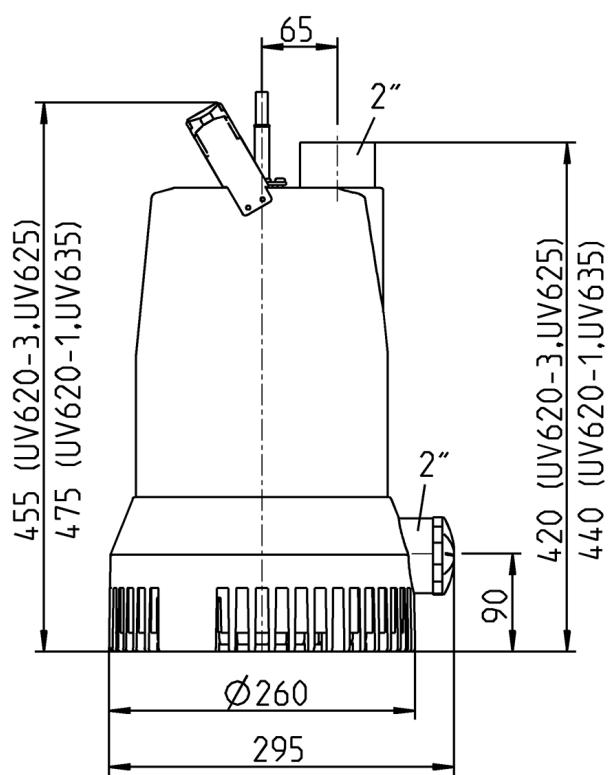




MULTIDRAIN

UV 620-1 UV 620-3 UV 625-3 UV 635-3
UV 620-1S UV 620-3S UV 625-3S UV 635-3S

EN Instruction Manual



You have purchased a product made by Pentair Jung Pumpen and with it, therefore, also excellent quality and service. Secure this service by carrying out the installation works in accordance with the instructions, so that our product can perform its task to your complete satisfaction. Please remember that damage caused by incorrect installation or handling will adversely affect the guarantee. Therefore please adhere to the instructions in this manual!

This appliance can be used by children aged 8 years or over and by persons with limited physical, sensory or intellectual capabilities, or with limited experience and knowledge, provided that they are supervised or have been instructed in the safe use of the appliance and are aware of the dangers involved. Children must not be allowed to play with the appliance. Cleaning and user maintenance must not be carried out by children unless they are supervised.

Damage prevention in case of failure

Like any other electrical device, this product may fail due to a lack of mains voltage or a technical defect.

If damage (including consequential damage) can occur as a result of product failure, the following precautions can be taken at your discretion:

- Installation of a water level dependent (under circumstances, mains-independent) alarm system, so that the alarm can be heard before damage occurs.
- Inspection of the collecting tank/chamber for tightness up to the top edge before – or at the latest, during – installation or operation of the product.
- Installation of backflow protection for drainage units that can be damaged by wastewater leakage upon product failure.
- Installation of a further product that can compensate in case of failure of the other product (e.g. duplex unit).
- Installation of an emergency power generator.

As these precautions serve to prevent or minimise consequential damage upon product failure, they are to be strictly observed as the manufacturer's guideline – in line with the standard DIN EN specifications as state of the art – when using the product (Higher Regional Court Frankfurt/Main, Ref.: 2 U 205/11, 06/15/2012).

SAFETY INSTRUCTIONS

This instruction manual contains essential information that must be observed during installation, operation and servicing. It is therefore important that the installer and the responsible technician/operator read this instruction manual before the equipment is installed and put into operation. The manual must always be available at the location where the pump or the plant is installed.

Failure to observe the safety instructions can lead to the loss of all indemnity.

In this instruction manual, safety information is distinctly labelled with particular symbols. Disregarding this information can be dangerous.



General danger to people



Warning of electrical voltage

NOTICE! Danger to equipment and operation

Qualification and training of personnel

All personnel involved with the operation, servicing, inspection and installation of the equipment must be suitably qualified for this work and must have studied the instruction manual in depth to ensure that they are sufficiently conversant with its contents. The supervision, competence and areas of responsibility of the personnel must be precisely regulated by the operator. If the personnel do not have the necessary skills, they must be instructed and trained accordingly.

Safety-conscious working

The safety instructions in this instruction manual, the existing national regulations regarding accident prevention, and any internal working, operating and safety regulations must be adhered to.

Safety instructions for the operator/user

All legal regulations, local directives and safety regulations must be adhered to.

The possibility of danger due to electrical energy must be prevented.

