



Innovative solutions for smart people



User Manual

Safety Disconnection Unit

STS 5

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Read prior to installation and operation!  
Observe all safety instructions!  
Keep in a safe place for future reference!



**This user manual includes important information and warnings.**

**Read the instructions for use and installation prior to installation, electric connection and start-up.**

**Also observe the instructions for use and installation of components/accessories of the device.**

### Meaning of symbols



#### **Attention!**

Ignoring the instructions may cause material damage!



#### **Danger!**

Ignoring the instructions may cause personal injury!



#### **Information!**

Provides useful information for the various work steps!

**In the following instructions, reference will be made to the symbols only!**

## 1.0 Foreword

You made a very good decision in selecting this high-quality product. To ensure trouble-free functionality, read and observe the use instructions. When installing and starting the device, observe the instructions for installation. All operational conditions of the product have been tested in the manufacturing process. This means that it has been delivered without defects. However, should the operation not be trouble-free, first refer to chapter 1.7 Troubleshooting.

In case of other malfunctions, contact your dealer/contractual partner.

## 1.1 Warranty (extract)

**The legal warranty according to § 437 of the German Civil Code applies.**

During the warranty period, we eliminate malfunctions free of charge when they are due to manufacturing or material defects. These are malfunctions occurring even when the device has been correctly connected and operated according to the instructions for use and installation.

## 1.2 General instructions



- **The operator bears the responsibility for all measures concerning:**
  - the proper installation,
  - the protection against dangers implied by incorrect operation.



- **The plug has to be readily accessible.**
- **The device is approved for operation:**
  - with 230 Volt 50 Hertz AC voltage,
  - up to a water temperature of 35°C,
  - in residential, commercial and industrial areas as well as small companies.

**We will not bear costs caused by improper operation or installation.**

**Questions regarding the device and orders of spare parts:**

- contact your contractual partner only.
- always indicate the postal address.
- always indicate the serial number.

### 1.3 Product description



Water is supplied by the device in the non potable water network in conformity with EN 1717. The disconnection is made according to category 5 - type AB.

Product features	Benefits
<ul style="list-style-type: none"><li>• Automatic control of the water feed</li><li>• Automatic detection of defects for:<ul style="list-style-type: none"><li>- pump</li></ul></li><li>• Multistage centrifugal pump</li><li>• Centrifugal pump with air separator</li></ul>	<ul style="list-style-type: none"><li>• User-friendly</li><li>• Quick and targeted detection of defects</li><li>• Pump monitoring</li><li>• High hydraulic performance</li></ul>
<ul style="list-style-type: none"><li>• Body offering acoustic protection</li><li>• Acoustic decoupling device/installation spot</li></ul>	<ul style="list-style-type: none"><li>• Self-priming</li><li>• Automatic switch-off of the air separator, resulting in:<ul style="list-style-type: none"><li>- improved efficiency</li></ul></li><li>• Low noise</li></ul>
<ul style="list-style-type: none"><li>• Clear control panel</li><li>• Pressure display/Pressure gauge</li></ul>	<ul style="list-style-type: none"><li>• Low noise</li><li>• User-friendly</li><li>• User-friendly</li></ul>
<ul style="list-style-type: none"><li>• Water-conveying connections with 2 or 3 parts threaded unions</li></ul>	<ul style="list-style-type: none"><li>• Easy installation</li><li>• Releasable connections</li></ul>
<ul style="list-style-type: none"><li>• Two-parts body</li></ul>	<ul style="list-style-type: none"><li>• Easy to service</li></ul>
<ul style="list-style-type: none"><li>• Low weight</li></ul>	<ul style="list-style-type: none"><li>• Easy installation</li></ul>
<ul style="list-style-type: none"><li>• Compact dimensions</li></ul>	<ul style="list-style-type: none"><li>• Space-saving</li></ul>
<ul style="list-style-type: none"><li>• Ecological corrosion resistant materials</li></ul>	<ul style="list-style-type: none"><li>• Environmental protection</li></ul>
<ul style="list-style-type: none"><li>• High efficiency</li></ul>	<ul style="list-style-type: none"><li>• Energy-saving operation</li></ul>



## 1.4 Flow guard (cf. picture 1)

- **Green LED "On" (1)**

Shows that the flow guard and the pump are ready to operate.

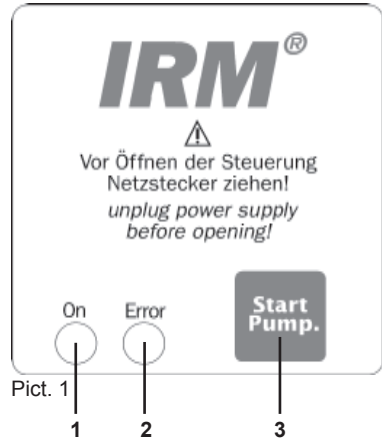
- **Red LED "Error" (2)**

Alert message:

Indicates that the flow guard has identified a defect (pump running dry)

- **Key "Start Pump." (3)**

Press this key to activate the pump, it starts running and stops again after a 15 seconds. When pressing and holding this key, the pump runs continuously during that period of time.





