξεις:  
**Οδηγίες ΕΚ για μηχανήματα 2006/42/ΕΚ**  
Οι απαιτήσεις προστασίας της οδηγίας χαμηλής τάσης τηρούνται σύμφωνα με το παράρτημα Ι, αρ. 1.5.1 της οδηγίας σχετικά με τα μηχανήματα 2006/42/ΕΓ.  
**Ηλεκτρομαγνητική συμβατότητα ΕΚ-2004/108/ΕΚ**  
Εναρμονισμένα χρησιμοποιούμενα πρότυπα, ιδιαίτερα: βλέπε προηγούμενη σελίδα

**EST**  
**EÜ vastavusdeklaratsioon**  
Käesolevaga tõendame, et see toode vastab järgmistele asjakohastele direktiividele:  
**Masinaidirektiiv 2006/42/EÜ**  
Madalpingedirektiivi kaitse-eesmärgid on täidetud vastavalt masinate direktiivi 2006/42/EÜ I lisa punktile 1.5.1.  
**Elektromagnetilise ühilduvuse direktiiv 2004/108/EÜ**  
kohaldatud harmoneeritud standardid, eriti: vt eelmist lk

**SK**  
**ES vyhlášení o zhode**  
Týmto vyhlasujeme, že konstrukcie tejto konstrukcnej série v dodanom vyhotovení vyhovujú nasledujúcim príslušným ustanoveniam:  
**Stroje - smernica 2006/42/ES**  
Bezpečnostné ciele smernice o nízkom napätí sú dodržiavané v zmysle prílohy I, č. 1.5.1 smernice o strojových zariadeniach 2006/42/ES.  
**Elektromagnetická zhoda - smernica 2004/108/ES**  
používané harmonizované normy, najmä: pozri predchádzajúcu stranu

**M**  
**Dikjarazzjoni ta' konformità KE**  
B'dan il-mezz, niddikjaraw li l-prodotti tas-serje jissodisfaw id-dispożizzjonijiet relevanti li ġejjin:  
**Makkinarju - Direttiva 2006/42/KE**  
L-oġġettivi tas-sigurtà tad-Direttiva dwar il-Vultaġġ Baxx huma konformi mal-Anness I, Nru 1.5.1 tad-Direttiva dwar il-Makkinarju 2006/42/KE.  
**Kompatibilità elettromagnetika - Direttiva 2004/108/KE**  
kif ukoll standards armonizzati b'mod partikolari:  
Tel: 0909.228.359 / 0909.228.350

**I**  
**Dichiarazione di conformità CE**  
Con la presente si dichiara che i presenti prodotti sono conformi alle seguenti disposizioni e direttive rilevanti:  
**Direttiva macchine 2006/42/EG**  
Gli obiettivi di protezione della direttiva macchine vengono rispettati secondo allegato I, n. 1.5.1 dalla direttiva macchine 2006/42/CE.  
**Compatibilità elettromagnetica 2004/108/EG**  
norme armonizzate applicate, in particolare: vedi pagina precedente

**S**  
**CE-försäkran**  
Härmed förklarar vi att denna maskin i levererat utförande motsvarar följande tillämpliga bestämmelser:  
**EG-Maskindirektiv 2006/42/EG**  
Produkten uppfyller säkerhetsmålen i lågspänningsdirektivet enligt bilaga I, nr. 1.5.1 i maskindirektiv 2006/42/EG.  
**EG-Elektromagnetisk kompatibilitet - riktlinje 2004/108/EG**  
tillämpade harmoniserade normer, i synnerhet: se föregående sida

**DK**  
**EF-overensstemmelseserklæring**  
Vi erklærer hermed, at denne enhed ved levering overholder følgende relevante bestemmelser:  
**EU-maskindirektiver 2006/42/EG**  
Lavspændingsdirektivets mål om beskyttelse overholdes i henhold til bilag I, nr. 1.5.1 i maskindirektivet 2006/42/EF.  
**Elektromagnetisk kompatibilitet: 2004/108/EG**  
anvendte harmoniserede standarder, særligt: se forrige side

**PL**  
**Deklaracja Zgodności WE**  
Niniejszym deklarujemy z pełną odpowiedzialnością, że dostarczony wyrób jest zgodny z następującymi dokumentami:  
**dyrektywy maszynowej WE 2006/42/WE**  
Przestrzegane są cele ochrony dyrektywy niskonapięciowej zgodnie z załącznikiem I, nr. 1.5.1 dyrektywy maszynowej 2006/42/WE.  
**dyrektywą dot. kompatybilności elektromagnetycznej 2004/108/WE**  
stosowanymi normami zharmonizowanymi, a w szczególności: patrz poprzednia strona

**TR**  
**CE Uygunluk Teyid Belgesi**  
Bu cihazın teslim edildiği şekliyle aşağıdaki standartlara uygun olduğunu teyid ederiz:  
**AB-Makina Standartları 2006/42/EG**  
Açık genilim yönergesinin koruma hedefleri, 2006/42/AT makine yönergesi EK I, no. 1.5.1'e uygundur.  
**Elektromanyetik Uyumluluk 2004/108/EG**  
kışmen kullanılan standartlar için: bkz. bir önceki sayfa