Leakages of dangerous (e.g. explosive, toxic, hot) substances must be discharged such that no danger to people or the environment occurs. Legal regulations must be observed.

Safety instructions for installation, inspection and maintenance works

As a basic principle, works may only be carried out to the equipment when it is shut down. Pumps or plant that convey harmful substances must be decontaminated.

All safety and protection components must be re-fitted and/or made operational immediately after the works have been completed. Their effectiveness must be checked before restarting, taking into account the current regulations and stipulations.

Unauthorised modifications, manufacture of spare parts

The equipment may only be modified or altered in agreement with the manufacturer. The use of original spare parts and accessories approved by the manufacturer is important for safety reasons. The use of other parts can result in liability for consequential damage being rescinded.

Unauthorised operating methods

The operational safety of the supplied equipment is only guaranteed if the equipment is used for its intended purpose. The limiting values given in the "Technical Data" section may not be exceeded under any circumstances.

Instructions regarding accident prevention

Before commencing servicing or maintenance works, cordon off the working area and check that the lifting gear is in perfect condition.

Never work alone. Always wear a hard hat, safety glasses and safety shoes and, if necessary, a suitable safety belt.

Before carrying out welding works or using electrical devices, check to ensure there is no danger of explosion.

People working in wastewater systems must be vaccinated against the pathogens that may be found there. For the sake of your health, be sure to pay meticulous attention to cleanliness wherever you are working.

Make sure that there are no toxic gases in the working area.

Observe the health and safety at work regulations and make

sure that a first-aid kit is to hand.

In some cases, the pump and the pumping medium may be hot and could cause burns.

For installations in areas subject to explosion hazards, special regulations apply!

APPLICATION

Submersible pumps from the MultiDrain range are suitable for pumping slightly soiled water without stones.

Continuous operation is possible if the yellow ring remains immersed.

NOTICE! The pump must not run dry! Otherwise engine damage may occur.

Use of the pumps is subject to relevant national laws, regulations and local requirements such as:

- Domestic contaminated water and waste water (e.g. EN 12056 in Europe)
- Installation of low voltage systems (e.g. VDE 0100 in Germany)

For non-standard utilisation conditions, further regulations must be observed (e.g. VDE 0100 in Germany, part 701: bathrooms and shower rooms; part 702: Swimming pools and fountains; part 704: Construction sites and part 737: outdoor use).

Temperatures

The pumped medium must have a temperature of max 40°C.

The submersible pump is frost-resistant down to -20°C when stored in dry conditions. When installed, however, it must not be allowed to freeze in the water.

Transport

The pump must always be lifted by the handle and never by the power supply cable! The pump should only be lowered into deeper chambers or pits using a chain.

ELECTRICAL CONNECTION

NOTICE! Only qualified electricians may carry out electrical work on the pump, plug or the control unit.

WARNING!

The pump must only be connected to outlets that are installed according to specifications and are protected with at least 16 A (slow) and RCCB circuit breakers (30mA).

Current applicable standards (such as EN standards), national regulations (such as VDE in Germany), and the regulations of the local power supply companies must be complied with.

The pumps are supplied with an open cable end (not UV 620-1S). To connect to the power supply, a control unit or a nationally approved motor protection plug with a protective earth contact must be used.

NOTICE! In order to protect the motor, 3-phase pumps must be operated via a thermally delayed motor overload protection switch (or motor protection plug).

NOTICE! Never put the mains plug or a free lead end in water! If water gets into it, this can cause malfunctions and damage.

Observe the operating voltage (see type plate)!

The pump is provided with a winding thermostat. In case of unacceptably high temperatures, it switches off the pump to protect it against possible damage. Unacceptably high temperatures may result e.g. from dry running or mechanical or electrical overload.

WARNING!

The pump is switched on again automatically after cooling down - risk of injury! Therefore, always disconnect the pump from the power supply before removing the cause of the malfunction! In order to do this remove the pre-fuses!

Pumps without built-in level control can also be operated automatically through the use of our level controls.

Rotational direction

The rotational direction must be checked before installation! If the rotational direction is correct, the start-up jolt should be in the opposite direction to the rotational direction arrow on the motor housing. The wrong rotational direction is also indicated if the pump performs inadequately when installed, or if loud noises can be heard during operation. If the rotational direction is wrong, 2 phases of the supply cable must be swapped over.

CAUTION!

The start-up jolt can be very forceful.

