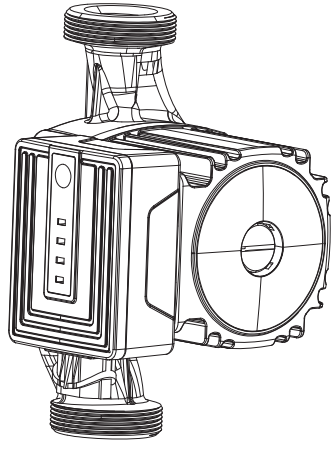
POMPE DE CIRCULATIE
CU EFICIENTA ENERGETICA RIDICATA
Instructiuni de operare si instalare

PRO GREEN



ErP READY
EEI≤0.23

Atentie!
Inainte de instalare cititi aceste instructiuni de instalare si utilizare. Instalarea si utilizarea trebuie sa fie conforme cu regulile si codurile de buna practica acceptate.

TRIVAS
open for innovation and development

CUPRINS

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1. Informatii generale

Aceste Instructiuni de Operare explica functiile si operarea pompei o data instalata si gata de utilizare.

2. Pompa de circulatie economica

Pompa de circulatie economica este proiectata pentru circularea apei in sistemele de incalzire. Instalati pompa in:

- sisteme de incalzire in pardoseala
- sisteme cu o singura conducta
- sisteme cu doua conducte

Aceste pompe au un motor cu magnet permanent iar controlul diferentei de presiune asigura reglarea continua a performantei pompei la cerintele actuale.

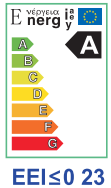
2.1. Avantajele instalarii pompei de circulatie economica

Instalarea acestor pompe inseamna:

Instalare si punere in functiune usoara
- Pompa este usor de instalat
- Cu setarile din fabrica pompa poate, in cele mai multe cazuri, sa fie pornita fara alte reglaje

Grad ridicat de confort
- Nivel de zgomot redus

Nivel scazut al consumului de energie
Pompa are un nivel scazut de consum de energie in comparatie cu produsele conventionale conform etichetei energetice:



EEI≤0 23

RO

Cititi acest manual inainte de a instala si utiliza pompa



Asigurati-va ca exista debit de apa de fiecare data cand porniti pompa! Este strict interzisa utilizarea pompei fara lichid in ea! Nu strangeti sau slabiti suruburile sub presiune!



Daca pompa este instalata intr-un loc cu caracter special, trebuie respectate conditiile de siguranta relevante!



Instalarea si punerea in functiune trebuie sa fie efectuate de catre personal calificat. Nu ne asumam eventualele defectiuni ale produsului cauzate de utilizarea incorecta.



In timpul functionarii pompei, suprafata acesteia poate fi fierbinte. Nu atingeti!



Cand presiunea din interiorul pompei este mare, in timpul aerisirii sau golirii, opriti alimentarea. Evacuati cu grija aerul sau apa!



Acordati atentie masurilor de siguranta in timpul operatiunilor de intretinere!

3. Conditii de utilizare

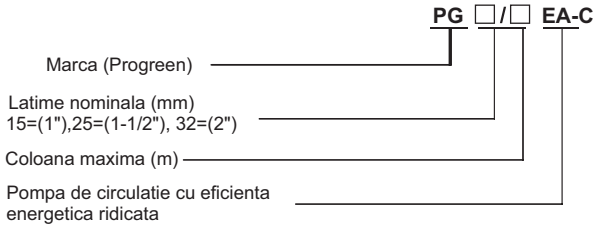
Lichidele trebuie sa fie curate, necorozive si fara potential inflamabil, fara continut de particule solide, fibre sau uleiuri minerale.
Apa din sistemele de incalzire trebuie sa indeplineasca standardele privind calitatea acesteia conform reglementarilor in vigoare.
1. Temperatura medie: TF 95°C
2. Presiune maxima de functiionare: 10bar
3. Clasa de izolatie: F
4. Tensiune lucru: 220V-240V/50Hz
5. Clasa protectie: Ip44

Acest produs nu trebuie utilizat in conditii de umezeala ridicata sau scufundat in apa!

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4. Nomenclator



5. Date tehnice

Model	Intrare/ Iesire	Debit nominal (m^3/h)	Coloana apa (m)	Debit maxim (m^3/h)	Coloana max apa (m)	Curent nominal (A)	Putere (W)	EM (%)
PG25/4EA-C130	G1-1/2	1.5	2.2	3.0	4	0.19	22	45
PG25/4EA-C180		1.5	2	3.0	4	0.19	22	45
PG25/5EA-C130		1.5	3.2	3.4	5	0.26	32	45
PG25/5EA-C180		1.5	3	3.4	5	0.26	32	45
PG25/6EA-C130		2	3.6	3.7	6	0.38	45	45
PG25/6EA-C180		2	3.2	3.7	6	0.38	45	45
PG25/7EA-C130		2	3.7	4.0	7	0.43	52	45
PG25/7EA-C180		2	3.7	4.0	7	0.43	52	45
PG25/8EA-C130		2.5	4.5	5.2	8	0.53	63	45
PG25/8EA-C180		2.5	4.5	5.2	8	0.53	63	45
PG25/9EA-C130		2.5	6.2	5.4	9	0.76	90	45
PG25/9EA-C180		2.5	6.3	5.4	9	0.76	90	45
PG25/10EA-C130		2.5	6.8	5.7	10	0.83	100	45
PG25/10EA-C180		2.5	7	5.7	10	0.83	100	45
PG25/12EA-C130		2.5	7.6	6.1	12	0.98	120	45
PG25/12EA-C180		2.5	8	6.1	12	0.98	120	45
PG32/4EA-C180	G2	1.5	2	3.0	4	0.19	22	45
PG32/5EA-C180		1.5	3	3.4	5	0.26	32	45
PG32/6EA-C180		2	3.2	3.7	6	0.38	45	45
PG32/7EA-C180		2	3.7	4.0	7	0.43	52	45
PG32/8EA-C180		2.5	4.5	5.2	8	0.53	63	45
PG32/9EA-C180		2.5	6.2	5.4	9	0.76	90	45
PG32/10EA-C180		2.5	7	5.7	10	0.83	100	45
PG32/12EA-C180		2.5	8	6.1	12	0.98	120	45