**LV**  
**EC - atbilstības deklarācija**  
Ar šo mēs apliecinām, ka šis izstrādājums atbilst sekojošiem noteikumiem:  
**Mašīnu direktīva 2006/42/EK**  
Zemsprieguma direktīvas drošības mērķi tiek ievēroti atbilstoši Mašīnu direktīvas 2006/42/EK pielikumam I, Nr. 1.5.1.  
**Elektromagnētiskās savietojamības direktīva 2004/108/EK**  
piemēroti harmonizēti standarti, tai skaitā: skatīt iepriekšējo lappusi

**SLO**  
**ES - izjava o skladnosti**  
Izjavljam, da dobavljene vrste izvedbe te serije ustrezajo sledečim zadevnim določilom:  
**Direktiva o strojih 2006/42/ES**  
Cilji Direktive o nizkonapetostni opremi so v skladu s prilogo I, št. 1.5.1 Direktive o strojih 2006/42/EG doseženi.  
**Direktiva o elektromagnetni združljivosti 2004/108/ES**  
uporabljeni harmonizirani standardi, predvsem: glejte prejšnjo stran

**E**  
**Sieu Phong co.,Ltd**  
**Declaración de conformidad CE**  
Por la presente declaramos la conformidad del producto en su estado de suministro con las disposiciones pertinentes siguientes:  
**Directiva sobre máquinas 2006/42/EG**  
Se cumplen los objetivos en materia de seguridad establecidos en la Directiva de Baja tensión según lo especificado en el Anexo I, punto 1.5.1 de la Directiva de Máquinas 2006/42/CE.  
**Directiva sobre compatibilidad electromagnética 2004/108/EG**  
normas armonizadas adoptadas, especialmente: véase página anterior

**N**  
**EU-Overensstemmelseserklæring**  
Vi erklærer hermed at denne enheten i utførelse som levert er i overensstemmelse med følgende relevante bestemmelser:  
**EG-Maskindirektiv 2006/42/EG**  
Lavspenningsdirektivets verne mål overholdes i samsvar med vedlegg I, nr. 1.5.1 i maskindirektiv 2006/42/EF.  
**EG-EMV-Elektromagnetisk kompatibilitet 2004/108/EG**  
anvendte harmoniserte standarder, særlig: se forrige side

**H**  
**EK-megfelelősségi nyilatkozat**  
Ezennel kijelentjük, hogy az berendezés megfelel az alábbi irányelveknek:  
**Gépek irányelv: 2006/42/EK**  
A kisfeszültségű irányelv védelmi előírásait a 2006/42/EK gépekre vonatkozó irányelv I. függelékének 1.5.1. sz. pontja szerint teljesíti.  
**Elektromágneses összeférhetőség irányelv: 2004/108/EK**  
alkalmazott harmonizált szabványoknak, különösen: lásd az előző oldalt

**RUS**  
**Декларация о соответствии Европейским нормам**  
Настоящим документом заявляем, что данный агрегат в его объеме поставки соответствует следующим нормативным документам:  
**Директивы ЕС в отношении машин 2006/42/EG**  
Требования по безопасности, изложенные в директиве по низковольтному напряжению, соблюдаются согласно приложению I, № 1.5.1 директивы в отношении машин 2006/42/EG.  
**Электромагнитная устойчивость 2004/108/EG**  
Используемые согласованные стандарты и нормы, в частности: см. предыдущую страницу

**RO**  
**EC-Declarație de conformitate**  
Prin prezenta declarăm că acest produs așa cum este livrat, corespunde cu următoarele prevederi aplicabile:  
**Directiva CE pentru mașini 2006/42/EG**  
Sunt respectate obiectivele de protecție din directiva privind joasa tensiune conform Anexei I, Nr. 1.5.1 din directiva privind mașinile 2006/42/CE.  
**Compatibilitatea electromagnetică - directiva 2004/108/EG**  
standarde armonizate aplicate, îndeosebi: vezi pagina precedentă

**LT**  
**EB atitikties deklaracija**  
Šiuo pažymima, kad šis gaminyas atitinka šias normas ir direktyvas:  
**Mašinų direktyvą 2006/42/EB**  
Laikomasi Žemos įtampos direktyvos keliamų saugos reikalavimų pagal Mašinų direktyvos 2006/42/EB I priedo 1.5.1 punktą.  
**Elektromagnetinio suderinamumo direktyvą 2004/108/EB**  
pritaikytus vieningus standartus, o būtent: žr. ankstesniame puslapyje

**BG**  
**EO-Декларация за съответствие**  
Декларираме, че продуктът отговаря на следните изисквания:  
**Машина директива 2006/42/EO**  
Целите за защита на разпоредбата за ниско напрежение са съставени съгласно. Приложение I, № 1.5.1 от Директивата за машини 2006/42/ЕС.  
**Електромагнитна съвместимост - директива 2004/108/EO**  
Хармонизирани стандарти: вж. предната страница



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