INSTALLATION

The pump must be installed as shown in the examples. For installations in accordance with EN 12056-4, the pressure pipe must be laid in a loop above the local backflow level and protected with a non-return valve in accordance with EN 12050-4.

A correspondingly larger diameter pipe should be used for longer pressure pipelines to avoid pipe friction losses.

The MultiDrain pumps have both a horizontal and a vertical discharge branch. The branch that is not used must be sealed with the plug. During operation, the pump is automatically ventilated via this plug.

In contrast to pumps with built-in level control, the ON and OFF switching heights of pumps without built-in level control are variable by the use of a separate level control.

NOTICE! If the pump is malfunctioning, part of the contents of the oil reservoir could escape into the pumping medium.

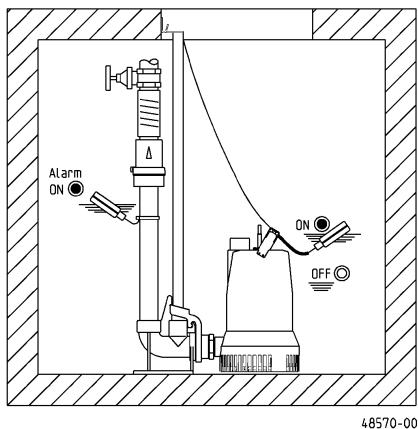
Dimensions of sump

Single installation with pump base: 40 x 50 cm

Single installation with guide rail system: 40 x 70 cm

Duplex installation: 70 x 70 cm

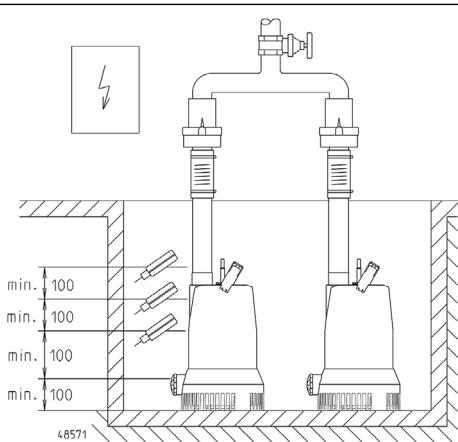
Example of single installation with guide rail system



Installation: Fix the coupling base firmly to the floor of the collection chamber using wall plugs and then mount the guide rail. Next, install the pressure pipe including the necessary fittings, such as the non-return valve and shut-off valves.

Finally, fit the pump with the screwed-on coupling catch onto the guide rail and lower it into place using a chain fixed to the handle.

Example of duplex installation



NOTICE! The floats of the level control and alarm system are installed so that they are freely movable but not under the inlet. Please observe the minimum distances. The controls must only be installed in a dry and well ventilated room!

MAINTENANCE

Maintenance and inspection of this product must be carried out in accordance with EN 12056-4.

To ensure continued reliability of service, we recommend that you take out a service contract.

DANGER!

Before carrying out any work: Disconnect the pump and the control unit from the mains power supply and take action to ensure that no one else can reconnect them to the power supply.

WARNING!

Check the plug and the mains cable for signs of mechanical and chemical damage. Damaged or kinked cables must be replaced by the manufacturer.

NOTICE! When using a chain to lift the pump, please observe the relevant national regulations regarding accident prevention. Lifting gear must be checked regularly by an expert in accordance with the legal regulations.

Cleaning

The inlet strainer prevents coarse dirt from entering the pump. Regular cleaning of the float and the foot strainer ensures optimum performance and operation.

If the impeller needs to be cleaned due to blocking or clogging, remove the screws on the underside of the pump and then remove the foot strainer.

Check and clean the ventilation hole in the sealing plug that is fitted in the unused discharge branch.

Tightening torque M_A for A2 screw materials

for M 6 $M_A = 8 \text{ Nm}$,

for M 8 $M_A = 20 \text{ Nm}$,

for M 10 $M_A = 40 \text{ Nm}$,

for M 12 $M_A = 70 \text{ Nm}$,

for foot strainer $M_A = 3 \text{ Nm}$.

QUICK TIPS FOR REMEDYING FAULTS

Pump does not work

- Check mains current (do not use a pin gauge)
- Fuse faulty = may be too weak (please refer to Electrical Connection)
- Mains supply cable damaged = repair to be carried out by manufacturer only

Pump runs but does not pump

- Empty the pressure pipe or hose to allow the non-return valve to open and the air to escape from the pump housing.

