

Pioneering for You

wilo

Wilo-Economy MHIL



de Einbau- und Betriebsanleitung
en Installation and operating instructions
fr Notice de montage et de mise en service

es Instrucciones de instalación y funcionamiento
it Istruzioni di montaggio, uso e manutenzione
ru Инструкция по монтажу и эксплуатации

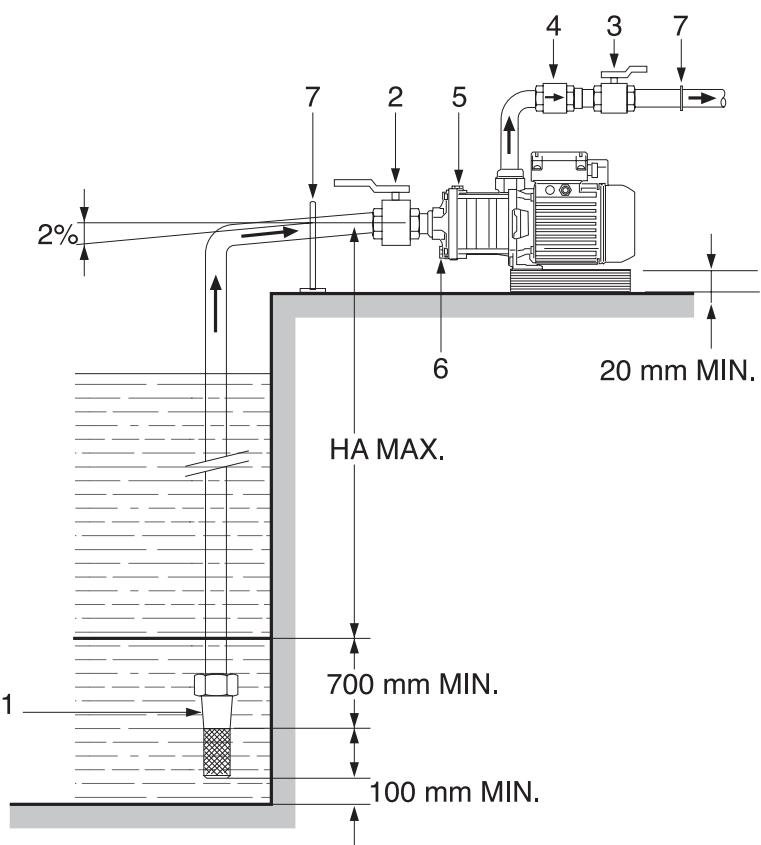


Fig. 1

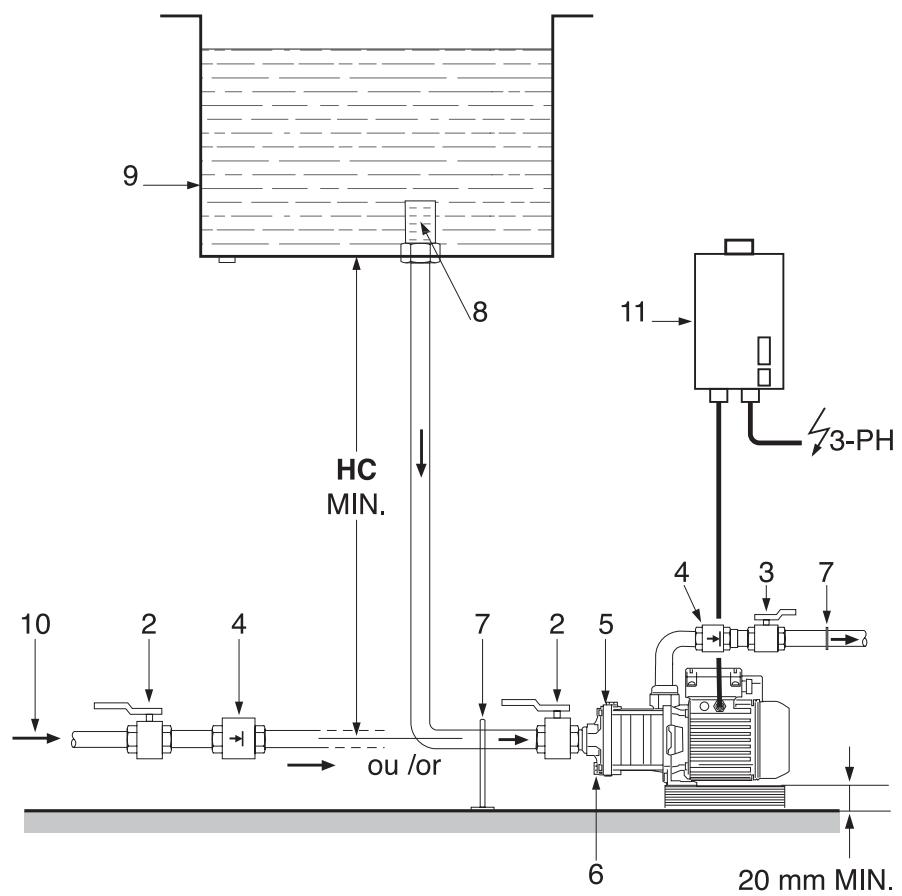


Fig. 2

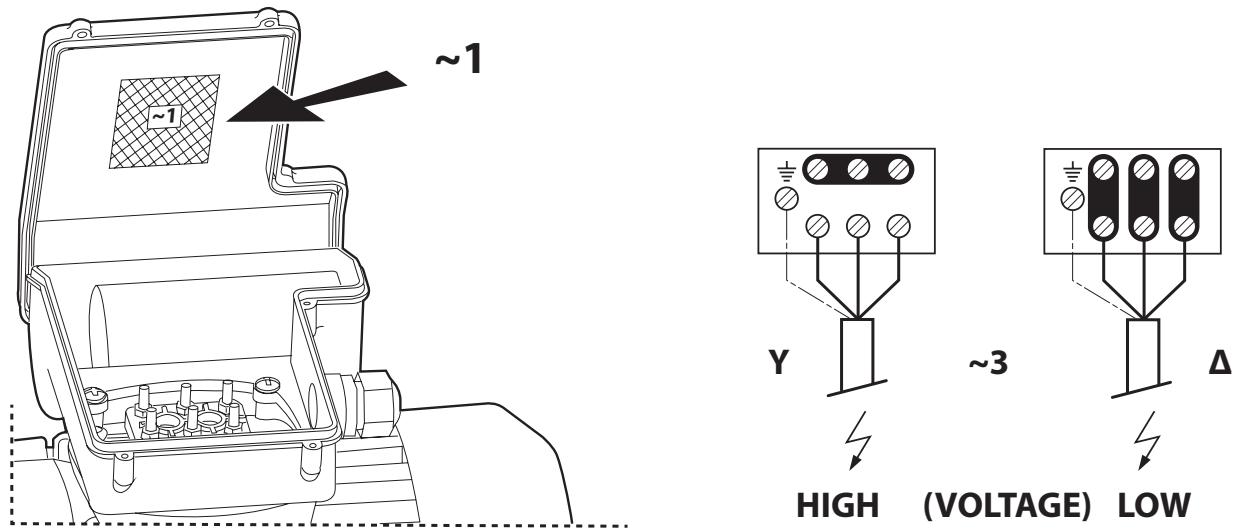


Fig. 3

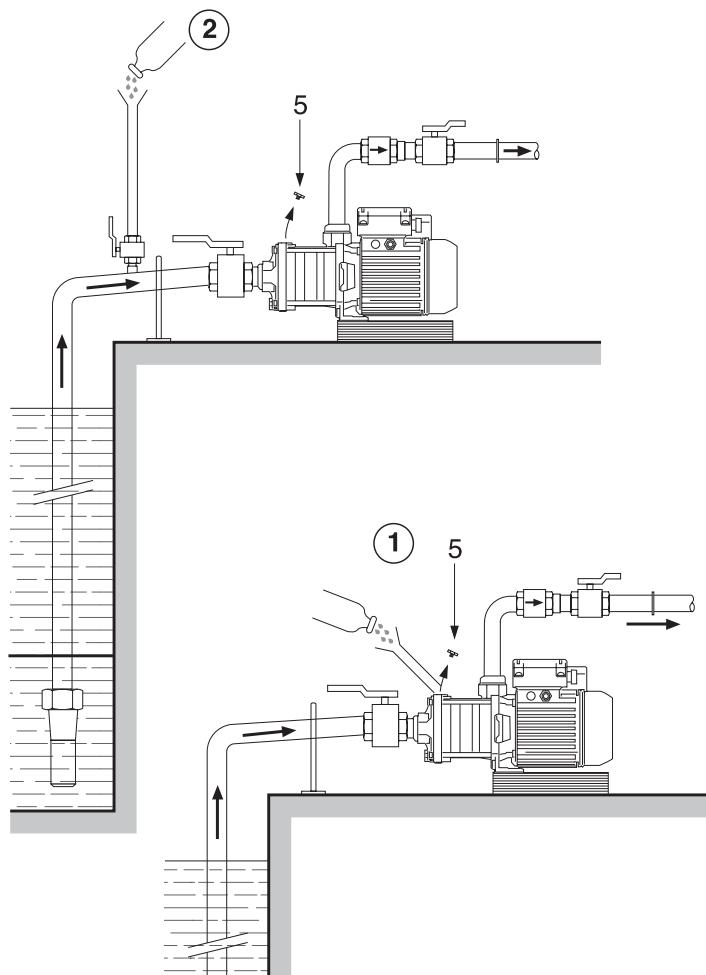


Fig. 4

1. General

Installation and service by qualified personnel only

1.1 Applications

Pumps for clear liquids in residential, agricultural, industrial, and other applications.

- Drawing of water from a well, spring, river, pond, etc. Water should not be drawn from abyssinian wells (tube, driven well).

1.2 Technical description

1.2.1 Performance and electrical data (Table 1)

Permissible temperature range	-15 °C to +90 °C	
Maximum ambient temperature	+40 °C	
Maximum permissible working pressure	10 bar	
Mains voltages:	50 Hz	60 Hz
	1~230V (±10%)	1~220V (-10%) - 1~240V (+6%)
	3~230/400V (±10%)	3~220/380V (-10%) - 3~265/460V (+10%)