## 1.5 Maintenance



The device includes components that require inspection and maintenance works. The indicated intervals for the inspection and maintenance works as well as the work steps should be observed by the operator in his own interest!



- **The operator is authorized to inspect the device himself!**
- **Maintenance and repair shall be carried out by qualified installers or competent operators!**

### Inspection and maintenance of the device:

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#### Body

**Inspection:** Verify that the body is clean and correctly fastened.

**Cleaning:** Clean the external body of the device with a damp cloth and a standard dishwashing liquid.



Make sure that no liquid enters the plugs and switches or gets behind the control element/ upper part of the body!

Interval: Every year

Execution: Operator

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#### Float valve

**Inspection:** Verify that it opens and closes correctly (sealing) and that the floating unit can move freely.

Interval: Every 6 months (depending on the local lime content in the potable water)

Execution: Operator



**Maintenance:** Exchanging the float valve.  
Depending on the lime content/hardness degree of the potable water, the float valve may be prematurely damaged due to lime deposition. In this case, replace the float valve (available as accessory).

Interval: Depending on the lime content / hardness degree, in case of premature wear.

Execution: Competent operator / qualified installer



## Pump with flow guard

**Inspection:** Verify the pressure built-up, the leaktightness, the pump and flow generated noise as well as the function: briefly press the key "**Start Pump.**" on the flow guard until the pump starts to run.

Interval: Every 6 months

Execution: Operator

**Maintenance:** Mechanical seal / Replace the bearing.

Interval: After 10.000 service hours or 10 years or in case of premature wear.

Execution: Qualified installer / manufacturer

## Seal, potable water

(Rubber seal between potable water tank and zone valve)

**Inspection:** Verify the correct seat and sealing.

Interval: Every 6 months

Execution: Operator

## Shock absorber

**Inspection:** Verify the leaktightness, air pressure of 3.5 bar - depressurized installation.

Interval: Every year

Execution: Qualified installer / manufacturer

## Inspection and maintenance plan

Part		Inspection		Maintenance	
		Interval		Interval	
		Per year	Months	Per year	Months
1	Body	1			
2	Float valve		6		
3	Pump with flow guard		6	After 10.000h or 10 years	
4	Seal, potable water		6		
5	Shock absorber	1			
The indications in the columns „Per year“ and „Months“ mean time intervals. e.g. 1 = once per year or 6 = every 6 months.					

## 1.6 Troubleshooting

### Proceed as follows:

1. Disconnect the device from the power supply (unplug).
2. Eliminate the defect, cf. possible malfunctions under "**What to do, if**".
3. Re-insert the plug into the appropriate socket.
  - The plug must be readily accessible and not be covered!
4. Set the desired operating state.

### **What to do, if....**

#### ***water leaks from the DN 50 drain pipe?***

*The floating unit of the float valve rubs against the tank wall.*

Place the float valve in the center: correctly insert the float valve in the bracket. Additional settings are not required. Make sure that the reinforced hose is mounted without stresses!

*The float valve has become dirty during the pipe installation.*

Set the control element of the device to "Manual".

Open a point of use and let the pump run about one minute to flush the valve and remove dirt. Then, reset the control element to the desired operating state.

*The float valve is prematurely covered with limescale due to the hardness degree of the potable water.*

Check the float valve's function as described in chapter 1.5 "Maintenance".

In case of premature wear, replace the float valve.

#### ***the pressure gauge displays 0 bar and the LED "Error" on the flow guard lights up?***

*The pump has run dry.*

Verify the float valve and its feed-in capacity. Check any shut-off valves possibly mounted in the supply pipe. Then, restart the installation, cf. instructions for installation, chapter 2.1.

**What to do, if....**

***the pump permanently starts at short intervals?***

*There is a leakage problem on the pressure side or a point of use is not leaktight.*

Shut-off the stop valve on the pressure side of the device.

Check whether the pressure gauge shows a pressure drop and the pump starts again. If not, the leakage problem is not due to the device but to the downstream pressure pipe.