Impeller blocked

- Solids and fibrous matter have become lodged in the pump housing = clean

Decreased pumping performance

- Pump housing obstructed = clean
- Impeller worn = replace
- Wrong direction of rotation (for a three-phase current) = ask a qualified electrician to change 2 phases of the supply line

**EU-Konformitätserklärung**

EU-Prohlášení o shodě

EU-Overensstemmelseserklæring

EU-Declaration of Conformity

EU-Vaatimustenmukaisuusvakuutus

EU-Déclaration de Conformité

EU-Megfelelőségi nyilatkozat

EU-Dichiarazione di conformità

EU-Conformiteitsverklaring

EU-Deklaracija zgodnosti

EU-Declarație de conformitate

EU-Vyhľásenie o zhode

EU-Försäkran om överensstämmelse

DE - Richtlinien - Harmonisierte Normen
CS - Směrnice - Harmonizované normy
DA - Direktiv - Harmoniseret standard
EN - Directives - Harmonised standards
FI - Direktiivi - Yhdenmukaisuusvaatimus

FR - Directives - Normes harmonisées
HU - Irányelv - Harmonizált szabványok
IT - Direttive - Norme armonizzate
NL - Richtlijnen - Geharmoniseerde normen
PL - Dyrektywy - Normy zharmonizowane

RO - Directivă - Norme coroborate
SK - Smernice - Harmonizované normy
SV - Direktiv - Harmoniserade normer

- 2006/42/EG (MD)
- 2011/65/EU (RoHS)
- 2014/30/EU (EMC)

EN 809:1998/AC:2010, EN ISO 12100:2010
EN 60034-1:2010, EN 61000-3-2:2014, EN 61000-3-3:2013

JUNG PUMPEN GmbH - Industriestr. 4-6 - 33803 Steinhagen - Germany - www.jung-pumpen.de

DE - Wir erklären in alleiniger Verantwortung, dass das Produkt den aufgeführten Richtlinien entspricht.
CS - Prohlašujeme na svou výlučnou odpovědnost, že výrobek odpovídá jmenovaným směrnicím.

DA - Vi erklærer under ansvar at produktet i overensstemmelse med de retningslinjer

EN - We hereby declare, under our sole responsibility, that the product is in accordance with the specified Directives.

FI - Me vakuuttamme omalla vastuullamme, että tuote täyttää ohjeita.

FR - Nous déclarons sous notre propre responsabilité que le produit répond aux directives.

HU - Kizárolagos felelősséggünk tudatában kijelentjük, hogy ez a termék megfelel az Európai Unió fentnevezett irányelveinek.

IT - Noi dichiariamo sotto la nostra esclusiva responsabilità che il prodotto è conforme alle direttive citate

NL - Wij verklaren geheel onder eigen verantwoordelijkheid dat het product voldoet aan de gestelde richtlijnen.

PL - Z pełną odpowiedzialnością oświadczamy, że produkt odpowiada postanowieniom wymienionych dyrektyw.

RO - Declaram pe proprie răspundere că produsul corespunde normelor prevăzute de directivele mai sus menționate.

SK - Na výlučnú zodpovednosť vyhlasujeme, že výrobok spĺňa požiadavky uvedených smerníc.

SV - Vi försäkrar att produkten på vårt ansvar är utförd enligt gällande riktlinjer.

US 152 E (JP09435)

US 151 E (JP09310)

UV 305-1(JP48691)

UV 620-1(JP47337)

US 152 D (JP09437)

US 151 D (JP09300)

UV 305-3(JP48692)

UV 620-1S(JP47338)

US 153 E (JP09311/1)

US 251 D (JP09301)

UV 310-1(JP48695)

UV 620-3(JP47339)

US 153 D (JP09302/1)

US 253 D (JP09303)

UV 310-3(JP48696)

UV 620-3S(JP47340)

US 155 E (JP09388)

UV 315-1(JP48699)

UV 625-3(JP47341)

US 155 D (JP09390)

UV 315-3(JP48700)

UV 625-3S(JP47342)

UV 635-3(JP47343)

UV 635-3S(JP47344)

DE - Weitere normative Dokumente CS - Jinými normativními dokumenty DA - Andre normative dokumenter EN - Other normative documents FI - Muinen normien FR - Autres documents normatifs HU - Egyéb szabályozó dokumentumokban leírtaknak IT - Altri documenti normativi NL - Verdere normatieve documenten PL - Innymi dokumentami normatywnymi RO - Alte acte normative SK - Iným záväzným dokumentom SV - Vidare normerande dokument:

EN 60034-5:2001/A1:2007

DE - Bevollmächtigter für technische Dokumentation CS - Oprávněná osoba pro technickou dokumentaci DA - Autorisert person for teknisk dokumentasjon EN - Authorized person for technical documentation FI - Valttuuttetu henkilö teknisen dokumentaatiolla FR - Personne autorisée à la documentation technique HU - Hivatalos személy műszaki dokumentáció IT - Persona abilitata per la documentazione tecnica NL - Bevoegd persoon voor technische documentatie PL - Pełnomocnik ds. dokumentacji technicznej RO - Persoană autorizată pentru documentației tehnice SK - Oprávnena osoba pre technickú dokumentáciu SV - Auktorisad person för teknisk dokumentation:

JUNG PUMPEN - Stefan Sirges - Industriestr. 4-6 - 33803 Steinhagen

Steinhagen, 10-10-2018


Stefan Sirges, General Manager


i.V. Rüdiger Rokohl, Sales Manager

CE 0197	
JUNG PUMPEN GmbH - Industriestr. 4-6 33803 Steinhagen, Germany 17 421.10.1707	
EN 12050-2:2001 Abwasserhebeanlage für fäkalienfreies Abwasser	
UV 305-1(JP48691)	UV 620-1(JP47337)
UV 305-1S(JP48693)	UV 620-1S(JP47338)
UV 305-3(JP48692)	UV 620-3(JP47339)
UV 305-3S(JP48694)	UV 620-3S(JP47340)
UV 310-1(JP48695)	UV 625-3(JP47341)
UV 310-1S(JP48697)	UV 625-3S(JP47342)
UV 310-3(JP48696)	UV 635-3(JP47343)
UV 310-3S(JP48698)	UV 635-3S(JP47344)
UV 315-1(JP48699)	UV 315-1(JP48699)
UV 315-1S(JP48701)	UV 315-1S(JP48701)
UV 315-3(JP48700)	UV 315-3(JP48700)
UV 315-3S(JP48702)	UV 315-3S(JP48702)
Sammeln und automatisches Heben von fäkalienfreiem Abwasser innerhalb und außerhalb von Gebäuden über die Rückstaubene	
BRANDVERHALTEN	NPD
WASSERDICHTHEIT	Bestanden
WIRKSAMKEIT (HEBEWIRKUNG)	
- Förderung von Feststoffen	Bestanden
- Rohrabschlüsse	Bestanden
- Lüftung	NPD
- Mindestfließgeschwindigkeit	Bestanden
- Freier Mindestdurchgang der Anlage	Bestanden
- Mindestnutzvolumen	NPD
MECHANISCHE FESTIGKEIT	
- Tragfähigkeit und strukturelle Stabilität des Sammelbehälters für die Verwendung außerhalb von Gebäuden	NPD
- Strukturelle Stabilität des Sammelbehälters für die Verwendung innerhalb von Gebäuden	NPD
GERÄUSCHPEGEL	70 dB(A)
DAUERHAFTIGKEIT	
- der Wasserdichtheit und Luftdichtheit	Bestanden
- der Hebewirkung	Bestanden
- der mechanischen Festigkeit	Bestanden
GEFÄHRLICHE SUBSTANZEN	NPD

CE 0197	
JUNG PUMPEN GmbH - Industriestr. 4-6 33803 Steinhagen, Germany 17 421.10.1707	
EN 12050-2:2001 Lifting plant for faecal-free wastewater	
UV 305-1(JP48691) UV 620-1(JP47337)	
UV 305-1S(JP48693) UV 620-1S(JP47338)	
UV 305-3(JP48692) UV 620-3(JP47339)	
UV 305-3S(JP48694) UV 620-3S(JP47340)	
UV 310-1(JP48695) UV 625-3(JP47341)	
UV 310-1S(JP48697) UV 625-3S(JP47342)	
UV 310-3(JP48696) UV 635-3(JP47343)	
UV 310-3S(JP48698) UV 635-3S(JP47344)	
UV 315-1(JP48699) UV 315-1(JP48699)	
UV 315-1S(JP48701) UV 315-1S(JP48701)	
UV 315-3(JP48700) UV 315-3(JP48700)	
UV 315-3S(JP48702) UV 315-3S(JP48702)	
Collecting and automatically lifting faecal-free waste water above the backflow level in buildings and sites	
REACTION TO FIRE	NPD
WATERDENSITY	Pass
EFFECTIVENESS(LIFTING EFFECTIVENESS)	
- Pumping of solids	Pass
- Pipe connections	Pass
- Ventilation	NPD
- Minimum flow velocity	Pass
- Minimum free passage of the plant	Pass
- Minimum useful volume	NPD
MECHANICAL RESISTANCE	
- Load bearing capacity and structural stability of collection tank for use outside buildings	NPD
- Structural stability of collection tank for use inside buildings	NPD
NOISE LEVEL	70 dB(A)
DURABILITY	
- of structural stability	Pass
- of lifting effectiveness	Pass
- of mechanical resistance	Pass
DANGEROUS SUBSTANCES	NPD