Speed (RPM)	50 Hz 2900 RPM	60 Hz 3500 RPM
Mains fuse protection	see motor rating plate	
Protective system	IP 54	
Insulation class	F	

Sound pressure level 0/+3 dB(A)

Connection diameters

Power (kW)	1~	1~	3~	3~
	50Hz	60Hz	50Hz	60Hz
0.55	≤58	≤60	≤58	≤60
0.75	≤59	≤61	≤59	≤61
1.1	≤64	≤67	≤59	≤62
1.5	≤64	≤68	≤64	≤68
2.2	-	-	≤64	≤68

Models	Tapped port ND	
	Suction	Discharge
MHIL100	1" - (26-34)	1" - (26-34)
MHIL300	1" - (26-34)	1" - (26-34)
MHIL500	1" 1/4 - (33-42)	1" - (26-34)
MHIL900	1" 1/2 - (40-49)	1" 1/4 - (33-42)

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

1.2.2 Series specifications

Pump family	MHIL	3	02	E	-	1	-	230	-	50	-	2	/	XX/X	-	IE3
Flow rate (m ³ /h) (2-pole/ 50 Hz)																
Number of stages																
E = gaskets EPDM																
V = gaskets VITON																
1 = single-phase motor																
3 = three-phase motor																
Mains voltage (V)																
Frequency (Hz)																
2 poles																
Manufacturer's key																
IE3 motor																

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, mechanical and bacteriological causes.
- material damage.