RO

6. Panou control



Buton

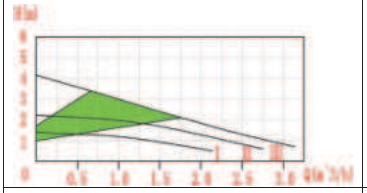
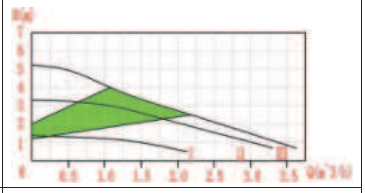
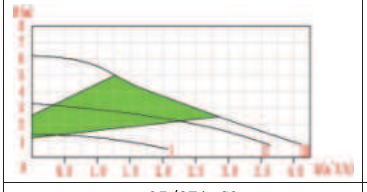
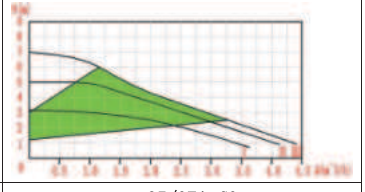
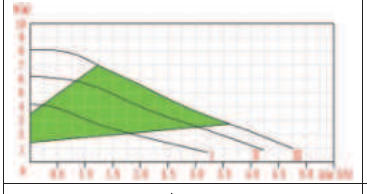
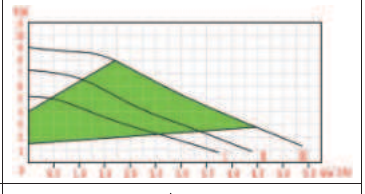
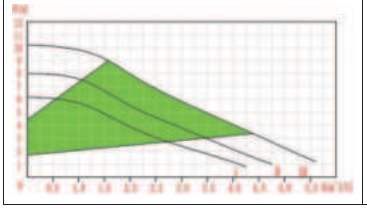
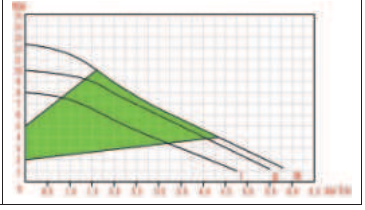
▶	Buton selectare mod operare	Apasati scurt pentru a schimba modul de operare

III	Indicator viteza a 3-a de functionare	Setare manuala viteza 3 de functioanare
II	Indicator viteza a 2-a de functionare	Setare manuala viteza 2 de functioanare
I	Indicator viteza intai de functionare	Setare manuala viteza 1 de functioanare
ECO	Indicator functionare mod ECO-AUTOMAT	Acest mod de functionare permite pompei sa ajusteaze automat puterea de functionare in functie de debitul apei

RO

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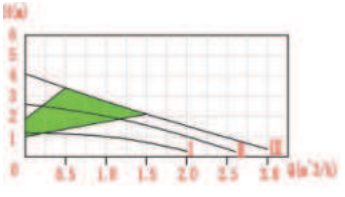
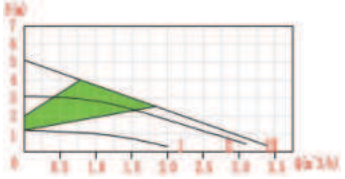
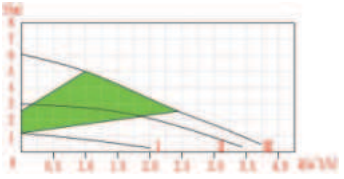
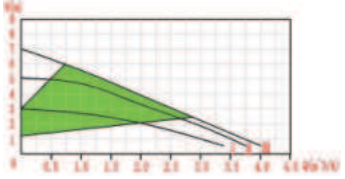
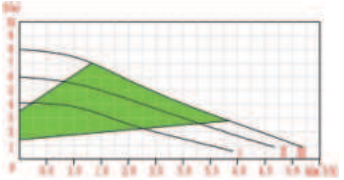
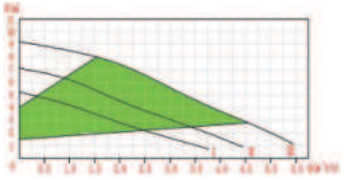
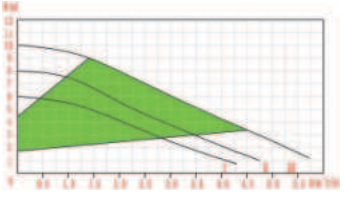
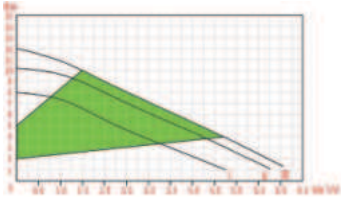
7. Curba de performanta

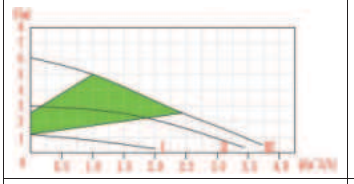
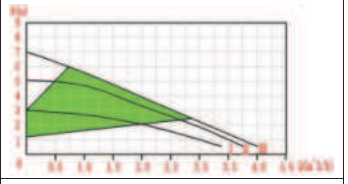
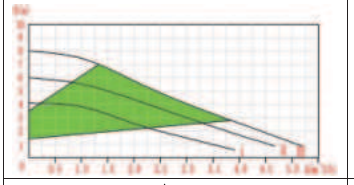
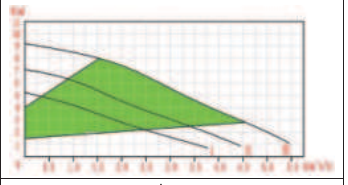
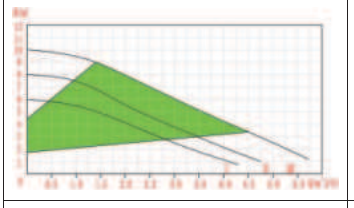
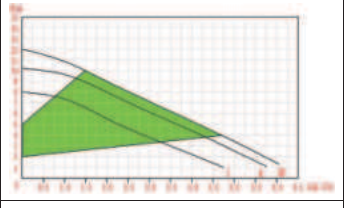
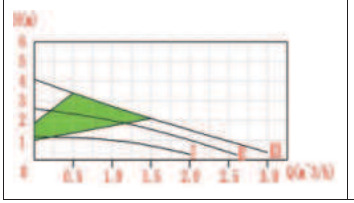
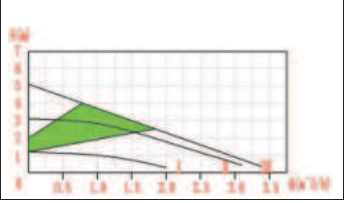
25/4EA-C3	25/5EA-C3
	