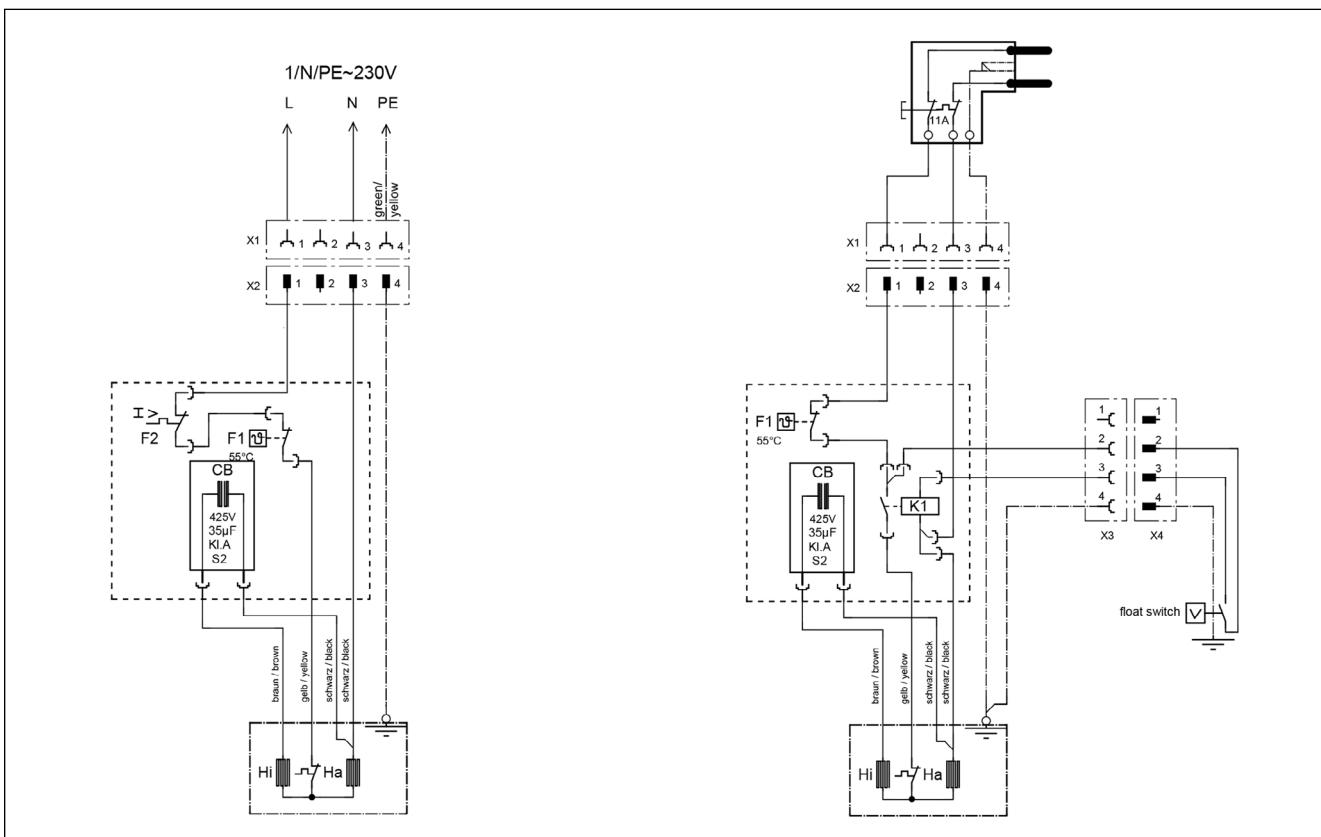
Technical data

	UV 620-1 UV 620-1S	UV 620-3 UV 620-3 S	UV 625-3 UV 625-3 S	UV 635-3 UV 635-3 S
[kg]	23,0 23,5	23,0 23,5	23,0 23,5	25,5 26,0
 DN [mm]	2 " 10	2 " 10	2 " 10	2 " 10
P1 [W]	2400	2380	2800	3700
P2 [W]	1650	1950	2280	3050
U [V]	1/PE ~230	3/PE ~400	3/PE ~400	3/PE ~400
f [Hz]	50	50	50	50
I [A]	10,4	4,6	5,2	6,2