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 any other parts may invalidate claims invoking the liability of the manufacturer 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.

The pump unit is to be transported with the shaft horizontal. When storing, ensure that the pump unit cannot overturn as a result of top-heaviness.

4. Description of product and accessories

4.1 Pump description

Centrifugal pump, multistage horizontal (2 to 7 stages, depending on model).

Not self-priming.

Tapped ports, axial suction, radial discharge in upward direction.

Shaft sealing by standardized mechanical packing.

4.2 Components supplied

- Centrifugal pump
- Installation and Operating Instructions.

4.3 Accessories

See catalogue or data sheet

5. Assembly and Installation

– See the rating plate of the pump and the rating plate of the motor.
Two standard cases:

Fig. 1 : Pump in suction

Fig. 2 : Pump under pressure from storage tank (item 9) or town water supply (item 10).

5.1 Installation

Install the pump in a place that is easy to reach, protected from frost, and as close as possible to the place from which water is drawn. Install the pump on a foundation block or directly on a smooth, level floor.

Pump attached by two holes for 8-mm dia. studs.

Required tools

- Open-end wrench 13 and 19,
- Allen wrench 6,
- Screwdriver.

Bear in mind that the altitude of the place of installation and the water temperature may reduce the suction head of the pump.

WARNING!

Above 80°C, plan to install the pump under pressure (figure 2).

Connections :

By hose with spiral reinforcement or by rigid pipe.

The diameter of the suction piping must never be less than that of the pump.

Limit the length of the suction pipe and avoid all features that cause losses of head (tappers, bends, valves,...).

No air entrance is allowed on the suction pipe which is showing a mounting declivity (2%) (figure 1).

If a rigid pipe is used, provide supports or collars so that the pump does not bear its weight (figure 1).

WARNING!

Carrefully seal the pipes with suitable product.

5.2 Electrical connections

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

– Refer to the motor data plate for its electrical characteristics (frequency, voltage, nominal current).

– Check if the motor it complies with the mains supply used.

– The three-phase motor must be protected by a circuit-breaker set to

the current marked on the motor data plate.

- The single-phase motor has built-in thermal protection.
- Provide a fuse disconnecting switch (type aM) to protect the power supply.

Line power

- Use a cable meeting standard board.

• **THREE-PHASE** : 4 conductors (3 phases + EARTH)

• **TWO-PHASE** : 3 conductors (2 phases + EARTH).

 A connection error would damage the motor. The power cable must never touch the pipe or the pump; make sure that it is away from any moisture.

The electric connections should be made as shown by the diagrams inside the cover of the motor terminal box (or see figure 3).

- The electric motors used with pumps can be connected to a frequency converter.

Strictly follow the directions given by the manufacturer's data sheet.

- The converter must not generate voltage peaks at the motor terminals higher than 850 V and dU/dt (Voltage/Time variation) higher than 2500 V/μs. If the value of the voltage signal are higher than those, risk of damage the motor are to forecast.

If it does, place an LC (inductance-capacitance) filter between the converter and the motor.

It must be connected to the motor with a minimum length cable, armoured if necessary.



DO NOT FORGET TO CONNECT THE EARTH.

6. Starting up

6.1 Prior cleaning



An hydraulic test is carried out on each pump in our factory. Some water stays inside them. It is recommended for hygienic reasons to clean the pump before using it on the potable water supply.

6.2 Filling, degassing

WARNING!

Never operate the pump dry, even briefly.

Pump under pressure (figure 2)

- Close the discharge valve (item 3).
- Open the suction valve (item 2).
- Unscrew the filling plug (item 5) on the main body of the pump.
- Put a funnel into the port and slowly and completely fill the pump and the suction pipe.
- When water flows out and all air has been eliminated, filling is complete.
- Screw the plug back in.

Pump in suction : two cases are possible :

1st CASE (figure 4-1) :

- Close the discharge valve (item 3).
- Open the suction valve (item 2).
- Unscrew the filling plug (item 5) on the main body of the pump.
- Put a funnel into the port and slowly and completely fill the pump and the suction pipe.
- When water flows out and all air has been eliminated, filling is complete.
- Screw the plug back in.

2nd CASE (figure 4-2) :

Filling can be made easier by fitting, on the pump suction pipe, a vertical pipe with a stopcock and a funnel.

- Close the discharge valve (item 3).
- Open the suction valve (item 2).
- Unscrew plug (item 5).
- Fill the pump and the suction pipe completely, until water flows out of the bleed device and all air bubbles have disappeared.
- Close the stopcock (which can be left in place), remove the pipe, and screw the filling plug back in.
- Start the motor by pressing briefly, wait for 20' to let air going up inside pump housing.

- Unscrew once again the plug (item 5) and, if a water flow doesn't appear, remove plug and complete the water level inside the pump. Close the plug and start again.

- If necessary, repeat this operation.

NOTE: We recommend to protect the pump against dry-running with an adequate device (automatic control, float switch, pressure switch).

6.3 Check dislocking and the motor sense of rotation

With an open-end screwdriver placed in the slot of the shaft on fan side, make sure that the pump turns freely without sticking.

Switch on the motor by short pressing on the motor-overload release and check that it turns in the direction indicated by the arrow located on the identification label of the pump.

If not, interchange two phase wires on the motor terminal block or circuit-breaker.

NOTE: The single-phase motors are designed to turn in the right direction in all cases.

6.4 Starting up



Depending on conveyed fluid and running of pump, surface temperature can exceed 68°C. Take necessary means to avoid injuries.

WARNING!

The pump must not be operated in a no-flow condition (discharge valve closed) for more than 10 minutes.