25/6EA-C3	25/7EA-C3
	
25/8EA-C3	25/9EA-C3
	
25/10EA-C3	25/12EA-C3
	

RO

POMPE DE CIRCULATIE CU EFICIENTA ENERGETICA RIDICATA
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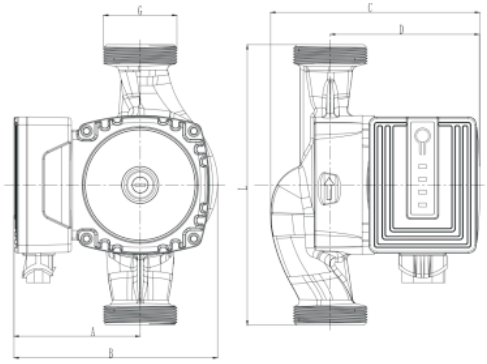
RO

25/4EA-C8	25/5EA-C8
	
25/6EA-C8	25/7EA-C8
	
25/8EA-C8	25/9EA-C8
	
25/10EA-C8	25/12EA-C8
	

32/6EA-C8	32/7EA-C8
	
32/8EA-C8	32/9EA-C8
	
32/10EA-C8	32/12EA-C8
	
32/4EA-C8	32/5EA-C8
	

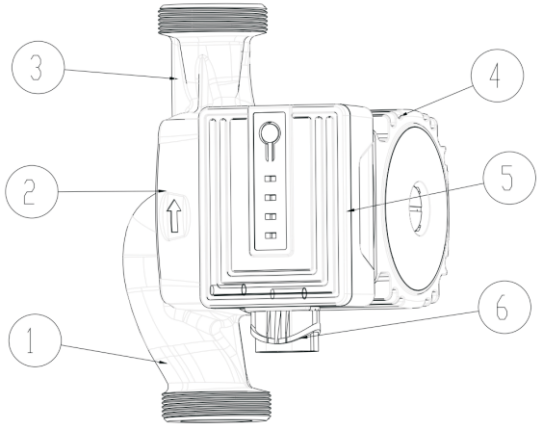
RO

8. Dimensiuni



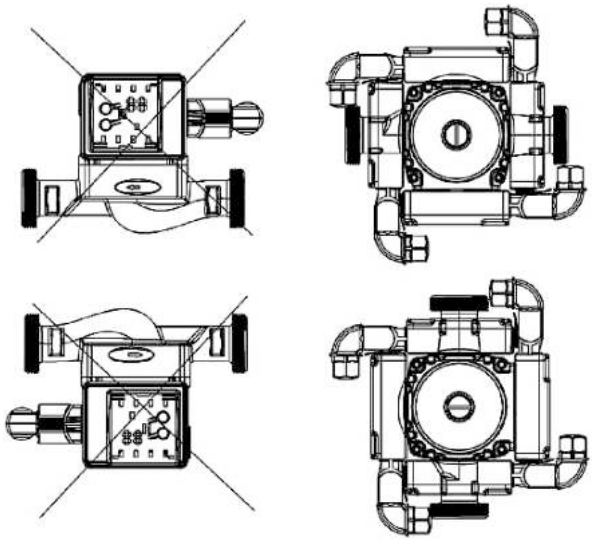
Model	Dimensiune/mm					
	A	B	C	D	L	G
PG25/4EA - C130	81	131	142	106	130	1.5
PG25/5EA - C130	81	131	142	106	130	1.5
PG25/6EA - C130	81	131	142	106	130	1.5
PG25/7EA - C130	81	131	142	106	130	1.5
PG25/8EA - C130	81	131	142	106	130	1.5
PG25/9EA - C130	81	131	142	106	130	1.5
PG25/10EA - C130	81	131	142	106	130	1.5
PG25/12EA - C130	81	131	142	106	130	1.5
PG25/4EA - C180	81	131	135	96	180	1.5
PG25/5EA - C180	81	131	135	96	180	1.5
PG25/6EA - C180	81	131	135	96	180	1.5
PG25/7EA - C180	81	131	135	96	180	1.5
PG25/8EA - C180	81	131	135	96	180	1.5
PG25/9EA - C180	81	131	135	96	180	1.5
PG25/10EA - C180	81	131	135	96	180	1.5
PG25/12EA - C180	81	131	135	96	180	1.5
PG32/4EA - C180	81	131	135	96	180	2
PG32/5EA - C180	81	131	135	96	180	2
PG32/6EA - C180	81	131	135	96	180	2
PG32/7EA - C180	81	131	135	96	180	2
PG32/8EA - C180	81	131	135	96	180	2
PG32/9EA - C180	81	131	135	96	180	2
PG32/10EA - C180	81	131	135	96	180	2
PG32/12EA - C180	81	131	135	96	180	2

