

DKG

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.

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!

TECHNICAL DATA

- Operating voltage: 1/N/PEx230 V, 50 Hz
- Power consumption Leistungsaufnahme: ca. 1,5 VA
- Electrode: U= ca. 20 VAC, I= 3 mA
- Sensitivity: approx. 35 KΩ
- Electrode cable: H05RN-F 2x1,0 mm²
- Output contacts: pot. free, max 5 A / 230 V ~
- Temperature range: -20° bis 50° C
- Humidity: 0-90% rH, nicht kondensierend
- Dim.: approx.: 147 x 71 x 70 (HxBxT) in mm; IP 20
- Electrode: U_{max} = 50 VAC / 120 VDC, I_{max} = 2 A

DESCRIPTION

The DKG monitors the oil chamber of the pump to check for water ingress. It is connected to the pump via a special electrode. The presence of water in the oil chamber is signalled by an acoustic Alarm. The cause is usually a damaged or worn mechanical seal. Have the oil, the oil chamber and the mechanical seal checked in accordance with the operating instructions for the pump.

A potential-free normally-open contact is provided for a remote fault indicator.

EMC

When installed as specified and used for the in-tended purpose, they meet the protective requirements of the EMC Directive. They are suitable for use in domestic and commercial areas of the public electricity grid. When connected to an industrial mains supply in an industrial plant with the power supply provided by a company-owned high-voltage transformer, it is to be expected that there will be insufficient immunity to interference.

MOUNTING



WARNING!

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

NOTICE! Repairs and maintenance work on the control unit or the pump must be carried out by a qualified electrician only!

When using this device, compliance with the relevant national laws and provisions as well as regional regulations must be assured.

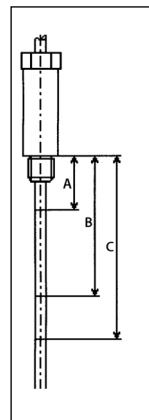
NOTICE! When mounted in an externally cabinet, there is a risk of condensation, which can lead to malfunctions or total failure. Please observe the instructions for the correct installation of a cabinet.

Longer electrode cable

The cable may be extended up to a length of 150 m. 2-core shielded cable (≥0,25 mm²) has to be used to avoid interference.

Adjusting the electrode

Before the electrode can be fitted, its length must be adjusted according to the type of pump.



Length **A = 22 mm** for the pumps:

- US ...
- UB ...
- UC 08... to UC 35...
- 75 P3 and 100 P5
- MultiCut, MultiStream and MultiFree 08... bis 45...

Length **B = 65 mm** for the pumps:

- UC 55... to UC 75...
- MultiCut, MultiStream and MultiFree 55...to 100..

Length **C = 125 mm** for the pumps:

- MultiStream 150...to 300...

NOTICE! If the electrode is shortened using a metal saw, the electrode rod itself must be clamped, not the electrode housing. Otherwise, the electrode could work loose in its moulding, resulting in leaks and failure.



CAUTION!

Before fixing the electrode to the pump, please allow it to cool down sufficiently.

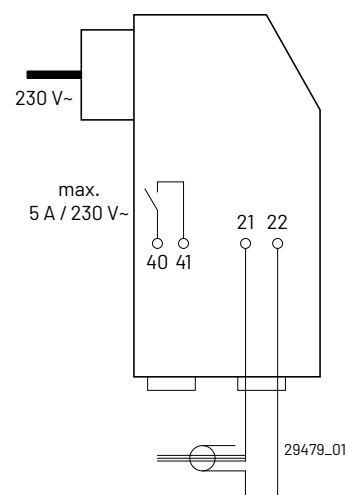
The "DKG" screw must first be removed from the oil chamber of the pump so that the electrode can be screwed in there. During this operation, hold the pump in such a way as to prevent any oil from escaping.

Electrical connection

The seal control DKG is supplied ready to plug in with connected electrode.

Remote failure indication system

- Loosen the housing screws and carefully open the DKG.
- Guide the cable for remote indication through the seal in the bottom left corner of the housing and connect it to terminal 40/41. Lower the cable as short as possible.
- Use the existing free fixing clamp as strain relief for the cable!
- Close the DKG again.
- The normally open contact can be loaded with max. 5A/230V~.





UKCA-Declaration of Conformity

Legislation - Designated Standards

- **Electromagnetic Compatibility Regulations 2016 (EMC)** EN 55014-1: 2017/A11:2020, EN 55014-2: 1997/A2:2008
- **The Restriction of the Use of Certain Hazardous Substance in Electrical and Electronic Equipment Regulations 2012 (RoHS)**
- **Electrical Equipment (Safety) Regulations 2016** EN 60335-1: 2012/A14:2019

Name and address of the manufacturer: JUNG PUMPEN GmbH - Industriestr. 4-6 - 33803 Steinhagen - Germany - www.jung-pumpen.de

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

AG3 GB (JP50770) **DKG GB** (JP55612)
AG10 GB (JP50771)
AGE GB (JP50772)
AGR GB (JP55611)

Other normative documents:

Authorized person for technical documentation

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