We recommend establishing a minimum flow of about 10 % of the rated capacity of the pump, to avoid the formation of a gas pocket at the top of the pump.

- Open the discharge valve to start the pump.
- Use a pressure gauge to check the stability of the discharge pressure; if it is unstable, bleed the pump again or perform the filling operation.
- Check that the current draw does not exceed the value marked on the motor data plate.

7. Servicing



Before any operation, switch off the pump(s).

No special servicing in operation. Always keep the pump perfectly clean.

For a prolonged shutdown, if there is no risk of frost, it is best not to drain the pump.

To avoid any blocking of the shaft and the hydraulic system, in frosty periods, empty the pump by removing the plug (item 6) and the filling plug (item 5). Screw the 2 plugs back in, without tightening them.

The replacement frequencies for the mechanical seal will depend on pump operating conditions, namely:

- For the mechanical seal, the temperature and pressure of the liquid pumped
- For the motor and other components, pressure head and ambient temperature.
- Priming frequency, duty continuous or periodic.

The mechanical seal do not require special servicing in operation.

Bearings are lubricated for lifetime and do not require any lubrication.

8. Fault finding, causes and remedies



If the liquid is toxic, corrosive or dangerous for human being, WILO must be informed or the qualified person in charge of the repairing. In this case, clean the pump to ensure a complete safety to the repairing man.

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

Fault	Cause	Remedy
Pump turns but no delivery	The internal parts are obstructed by particles	Dismantle the pump and clean
	Suction pipe obstructed	Clean all the pipes
	Air in suction pipes	Check tightness of the whole pipe up to the pump and seal it
	Pump is no more primed	Fill the pump to prime again. Check foot valve is tight
	Suction pressure is too low, it causes cavitation noise	Too high losses of head on suction or suction head is too high (check the NPSH of the installed pump)
	The pump turns in the wrong sense (3~ motor)	Cross the two phase wires on motor terminal block or motor-overload release to reverse the sense of rotation
	The supply voltage of the motor is too low	Check the voltage on the terminals of the motor and the cross-section of the conductors
The pump vibrates	Loose on its foundation	Check and tighten completely the nuts of the stud bolts
	Particles obstructing the pump	Dismantle the pump and clean
	Difficult rotation of the pump	Check the pump turns freely without abnormal sticking
	Bad electrical connection	Check the connections of the pump
The motor overheats	Too low voltage	Check voltage on terminals of the motor, it should be within $\pm 10\%$ of the rated voltage
	Pump obstructed by particles	Dismantle the pump and clean
	Ambient temperature above 40°C	The motor is aimed at operating at a maximum ambient temperature of 40°C
	Coupling failure in the terminal box	To conform to the motor plate
The pump delivers insufficient pressure	The motor fails to run at its normal speed (particles, inadequate motor supply ...)	Dismantle the pump and solve the defect
	The motor is defective	Replace the motor
	Bad filling of the pump	Fill the pump and drain until there are no more air bubbles
	The motor turns in the wrong way (three-phase motor)	Reverse the sense of rotation by interchanging the two phase wires on the motor terminal box or motor-overload release
	The supply voltage of the motor is too low	Check the voltage at the terminals of the motor and the cross-section of the conductors and of the coupling
The circuit-breaker device is on	Too low value of the thermal relay (3~ motor)	Check the current with an ammeter or set the value of the current rating on the motor data plate
	The voltage is too low	Check the adequate cross-section of the conductors of the electrical cable
	A phase is cut	Check it and change the electrical cable if necessary
	The thermal relay of the circuit-breaker is defective	Replace it
	A fuse is off	Replace it
The flow is irregular	The suction head (H_a) is not adequate	Study again the installation conditions and the recommendations described in this instruction
	The suction pipe has a lower diameter than the one of the pump	The suction pipe must have the same diameter as the suction pump port
	The strainer and the suction pipe are partially obstructed	Remove and clean

Subject to technical alterations.

**EU/EG KONFORMITÄTSERKLÄRUNG
EU/EC DECLARATION OF CONFORMITY
DECLARATION DE CONFORMITE UE/CE**

Als Hersteller erklären wir hiermit, dass die Pumpenbauarten der Baureihen
We, the manufacturer, declare that the pump types of the series
Nous, fabricant, déclarons que les types de pompes des séries

**MHIL
MHIL-N**

(Die Seriennummer ist auf dem Typenschild des Produktes nach Punkten b) & c) von §1.7.4.2 und §1.7.3 des Anhangs I der Maschinenrichtlinie angegeben. / The serial number is marked on the product site plate according to points b) & c) of §1.7.4.2 and §1.7.3 of the annex I of the Machinery directive. / Le numéro de série est inscrit sur la plaque signalétique du produit en accord avec les points b) & c) du §1.7.4.2 et du §1.7.3 de l'annexe I de la Directive Machines.)

in der gelieferten Ausführung folgenden einschlägigen Bestimmungen entsprechen :
In their delivered state comply with the following relevant directives :
dans leur état de livraison sont conformes aux dispositions des directives suivantes :

_ Maschinenrichtlinie 2006/42/EG

_ Machinery 2006/42/EC

_ Machines 2006/42/CE

und gemäss Anhang 1, §1.5.1, werden die Schutzziele der Niederspannungsrichtlinie 2014/35/EU ab 20 April 2016 eingehalten
and according to the annex 1, §1.5.1, comply with the safety objectives of the Low Voltage Directive 2014/35/EU from April 20th 2016
et, suivant l'annexe 1, §1.5.1, respectent les objectifs de sécurité de la Directive Basse Tension 2014/35/EU à partir du 20/04/2016