Fig 1

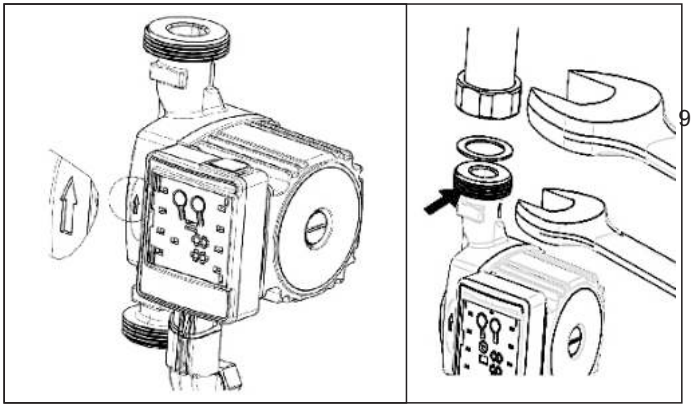


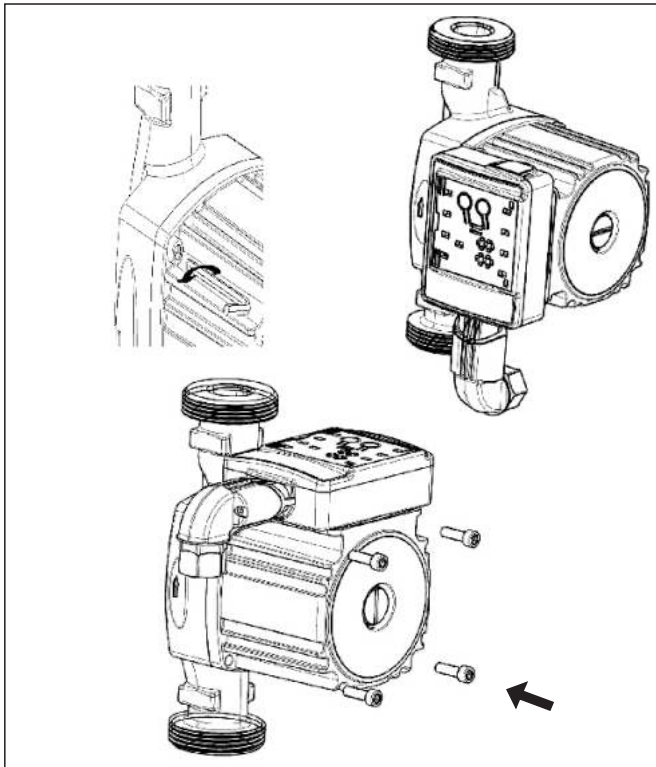
Componente Fig.1

1. intrare
2. corpul pompei
3. iesire
4. carcasa motor
5. panou control
6. terminal conectare cablu alimentare

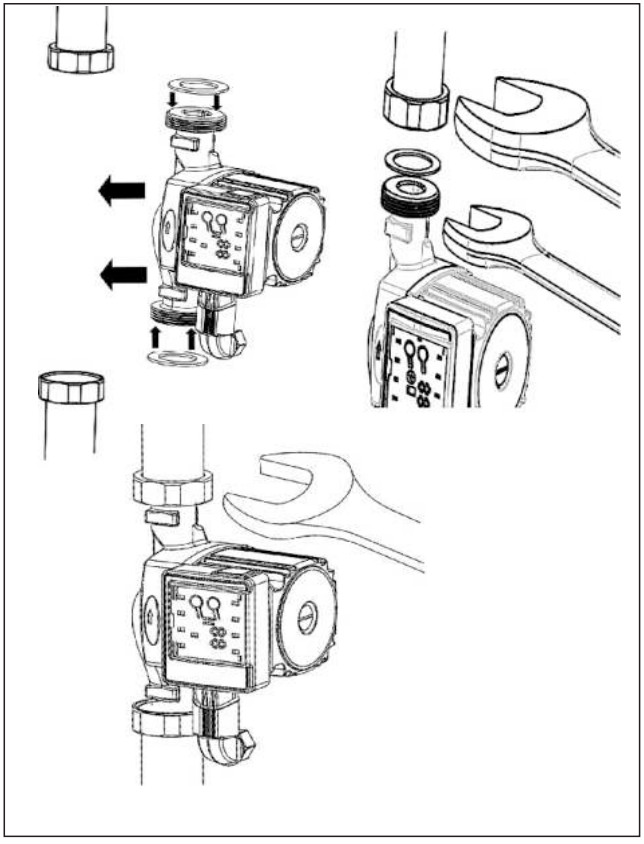


Atentie!
Pompa trebuie instalata cu axul motorului in pozitie orizontala.

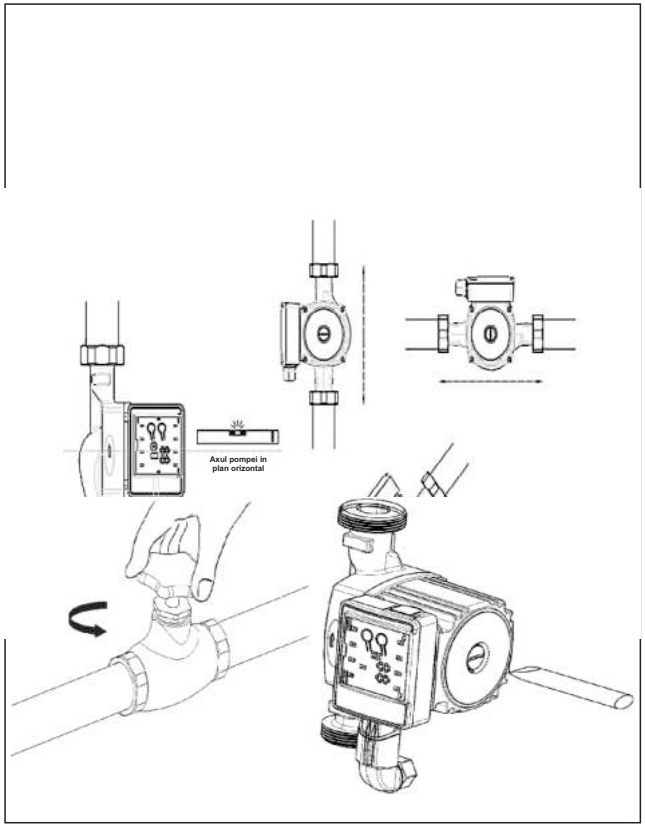




Atentie!
Lichidul din pompa poate fi foarte fierbinte si sub presiune ridicata. Drenati sistemul sau inchideti valvele de pe fiecare parte a pompei inainte de a indeparta suruburile!



Atentie!
Strangeti cele doua garnituri dupa ce pompa este pozitionata pe conducta!



9. Posibile defectiuni, cauze si remedieri

Defectiuni	Panou control	Cauze	Remedieri
1. Pompa nu functioneaza	Lumina stinsa	a) cablul de alimentare nu este conectat corect	Reconectati cablul
		b) intrerupatorul de circuit de curent sau tensiune s-a blocat	Inlocuiti intrerupatorul
		c) pompa defecta	Inlocuiti pompa
	Indicator alimentare aprins	a) alimentare defectuoasa, posibil scazuta	Verificati daca alimentarea cu electricitate se afla in parametri
		b) pompa este blocata	Indepartati impuritatile
2. Zgomot in sistem	Indicatorul alimentare si campul luminos pentru setarea pompei sunt aprinse	a) aer in sistem	Aerisiti sistemul
		b) debitul este prea mare	Micsorati debitul pe alimentare
3. Zgomot in pompa	Indicatorul alimentare si campul luminos pentru setarea pompei sunt aprinse	a) aer in pompa	Lasati pompa sa functioneze deoarece se autoaeriseste in timp.
		b) presiunea de admisie este prea scazuta	Mariti presiunea de admisie si verificati volumul aerului din vasul de expansiune in cazul in care acesta este instalat
4.Performanta scazuta	Indicatorul alimentare si campul luminos pentru setarea pompei sunt aprinse	performanta pompei este prea scazuta	Cresteti debitul de apa pe alimentarea pompei.