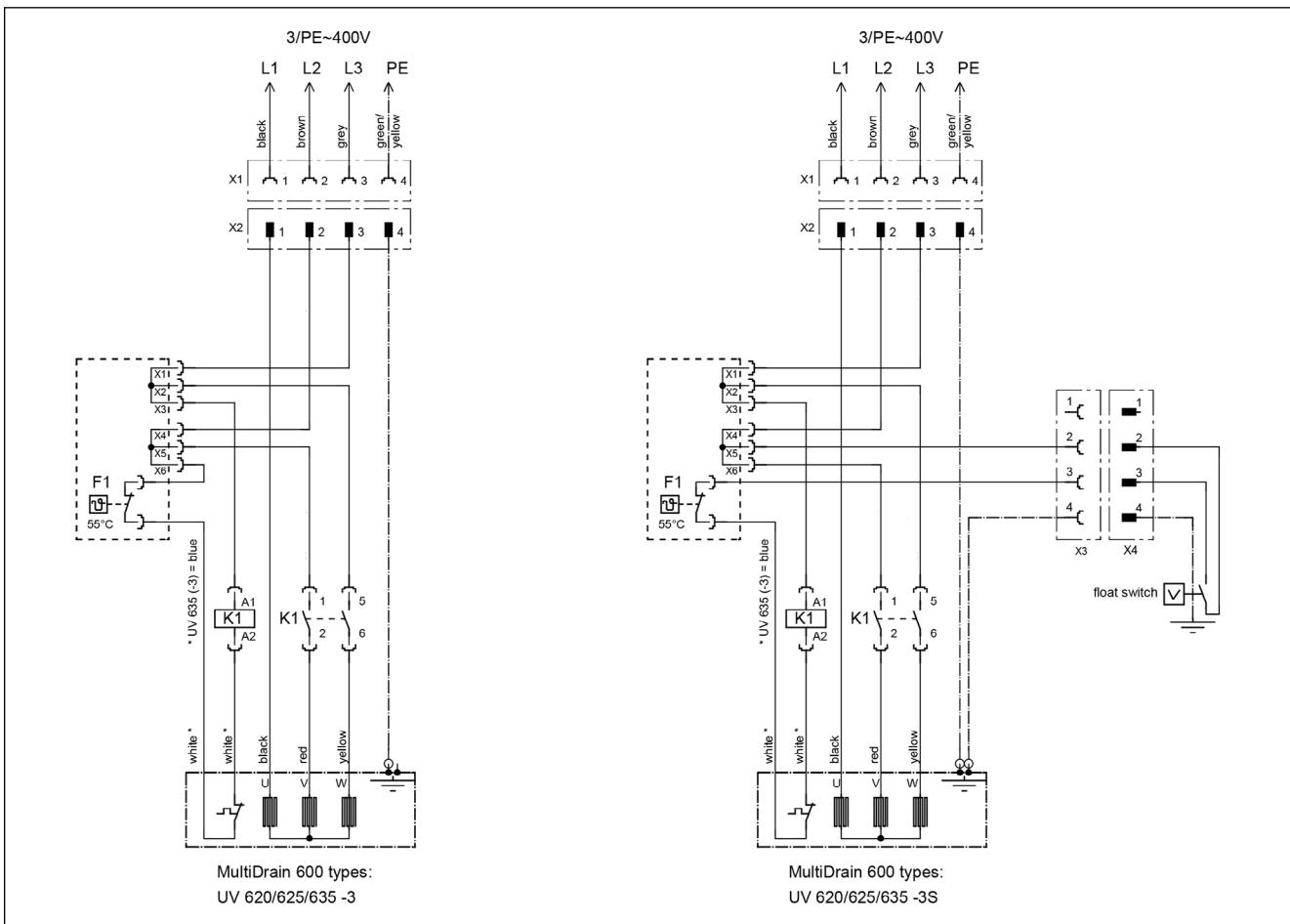
Performance

H[m]	6	8	10	12	14	16	18	20	22	24	Q[m/h]
UV 620-1	36	33	30	27	22	16					
UV 620-3	37	34	32	28	24	18	5				
UV 625-3	38	36	33	31	27	23	18	5			
UV 635-3			39	37	34	32	28	25	20	14	