_ Elektromagnetische Verträglichkeit-Richtlinie 2014/30/EU ab 20 April 2016

_ Electromagnetic compatibility 2014/30/EU from April 20th 2016

_ Compatibilité électromagnétique 2014/30/UE à partir du 20 avril 2016

_ Richtlinie energieverbrauchsrelevanter Produkte 2009/125/EG

_ Energy-related products 2009/125/EC

_ Produits liés à l'énergie 2009/125/CE

Nach den Okodesign-Anforderungen der Verordnung 640/2009 für Ausführungen mit einem einstufigen Dreiphasen - 50Hz - Käfigläufer - Induktionselektromotor, der Verordnung 4/2014 "Geänderte

This applies according to eco-design requirements of the regulation 640/2009 to the versions with an induction electric motor, squirrel cage, three-phase, single speed, running at 50Hz, amended by Regulation 4/2014 "

suivant les exigences d'éco-conception du règlement 640/2009 aux versions comportant un moteur électrique à induction à cage d'écureuil, triphasé, mono-vitesse, fonctionnant à 50Hz, amendé par le règlement 4/2014"

und entsprechender nationaler Gesetzgebung,
and with the relevant national legislation,
et aux législations nationales les transposant,

sowie auch den Bestimmungen zu folgenden harmonisierten europäischen Normen :
comply also with the following relevant harmonized European standards :
sont également conformes aux dispositions des normes européennes harmonisées suivantes :

EN 809+A1

EN 60034-1

EN 60204-1

EN 60034-30-1

Bevollmächtigter für die Zusammenstellung der technischen Unterlagen ist:

Person authorized to compile the technical file is :

Personne autorisée à constituer le dossier technique est :

Dortmund,



H. HERCHENHEIN
Senior Vice President - Group ITQ

N°2117790.02 (CE-A-S n°4096242)

Digital unterschrieben von
holger.herchenhein@wilo.c
om
Datum: 2016.04.18
07:55:45 +02'00'

Division Clean and Waste Water
Quality Manager - PBU Multistage
WILO SALMSON FRANCE SAS
80 Bd de l'Industrie - CS 90527
F-53005 Laval Cedex