RO

10. Coduri eroare

Cod de eroare semnifica (in functie de numarul de clipiri luminoase, lumina va fi stinsa timp de aproximativ 1 secunda inainte ca eroarea sa fie raportata si lumina va fi stinsa aproximativ 1 secunda dupa ce eroarea este raportata) patru lumini 

care clipesc in acelasi timp.

Clipeste 1 data : Rotor blocat
Clipeste de 2 ori : Lipsa faza la terminalul de conectare
Clipeste de 3 ori : Protectie temperatura ridicata
Clipeste de 4 ori : Scurt-circuit intre faze
Clipeste de 5 ori : Supracurent

11. Atentionari

1. Inainte de a instala si utiliza pompa, trebuie sa verificati daca aceasta a suferit deteriorari in timpul transportului sau depozitarii, daca stecherul sau cablul sunt intacte. Daca exista deteriorari, adresati-va personalului calificat pentru a o inlocui sau repara.

2. Inainte de a pune in functiune pompa, asigurati-va ca rezistenta izolatiei respecta standardele in vigoare. Rezistenta izolatiei trebuie sa fie mai mare de 5MΩ cand se apropie de temperatura maxima de functionare.

3. Intregul ansamblu trebuie fixat corect in timpul instalarii, iar conducta de intrare trebuie sigilata incat sa nu existe neetanseitati.

4. Conducta de iesire trebuie conectata ferm pentru a preveni scurgerile electrice cauzate de expunerea motorului la apa.

5. Conductele de intrare si iesire ale pompei trebuie prevazute cu un cadru de sustinere astfel incat sa nu fie sustinut in intregime de pompa.

6. Este strict interzis utilizarea pompei in mediu foarte umed sau sa o scufundati in apa, stropirea motorului cu apa sau chiar expunerea acestuia la un jet de apa. Aceste precautii previn deterioararea izolatiei electrice din cauza umiditatii.

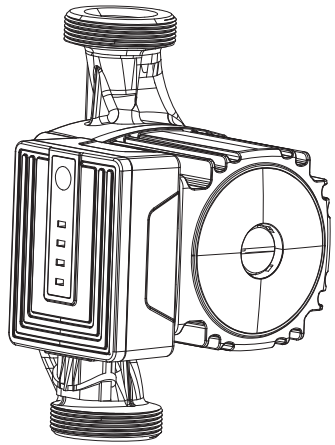
RO

7. Pompa trebuie instalata corect impreuna cu un dispozitiv de protectie impotriva scurgerilor. Pompa este echipata cu un intrerupator cu trei pini care trebuie conectat la o priza cu impamantare.

8. In timpul functionarii pompei, daca doriti sa ajustati pozitia acesteia sau sa apasati butonul de selectare a modului de operare, opriti alimentarea pompei pentru a preveni eventuale accidentari.

High Energy-efficient Circulator Pump

Installation and operating Instruction



ErP READY

EEI≤0.23

Warning

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

CONTENT

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Low-energy circulation pump.....1

Conditions of Use.....2

Connotation of the Type.....3

Technical data sheet.....3

Control Panel.....4

Panel introduction 4

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Installation dimension 8-13

Fault Sheet and Solution 14

Error code.....14

Attention.....15

1 General information

These Operating Instructions explain the functions and operation of the pump when installed and ready for use.
The figures referred to in the text can be found on the fold-out pate at the front

2 Low-energy circulation pump

Low-energy circulation pump is designed for the circulation of water in heating systems.
Install the low-energy circulation pumps in

- Underfloor heating systems
- One-pipe systems
- Two-pipe systems

Low-energy circulation pump incorporates a permanent-magnet motor and difference-pressure control enabling continuous adjustment of the pump performance to the actual requirements.

2.1 Advantages of installing a Low-energy circulation pump

The installation of a Low-energy circulation pump means
Easy installation and start-up

- Low-energy circulation pumps is easy to install.
  With the factory setting, the pump ca n, in most cases , be started
  Without marking any setting

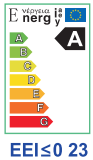
High degree of comfort

- Minimum noise from valves, etc.

Low energy consumption

- Low energy consumption compared to the convention circulation pumps

It is A-labelled as follows:



EEI≤0 23

English

Please read this manual before installation and use

 Please ensure that there is water flow in the pipeline before starting each time. It is strictly forbidden to run without liquid in the pump. Do not tighten or loosen bolts under pressure.	 If this product is installed in a special place, must comply with the relevant safety regulations!
 This product should be operated by qualified personnel according to this manual! We will not be liable for damages caused to our products due to incorrect operation。	 When the product is running or conveying high-temperature liquid, the pump surface may be heated, please do not touch it.
 When the pressure in the pump is high, exhaust air or discharge residual liquid, the power should be turned off at the same time careful pump ejection medium!	 Pay attention to safety protection during maintenance of RS variable frequency shielded circulating pump (including shielded motor)!

3 Conditions of Use

Clean, thin, non-aggressive and non-explosive liquid, not containing solid particles, fibers or mineral oil.
In heating systems, the water meet the requirements of accepted standards on water quality in heating system

1. Medium temperature: TF 95

2. Maximum working pressure: 10bar

3. Insulation class: F

4. Working voltage: 220V---240V/50Hz

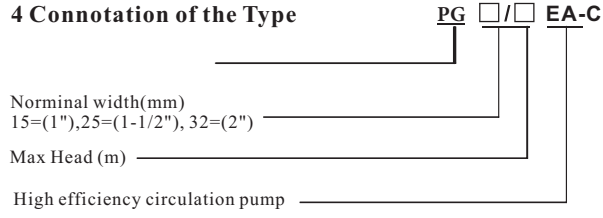
5. Protection class: IP44

This product cannot be used in wet environments and underwater operations.