UV 620-1

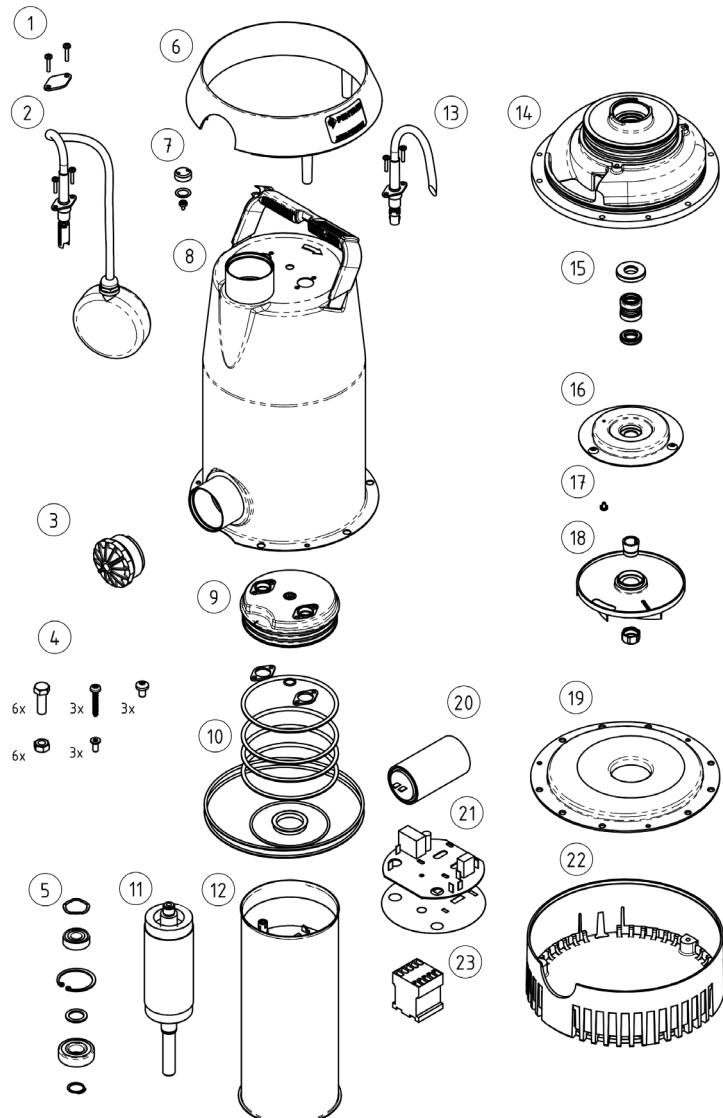


UV 620-3 - UV 635-3



MULTIDRAIN UV 600

Spare parts



①	Blindflansch	Blind flange	JP48921
②	KT-Schalter	KT-switch	JP48881
③	Stopfen	Plug	JP48887
④	Schraubensatz	Screw set	JP48899
⑤	Lagersatz	Bearing set	JP48893
⑥	Abdeckung	Cover	JP48900
⑦	Verschluss	Plug	JP48882
⑧	Doppelmantel	Double jacket	JP48885
	UV 620-625		JP48886
	UV 635		
⑨	Deckel	Plug	
	1 Loch	1 hole	JP48891
	2 Loch	2 hole	JP48892
⑩	Dichtungssatz	Seal set	JP48898
⑪	Rotorwelle	Rotor shaft	
	UV 620-625		JP48894
	UV 635		JP48895
⑫	Stator + Gehäuse	Stator + Housing	
	620-1		JP48890
	620-3, 625-3		JP48888
	635-3		JP48889
⑬	Leitung	Cable	
	230 V, 620-1		JP48883
	400 V, 6xx-3		JP48884
⑭	Lagerflansch	Bearing flange	JP48901
⑮	Gleitringdicht.satz	Mech. seal set	JP48902
⑯	Dichtungsdeckel	Seal cover	JP48903
⑰	Ölschraube	Oil screw	JP48904
⑱	Laufrad	Impeller	
	UV 620		JP48905
	UV 625		JP48906
	UV 635		JP48907
⑲	Ringgehäusedeckel	Volute casing cover	JP48908
⑳	Kondensator	Capacitor	JP48879
㉑	Platine	PCB	
	UV 620-1		JP48897
	UV 620-1S		JP50263
	UV 6xx-3		JP48896
㉒	Siebfuß	Strainer base	JP48914
㉓	Schaltschütz	Contactor	JP48880
--	Motorschutzstecker 230V	Motor protection plug 230V	JP50290



**PUMP TECHNICAL
SERVICES LIMITED**