wilo

WILO SE
Nortkirchenstraße 100
44263 Dortmund - Germany

<p>(BG) - Български език ДЕКЛАРАЦИЯ ЗА СЪОТЕСТВИЕ ЕО</p> <p>WILO SE декларираат, че продуктите посочени в настоящата декларация съответстват на разпоредбите на следните европейски директиви и приелите ги национални законодателства:</p> <p>Машини 2006/42/EO ; Електромагнитна съвместимост 2014/30/EO ; Продукти, свързани с енергопотреблението 2009/125/EO</p> <p>както и на хармонизираните европейски стандарти, упоменати на предишната страница.</p>	<p>(CS) - Čeština ES PROHLÁŠENÍ O SHODĚ</p> <p>WILO SE prohlašuje, že výrobky uvedené v tomto prohlášení odpovídají ustanovením níže uvedených evropských směrnic a národním právním předpisům, které je přejímají:</p> <p>Stroje 2006/42/ES ; Elektromagnetická Kompatibilita 2014/30/ES ; Výrobků spojených se spotřebou energie 2009/125/ES</p> <p>a rovněž splňují požadavky harmonizovaných evropských norem uvedených na předcházející stránce.</p>
<p>(DA) - Dansk EF-OVERENSSTEMMELSESERKLÆRING</p> <p>WILO SE erklærer, at produkterne, som beskrives i denne erklæring, er i overensstemmelse med bestemmelserne i følgende europæiske direktiver, samt de nationale lovgivninger, der gennemfører dem:</p> <p>Maskiner 2006/42/EU ; Elektromagnetisk Kompatibilitet 2014/30/EU ; Energirelaterede produkter 2009/125/EU</p> <p>De er ligeledes i overensstemmelse med de harmoniserede europæiske standarder, der er anført på forrige side.</p>	<p>(EL) - Ελληνικά ΔΗΛΩΣΗ ΣΥΜΜΟΡΦΩΣΗΣ ΕΚ</p> <p>WILO SE δηλώνει ότι τα προϊόντα που ορίζονται στην παρούσα ευρωπαϊκά δήλωση είναι σύμφωνα με τις διατάξεις των παρακάτω οδηγιών και τις εθνικές νομοθεσίες στις οποίες έχει μεταφερθεί:</p> <p>Μηχανήματα 2006/42/EK ; Ηλεκτρομαγνητικής συμβατότητας 2014/30/EK ; Συνδεόμενα με την ενέργεια προϊόντα 2009/125/EK</p> <p>και επίσης με τα εξής εναρμονισμένα ευρωπαϊκά πρότυπα που αναφέρονται στην προηγούμενη σελίδα.</p>
<p>(ES) - Español DECLARACIÓN CE DE CONFORMIDAD</p> <p>WILO SE declara que los productos citados en la presente declaración están conformes con las disposiciones de las siguientes directivas europeas y con las legislaciones nacionales que les son aplicables :</p> <p>Máquinas 2006/42/CE ; Compatibilidad Electromagnética 2014/30/CE ; Productos relacionados con la energía 2009/125/CE</p> <p>Y igualmente están conformes con las disposiciones de las normas europeas armonizadas citadas en la página anterior.</p>	<p>(ET) - Eesti keel EU VASTAVUSDEKLARATSIOONI</p> <p>WILO SE kinnitab, et selles vastavustunnistuses kirjeldatud tooted on kooskõlas alljärgnevate Euroopa direktiivide säätetega ning riiklike seadusandlustega, mis nimetatud direktiivid üle on võtnud:</p> <p>Masinad 2006/42/EÜ ; Elektromagnetilist Ühilduvust 2014/30/EÜ ; Energiamõjuga toodete 2009/125/EÜ</p> <p>Samuti on tooted kooskõlas eelmisel leheküljel ära toodud harmoniseeritud Euroopa standarditega.</p>
<p>(FI) - Suomen kieli EY-VAATIMUSTENMUKAISUUSVAKUUTUS</p> <p>WILO SE vakuuttaa, että tässä vakuutuksessa kuvatut tuotteet ovat seuraavien eurooppalaisten direktiivien määräysten sekä niihin sovellettavien kansallisten lakiasetusten mukaisia:</p> <p>Koneet 2006/42/EY ; Sähkömagneettinen Yhteensopivuus 2014/30/EY ; Energiaan liittyvien tuotteiden 2009/125/EY</p> <p>Lisäksi ne ovat seuraavien edellisellä sivulla mainittujen yhdenmukaistettujen eurooppalaisten normien mukaisia.</p>	<p>(GA) - Gaeilge EC DEARBHÚ COMHLÍONTA</p> <p>WILO SE ndearbhaíonn an cur síos ar na táigí atá i ráiteas seo, siad i gcomhréir leis na forálacha atá sna treoracha seo a leanas na hEorpa agus leis na dlíthe náisiúnta is infheidhme orthu:</p> <p>Innealra 2006/42/EC ; Comhoiriúnacht Leictreamaighnéadach 2014/30/EC ; Fuinneamh a bhaineann le táigí 2009/125/EC</p> <p>Agus siad i gcomhréir le forálacha na caighdeáin chomhchuibhithe na hEorpa dá dtagraítear sa leathanach roimhe seo.</p>
<p>(HR) - Hrvatski EZ IZJAVA O SUKLADNOSTI</p> <p>WILO SE izjavljuje da su proizvodi navedeni u ovoj izjavi u skladu sa sljedećim prihvaćenim europskim direktivama i nacionalnim zakonima:</p> <p>EZ smjernica o strojevima 2006/42/EZ ; Elektromagnetna kompatibilnost - smjernica 2014/30/EZ ; Smjernica za proizvode relevantne u pogledu potrošnje energije 2009/125/EZ</p> <p>i usklađenim europskim normama navedenim na prethodnoj stranici.</p>	<p>(HU) - Magyar EK-MEGFELELŐSÉGI NYILATKOZAT</p> <p>WILO SE kijelenti, hogy a jelen megfelelőségi nyilatkozatban megjelölt termékek megfelelnek a következő európai irányelvek előírásainak, valamint azok nemzeti jogrendbe általált rendelkezéseinek:</p> <p>Gépek 2006/42/EK ; Elektromágneses összetérhetőségre 2014/30/EK ; Energiaival kapcsolatos termékek 2009/125/EK</p> <p>valamint az előző oldalon szereplő, harmonizált európai szabványoknak.</p>
<p>(IS) - Íslenska EB LEYFISYFIRLÝSING</p> <p>WILO SE lýsir því yfir að vörurnar sem um getur í þessari yfirlýsingu eru í samræmi við eftirfarandi tilskipunum ESB og landslögum hafa samþykkt:</p> <p>Vélartilskipun 2006/42/EB ; Rafseguls-samhæfni-tilskipun 2014/30/EB ; Tilskipun varðandi vörur tengdar orkunotkun 2009/125/EB</p> <p>og samhæfða evrópska staðla sem nefnd eru í fyrri síðu.</p>	<p>(IT) - Italiano DICHIARAZIONE CE DI CONFORMITÀ</p> <p>WILO SE dichiara che i prodotti descritti nella presente dichiarazione sono conformi alle disposizioni delle seguenti direttive europee nonché alle legislazioni nazionali che le traspongono :</p> <p>Macchine 2006/42/CE ; Compatibilità Elettromagnetica 2014/30/CE ; Prodotti connessi all'energia 2009/125/CE</p> <p>E sono pure conformi alle disposizioni delle norme europee armonizzate citate a pagina precedente.</p>
<p>(LT) - Lietuvių kalba EB ATITIKTIES DEKLARACIJA</p> <p>WILO SE pareiškia, kad šioje deklaracijoje nurodyti gaminiai atitinka šiuos Europos direktyvų ir jas perkeliančius nacionalinių įstatymų nuostatus:</p> <p>Mašinos 2006/42/EB ; Elektromagnetinis Suderinamumas 2014/30/EB ; Energija susijusiems gaminiams 2009/125/EB</p> <p>ir taip pat harmonizuotas Europos normas, kurios buvo cituotos ankstesniame puslapyje.</p>	<p>(LV) - Latviešu valoda EK ATBILSTĪBAS DEKLĀCIJU</p> <p>WILO SE deklarē, ka izstrādājumi, kas ir nosaukti šajā deklācijā, atbilst šeit uzskaitīto Eiropas direktīvu nosacījumiem, kā arī atsevišķu valstu likumiem, kuros tie ir ietverti:</p> <p>Mašīnas 2006/42/EK ; Elektromagnētiskās Saderības 2014/30/EK ; Enerģiju saistītiem ražojumiem 2009/125/EK</p> <p>un saskaņotajiem Eiropas standartiem, kas minēti iepriekšējā lappusē.</p>