English

High Energy-efficient Circulator Pump
Installation and operating Instruction

4 Connotation of the Type



5 Technical data sheet

Model	In&Outlet size	Rated Flow (m^3/h)	Rated Head (m)	Max Flow (m^3/h)	Max Head (m)	Rated Current (A)	Power (W)	EM (%)
PG25/4EA-C130	G1-1/2	1.5	2.2	3.0	4	0.19	22	45
PG25/4EA-C180		1.5	2	3.0	4	0.19	22	45
PG25/5EA-C130		1.5	3.2	3.4	5	0.26	32	45
PG25/5EA-C180		1.5	3	3.4	5	0.26	32	45
PG25/6EA-C130		2	3.6	3.7	6	0.38	45	45
PG25/6EA-C180		2	3.2	3.7	6	0.38	45	45
PG25/7EA-C130		2	3.7	4.0	7	0.43	52	45
PG25/7EA-C180		2	3.7	4.0	7	0.43	52	45
PG25/8EA-C130		2.5	4.5	5.2	8	0.53	63	45
PG25/8EA-C180		2.5	4.5	5.2	8	0.53	63	45
PG25/9EA-C130		2.5	6.2	5.4	9	0.76	90	45
PG25/9EA-C180		2.5	6.3	5.4	9	0.76	90	45
PG25/10EA-C130		2.5	6.8	5.7	10	0.83	100	45
PG25/10EA-C180		2.5	7	5.7	10	0.83	100	45
PG25/12EA-C130		2.5	7.6	6.1	12	0.98	120	45
PG25/12EA-C180		2.5	8	6.1	12	0.98	120	45
PG32/4EA-C180	G2	1.5	2	3.0	4	0.19	22	45
PG32/5EA-C180		1.5	3	3.4	5	0.26	32	45
PG32/6EA-C180		2	3.2	3.7	6	0.38	45	45
PG32/7EA-C180		2	3.7	4.0	7	0.43	52	45
PG32/8EA-C180		2.5	4.5	5.2	8	0.53	63	45
PG32/9EA-C180		2.5	6.2	5.4	9	0.76	90	45
PG32/10EA-C180		2.5	7	5.7	10	0.83	100	45
PG32/12EA-C180		2.5	8	6.1	12	0.98	120	45

English

6 Control Panel



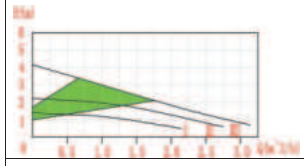
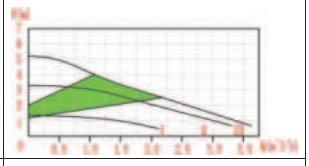
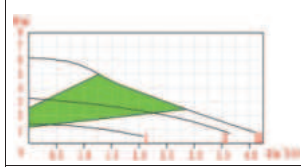
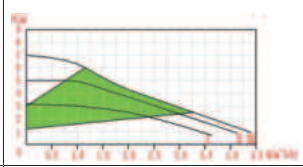
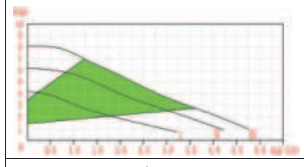
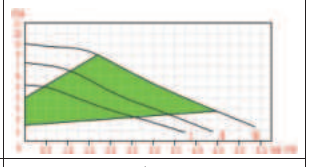
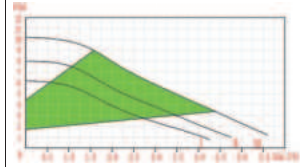
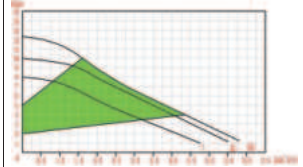
Button introduction

	working mode switch button	Short press to switch the working modes in turn

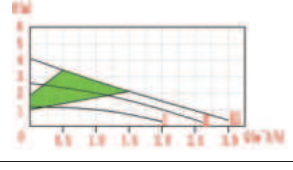
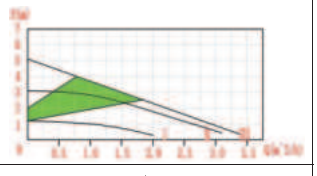
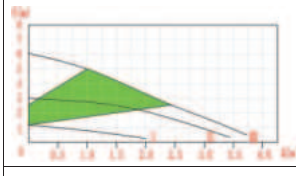
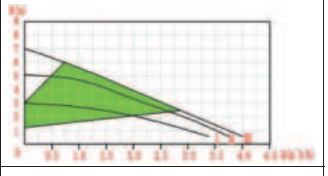
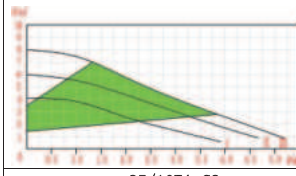
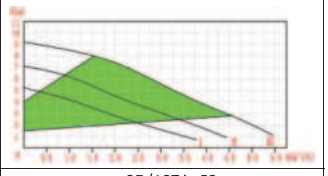
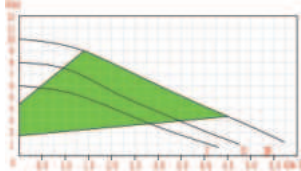
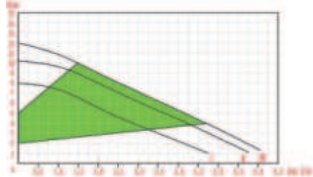
7 Panel introduction

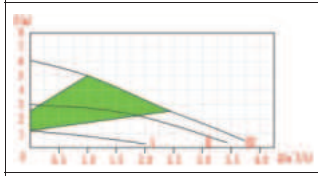
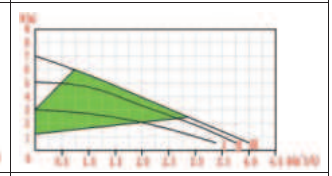
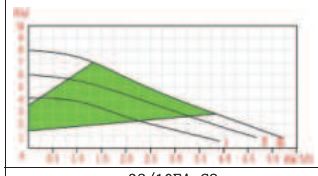
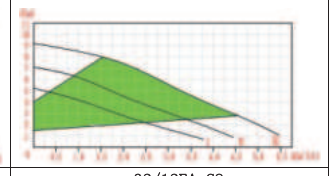
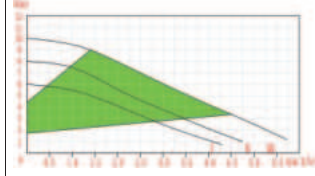
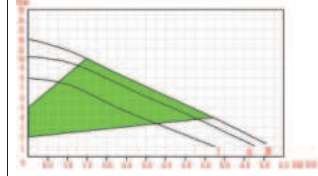
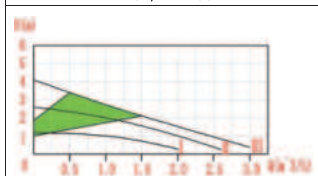
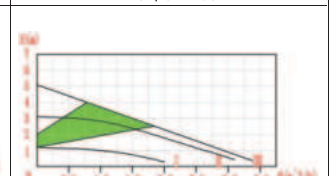
III	Third speed working indicator light	On Manual third speed fixed speed work
II	Second speed working indicator light	On Manual second speed fixed speed work
I	First speed working indicator light	On Manual first speed fixed speed work
ECO	Auto working indicator light	The pump automatically adjusts the power according to the water flow under this mode.

8 Performance curve

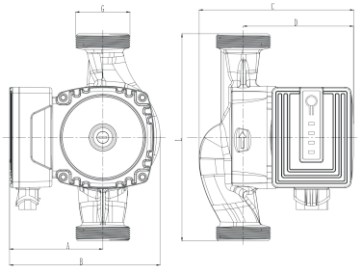
25/4EA-C3	25/5EA-C3
	
25/6EA-C3	25/7EA-C3
	
25/8EA-C3	25/9EA-C3
	
25/10EA-C3	25/12EA-C3
	

English

25/4EA-C8	25/5EA-C8
	
25/6EA-C8	25/7EA-C8
	
25/8EA-C8	25/9EA-C8
	
25/10EA-C8	25/12EA-C8
	

32/6EA-C8	32/7EA-C8
	
32/8EA-C8	32/9EA-C8
	
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32/4EA-C8	32/5EA-C8
	

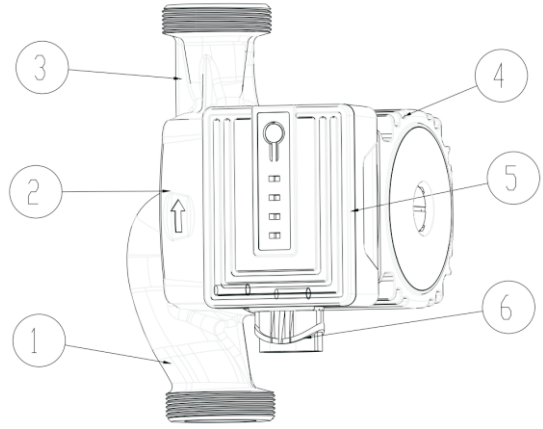
9 Installation dimension



Model	Size/mm					
	A	B	C	D	L	G
PG25/4EA-C130	81	131	142	106	130	1.5
PG25/5EA-C130	81	131	142	106	130	1.5
PG25/6EA-C130	81	131	142	106	130	1.5
PG25/7EA-C130	81	131	142	106	130	1.5
PG25/8EA-C130	81	131	142	106	130	1.5
PG25/9EA-C130	81	131	142	106	130	1.5
PG25/10EA-C130	81	131	142	106	130	1.5
PG25/12EA-C130	81	131	142	106	130	1.5
PG25/4EA-C180	81	131	135	96	180	1.5
PG25/5EA-C180	81	131	135	96	180	1.5
PG25/6EA-C180	81	131	135	96	180	1.5
PG25/7EA-C180	81	131	135	96	180	1.5
PG25/8EA-C180	81	131	135	96	180	1.5
PG25/9EA-C180	81	131	135	96	180	1.5
PG25/10EA-C180	81	131	135	96	180	1.5
PG25/12EA-C180	81	131	135	96	180	1.5
PG32/4EA-C180	81	131	135	96	180	2
PG32/5EA-C180	81	131	135	96	180	2
PG32/6EA-C180	81	131	135	96	180	2
PG32/7EA-C180	81	131	135	96	180	2
PG32/8EA-C180	81	131	135	96	180	2
PG32/9EA-C180	81	131	135	96	180	2
PG32/10EA-C180	81	131	135	96	180	2
PG32/12EA-C180	81	131	135	96	180	2

English

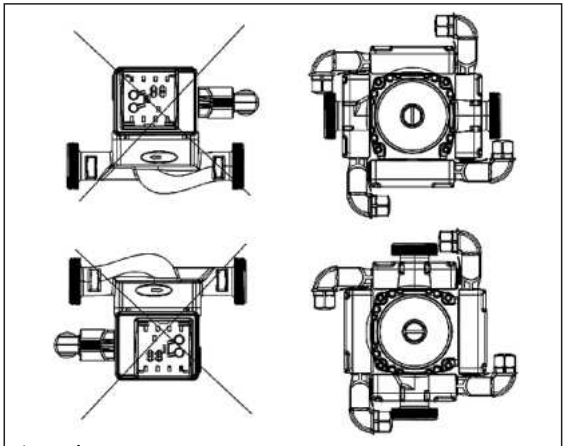
Fig 1



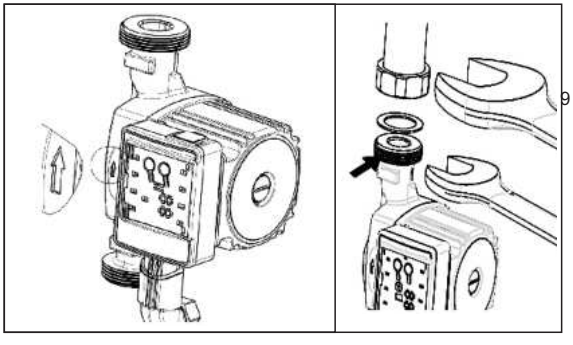
Terms (Fig.1)