<p>(MT) - Malti DIKJARAZZJONI KE TA' KONFORMITÀ</p> <p>WILO SE jiddikjara li l-prodotti specifikati f'din id-dikjarazzjoni huma konformi mad-direttivi Ewropej li jsegwu u mal-leġislazzjonijiet nazzjonali li japplikawhom:</p> <p>Makkinarju 2006/42/KE ; Kompatibbiltà Elettromanjetika 2014/30/KE ; Prodotti relatati mal-enerġija 2009/125/KE</p> <p>kif ukoll man-normi Ewropej armoniżżati li jsegwu imsemmija fil-paġna preċedenti.</p>	<p>(NL) - Nederlands EG-VERKLARING VAN OVEREENSTEMMING</p> <p>WILO SE verklaart dat de in deze verklaring vermelde producten voldoen aan de bepalingen van de volgende Europese richtlijnen evenals aan de nationale wetgevingen waarin deze bepalingen zijn overgenomen:</p> <p>Machines 2006/42/EG ; Elektromagnetische Compatibiliteit 2014/30/EG ; Energiegerelateerde producten 2009/125/EG</p> <p>De producten voldoen eveneens aan de geharmoniseerde Europese normen die op de vorige pagina worden genoemd.</p>
<p>(NO) - Norsk EU-OVERENSSTEMMELSESERKLAERING</p> <p>WILO SE erklærer at produktene nevnt i denne erklæringen er i samsvar med følgende europeiske direktiver og nasjonale lover:</p> <p>EG-Maskindirektiv 2006/42/EG ; EG-EMV-Elektromagnetisk kompatibilitet 2014/30/EG ; Direktiv energirelaterte produkter 2009/125/EF</p> <p>og harmoniserte europeiske standarder nevnt på forrige side.</p>	<p>(PL) - Polski DEKLARACJA ZGODNOŚCI WE</p> <p>WILO SE oświadcza, że produkty wymienione w niniejszej deklaracji są zgodne z postanowieniami następujących dyrektyw europejskich i transponującymi je przepisami prawa krajowego:</p> <p>Maszyn 2006/42/WE ; Kompatybilności Elektromagnetycznej 2014/30/WE ; Produktów związanych z energią 2009/125/WE</p> <p>oraz z następującymi normami europejskimi zharmonizowanymi podanymi na poprzedniej stronie.</p>
<p>(PT) - Português DECLARAÇÃO CE DE CONFORMIDADE</p> <p>WILO SE declara que os materiais designados na presente declaração obedecem às disposições das directivas europeias e às legislações nacionais que as transcrevem :</p> <p>Máquinas 2006/42/CE ; Compatibilidade Electromagnética 2014/30/CE ; Produtos relacionados com o consumo de energia 2009/125/CE</p> <p>E obedecem também às normas europeias harmonizadas citadas na página precedente.</p>	<p>(RO) - Română DECLARAȚIE DE CONFORMITATE CE</p> <p>WILO SE declară că produsele citate în prezenta declaratie sunt conforme cu dispozițiile directivelor europene următoare și cu legislațiile naționale care le transpun :</p> <p>Mașini 2006/42/CE ; Compatibilitate Electromagnetică 2014/30/CE ; Produselor cu impact energetic 2009/125/CE</p> <p>și, de asemenea, sunt conforme cu normele europene armonizate citate în pagina precedentă.</p>
<p>(RU) - русский язык Декларация о соответствии Европейским нормам</p> <p>WILO SE заявляет, что продукты, перечисленные в данной декларации о соответствии, отвечают следующим европейским директивам и национальным предписаниям:</p> <p>Директива ЕС по машинному оборудованию 2006/42/EC ; Директива ЕС по электромагнитной совместимости 2014/30/EC ; Директива о продукции, связанной с энергопотреблением 2009/125/EC</p> <p>и гармонизированным европейским стандартам, упомянутым на предыдущей странице.</p>	<p>(SK) - Slovenčina ES VYHLÁSENIE O ZHODE</p> <p>WILO SE čestne prehlasuje, že výrobky ktoré sú predmetom tejto deklarácie, sú v súlade s požiadavkami nasledujúcich európskych direktív a odpovedajúcich národných legislatívnych predpisov:</p> <p>Strojových zariadeniach 2006/42/ES ; Elektromagnetickej Kompatibilitu 2014/30/ES ; Energeticky významných výrobkov 2009/125/ES</p> <p>ako aj s harmonizovanými európskych normami uvedenými na predchádzajúcej strane.</p>
<p>(SL) - Slovenščina ES-IZZAVA O SKLADNOSTI</p> <p>WILO SE izjavlja, da so izdelki, navedeni v tej izjavi, v skladu z določili naslednjih evropskih direktiv in z nacionalnimi zakonodajami, ki jih vsebujejo:</p> <p>Stroji 2006/42/ES ; Elektromagnetno Združljivostjo 2014/30/ES ; Izdelkov, povezanih z energijo 2009/125/ES</p> <p>pa tudi z usklajenimi evropskimi standardi, navedenimi na prejšnji strani.</p>	<p>(SV) - Svenska EG-FÖRSÄKRAN OM ÖVERENSSTÄMMELSE</p> <p>WILO SE intygar att materialet som beskrivs i följande intyg överensstämmer med bestämmelserna i följande europeiska direktiv och nationella lagstiftningar som inför dem:</p> <p>Maskiner 2006/42/EG ; Elektromagnetisk Kompatibilitet 2014/30/EG ; Energirelaterade produkter 2009/125/EG</p> <p>Det överensstämmer även med följande harmoniserade europeiska standarder som nämnts på den föregående sidan.</p>
<p>(TR) - Türkçe CE UYGUNLUK TEYİD BELGESİ</p> <p>WILO SE bu belgede belirtilen ürünlerin aşağıdaki Avrupa yönetmeliklerine ve ulusal kanunlara uygun olduğunu beyan etmektedir:</p> <p>Makine Yönetmeliği 2006/42/AT ; Elektromanyetik Uyumluluk Yönetmeliği 2014/30/AT ; Eko Tasarım Yönetmeliği 2009/125/AT</p> <p>ve önceki sayfada belirtilen uyumlaştırılmış Avrupa standartlarına.</p>	

Wilo – International (Subsidiaries)