1. inlet
2. pump body
3. outlet
4. motor
5. controller box
6. cable connector

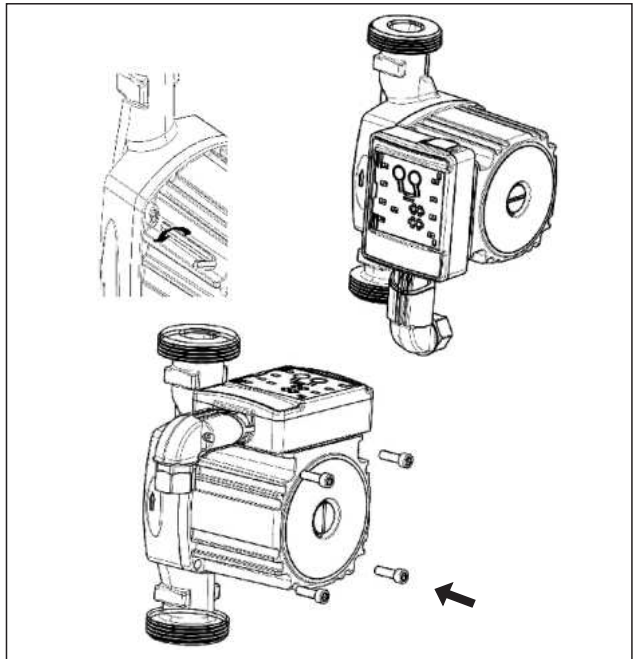
English



Attention : Install the pump must with motor shaft horizontal



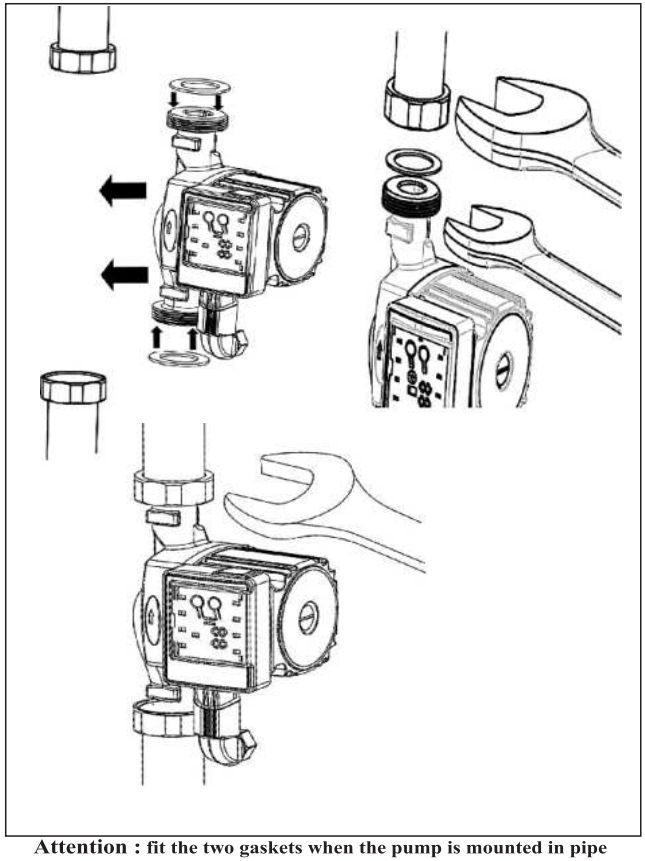
High Energy-efficient Circulator Pump
Installation and operating Instruction



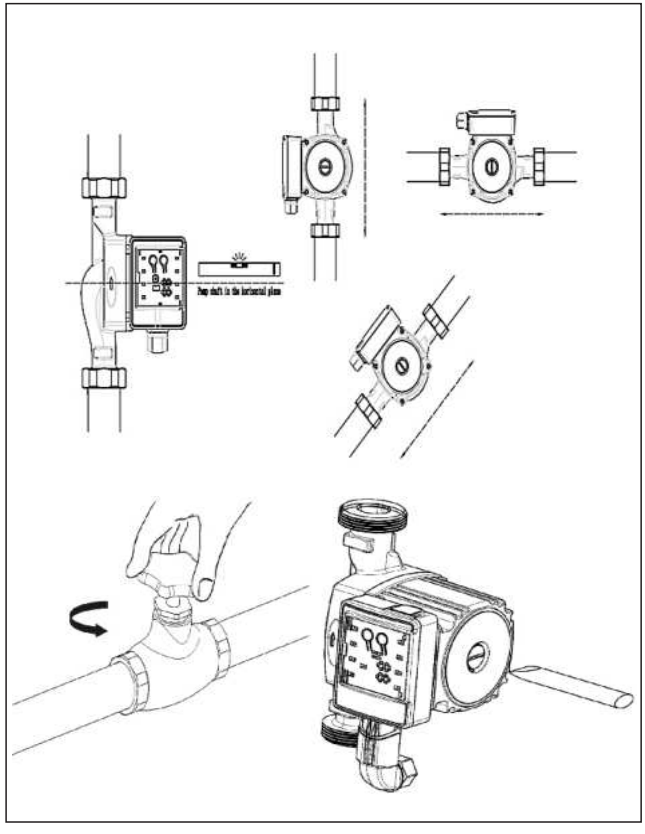
Warning

The pump liquid may be scalding hot and under the high pressure.Drain the system or closed isolated valves on either Side of pump before removed the screws.

English



Attention : fit the two gaskets when the pump is mounted in pipe



English

10 Fault Sheet and Solution

Fault	Control panel	Cause	Remedy
1. the pump does not run	light off	a)The power cable is not connected properly	Re-connect the power cable.
		b)The frequency controller is failed	Change the frequency controller
	Only show Power	a) Electricity supply failure. Might be too low	Check that the electricity supply Falls within the specified Range.
		b) The pump is blocked	Remove the impurities
2. Noise in the System	show power and light field for Pump setting are On	a) Air in the system	vent the system
		b) the flow is too high	Reduce the suction head
3. Noise in the Pump	show power and light field for Pump setting are On	a) Air in pump	Let the pump run. it vents itself over time
		b) the inlet pressure is Too low.	Increase the inlet pressure Check the air volume in The expansion tank. if installed
4. Insufficient	show power and Light field for Pump setting are on	a) the pump performance is too low	Increase the suction head

11 Error Code

Error code meaning (judged by the number of light flashes, the light will be off for about 1s before the error is reported, and the light will be off for about 1s after the error is reported),four lights 

flashing at the same time.

Flash 1 time: Rotor blocked
Flash 2 time: Three-phase phase loss when working with load
Flash 3 time: High temperature protection
Flash 4 time: Three-phase short circuit
Flash 5 time: Momentary overcurrent

12 Attention

1. Before installation and use, we should fully check whether the pump is damaged in the process of transportation and storage, and whether the cable and plug are intact. If there is any damage, please ask professionals to replace or repair it in time.

2. Before the pump operation, check the insulation resistance should meet the relevant standards. The insulation resistance must be greater than 5MΩ when approaching the operating temperature.

3.The complete machine shall be fixed during installation, and the water inlet pipe and its interface shall be sealed without air leakage.

4. The outlet pipe should be firmly connected to prevent the leakage of electric pump caused by the splash to the motor.

5. The inlet and outlet pipes shall be provided with a supporting frame, which shall not be completely supported by the pump.

6. It is strictly forbidden to use the electric pump in water or diving, to prevent the motor from spraying water, splashing water, and even to spray water with strong current. To prevent the winding insulation from being damaged by moisture.

7. The electric pump shall be correctly installed with leakage protection device, and the electric pump equipped with three-pin plug shall ensure that the plug board is connected with ground wire.

8. When the electric pump is working, if you want to adjust the position of the electric pump or touch the action of the electric pump, you must first cut off the power supply to prevent accidents.