Argentina WILO SALMSON Argentina S.A. C1295ABI Ciudad Autónoma de Buenos Aires T +54 11 4361 5929 info@salmson.com.ar	Canada WILO Canada Inc. Calgary, Alberta T2A 5L4 T +1 403 2769456 bill.lowe@wilo-na.com	Greece WILO Hellas AG 14569 Anixi (Attika) T +30 2 6248300 wilo.info@wilo.gr	Latvia WILO Baltic SIA 1019 Riga T +371 6714-5229 info@wilo.lv	Romania WILO Romania s.r.l. 077040 Com. Chiajna Jud. Ilfov T +40 21 3170164 wilo@wilo.ro	Sweden WILO Sverige AB 35246 Växjö T +46 470 727600 wilo@wilo.se
Australia WILO Australia Pty Limited Murrarrie, Queensland, 4172 T +61 7 3907 6900 chriss.dayton@wilo.com.au	China WILO China Ltd. 101300 Beijing T +86 10 58041888 wilobj@wilo.com.cn	Hungary WILO Magyarország Kft 2045 Törökpalint (Budapest) T +36 23 889500 wilo@wilo.hu	Lebanon WILO LEBANON SARL Jdeideh 1202 2030 Lebanon T +961 1 888910 info@wilo.com.lb	Russia WILO Rus ooo 123592 Moscow T +7 495 7810690 wilo@wilo.ru	Switzerland EMB Pumpen AG 4310 Rheinfelden T +41 61 83680-20 info@emb-pumpen.ch
Austria WILO Pumpen Österreich GmbH 2351 Wiener Neudorf T +43 507 507-0 office@wilo.at	Croatia Wilo Hrvatska d.o.o. 10430 Samobor T +38 51 3430914 wilo-hrvatska@wilo.hr	India WILO India Mather and Platt Pumps Ltd. Pune 411019 T +91 20 27442100 services@matherplatt.com	Lithuania WILO Lietuva UAB 03202 Vilnius T +370 5 2136495 mail@wilo.lt	Saudi Arabia WILO ME - Riyadh Riyadh 11465 T +966 1 4624430 wshoula@wataniaind.com	Taiwan WILO Taiwan Company Ltd. Sanchong Dist., New Taipei City 24159 T +886 2 2999 8676 nelson.wu@wilo.com.tw
Azerbaijan WILO Caspian LLC 1014 Bakú T +994 12 5962372 info@wilo.az	Denmark WILO Danmark A/S 2690 Karlslunde T +45 70 253312 wilo@wilo.dk	Indonesia WILO Pumps Indonesia Jakarta Selatan 12140 T +62 11 274676 citrawilo@cbn.net.id	Morocco WILO MAROC SARL 20600 CASABLANCA T +212 (0) 5 22 66 09 24/28 contact@wilo.ma	Serbia and Montenegro WILO Beograd d.o.o. 11000 Beograd T +381 11 2851278 office@wilo.rs	Turkey WILO Pompa Sistemleri San. ve Tic. A.S., 34956 İstanbul T +90 216 2509400 wilo@wilo.com.tr
Belarus WILO Bel OOO 220035 Minsk T +375 17 2535363 wilo@wilo.by	Estonia WILO Eesti OÜ 12618 Tallinn T +372 6 509780 info@wilo.ee	Ireland WILO Ireland Limerick T +353 61 227566 sales@wilo.ie	The Netherlands WILO Nederland b.v. 1551 NA Westzaan T +31 88 9456 000 info@wilo.nl	Slovakia WILO CS s.r.o., org. Zložka 83106 Bratislava T +421 2 33014511 info@wilo.sk	Ukraine WILO Ukraina t.o.w. 01033 Kiev T +38 04 2011870 wilo@wilo.ua
Belgium WILO SA/NV 1083 Ganshoren T +32 2 4823333 info@wilo.be	Finland WILO Finland OY 02330 Espoo T +358 207401540 wilo@wilo.fi	Italy WILO Italia s.r.l. 20068 Peschiera Borromeo (Milano) T +39 25538351 wilo.italia@wilo.it	Norway WILO Norge AS 0975 Oslo T +47 22 804570 wilo@wilo.no	Slovenia WILO Adriatic d.o.o. 1000 Ljubljana T +386 1 5838130 wilo.adriatic@wilo.si	United Arab Emirates WILO Middle East FZE Jebel Ali Free Zone-South PO Box 262720 Dubai T +971 4 880 91 77 info@wilo.ae
Bulgaria WILO Bulgaria Ltd. 1125 Sofia T +359 2 9701970 info@wilo.bg	France WILO S.A.S. 78390 Bois d'Arcy T +33 1 30050930 info@wilo.fr	Kazakhstan WILO Central Asia 050002 Almaty T +7 727 2785961 info@wilo.kz	Poland WILO Polska Sp. z.o.o. 05-506 Lesznowola T +48 22 7026161 wilo@wilo.pl	Portugal Bombas Wilo-Salmson Portugal Lda. 4050-040 Porto T +351 22 2080350 bombas@wilo.pt	Spain WILO Ibérica S.A. 28806 Alcalá de Henares (Madrid) T +34 91 8797100 wilo.iberica@wilo.es
Brazil WILO Brasil Ltda Jundiaí – São Paulo – Brasil ZIP Code: 13.213-105 T +55 11 2923 (WILO) 9456 wilo@wilo-brasil.com.br	Great Britain WILO (U.K.) Ltd. Burton Upon Trent DE14 2WJ T +44 1283 523000 sales@wilo.co.uk	Korea WILO Pumps Ltd. 618-220 Gangseo, Busan T +82 51 950 8000 wilo@wilo.co.kr			Vietnam WILO Vietnam Co Ltd. Ho Chi Minh City, Vietnam T +84 8 38109975 nkminh@wilo.vn

wilo

Pioneering for You

WILO SE
Nortkirchenstraße 100
D-44263 Dortmund
Germany
T +49(0)231 4102-0
F +49(0)231 4102-7363
wilo@wilo.com
www.wilo.com