**In case of other malfunctions, contact your dealer/contractual partner.**



**If the device has to be removed from the wall bracket for troubleshooting or other works or if the pump has to be emptied, observe the first work steps as described in chapter 1.3 of the installation instructions.**

## 1.7 Technical specifications

Delivery rate Qmax	47 l/min
Delivery head H	max. 44 m
Temperature range	+5°C up to +35°C
System pressure pd	up to 10 bar
Max. installation height	20m
Supply voltage	230 V AC / 50 HZ
Working voltage Pump	230 V AC / 50 HZ
Standby power consumption	2.8 W
Nominal consumption	max. 805 W
Type of protection	IP42
Ambient temperature	min. +15°C.....max. +35°C
Mounting conditions	Interior
Weight	18 kg

### *Materials*

Body	PP-foam
Pump	stainless steel / Noryl / PP / light metal
Water tank	PE

### *Connections*

Water inlet	¾"
Pressure pipe	1"
Emergency overflow	DN 50

## 1.8 Important information



### General

This state-of-the-art product has been developed and manufactured with the greatest care. It undergoes permanent quality controls. While observing the installation instructions, the present instructions of use will help the user to become familiar with the device and to operate it in accordance with the intended purpose. The instructions for installation and use include important information for a safe, appropriate and economic operation of the device. Observing them is necessary to ensure the device's reliability and long service life as well as to avoid dangers. The instructions for installation and use do not take into account the local provisions that have to be observed by the operator. Do not exceed the values concerning the pumped fluid and temperature defined in the technical documentation and observe any other directives specified in the instructions for use and installation. The type plate indicates the type series, the most important operating data and the serial number that always has to be referred to in case of question, repeat order and especially when ordering spare parts. Insofar as additional information or indications are required as well as in the event of damage, contact your contractual partner/dealer.

### Safety

This user manual includes essential instructions that must be observed during operation and maintenance (cf. installation instructions when installing!). This is why the instructions for use and installation have to be read attentively by the operator prior to installation and start-up. They have to be kept close to the device and be available anytime. Observe not only the general safety instructions defined under this general point "Safety," but also the special safety instructions listed under the other main points. Observe the instructions directly affixed on the device and make sure that they remain entirely readable.

### Qualification and training of personnel

Only qualified personnel are authorized to handle, service, inspect and install the device. The operator will have to detail the scope of responsibility, the competence and the monitoring of the personnel. If the personnel do not have the required knowledge, they have to be trained and instructed accordingly. If required, this can be done by the manufacturer/supplier by order of the operator of the device. Furthermore, the operator has to ensure that the personnel fully understand the content of the instructions for use and installation.

### **Risks incurred by the non-observance of safety instructions**

The non-observance of safety instructions may endanger people, the environment and damage the device. The non-observance of the safety instructions causes the loss of any claims for damages. For instance, the non-observance may lead to the following dangers:

- Failure of important functions
- Failure of prescribed methods for maintenance and repair
- Electric and mechanical effects endangering people

### **Safety conscious attitude to work**

Observe the safety instructions specified in the instructions for use and installation, the national regulations on accident prevention currently in force as well as possible internal process specifications, operating rules and safety instructions of the operator.

### **Safety instructions for the operator/user**

Exclude any dangers due to electric energy (for further details cf. also the country-specific regulations of local authorities).

### **Safety instructions for maintenance, inspection and installation**

The operator has to ensure that all maintenance, inspection and installation works will be carried out by authorized and qualified personnel who have carefully read the instructions for use and installation. As soon as the works are concluded, all safety and protective devices have to be fitted and put into operation again. Prior to restart, observe the points listed in the section Start-up.

### **Unauthorized changes and spare part production**

The device shall not be transformed or modified. Original spare parts and accessories approved by the manufacturer provide safety. The warranty becomes void when using other parts.

### **Inadmissible operational modes**

The operational safety of the delivered device is only guaranteed when used in compliance with the intended purpose. The limit values specified in the data sheet shall by no means be exceeded.

### **Transport, temporary storage**

Do not touch the float valve or the electric feed line during transport. Make sure that the device is not submitted to shocks or impacts. Keep the device in a dry, cool, sun-protected room not liable to frost.

### **Safety prescriptions for installation**

Your electric systems shall comply with the general installation regulations IEC 364/ VDE 0100, i.e. present sockets with earthing terminals. According to DIN EN 60335-2-41 / VDE 0700, the power network to which the device will be connected has to be equipped with a residual current device (ground fault circuit interrupter). If necessary, contact your local electrician.

- When using an extension cord, make sure that its quality is not lower than that of the cord included in the delivery.
- Make sure that the electrical connections are not exposed to humidity.
- Attention! Unplug prior to each pipe installation/disassembly or other works on the device.

### **Verification prior to installation**

Check whether the device is suited for the power supply system by reading the information on the type plate. Make sure that all safety regulations are observed.

### **Electric connection**

Observe the safety prescriptions for your electric connection. Simply plug in.

### **Maintenance and repair/General instructions**

Unplug prior to any maintenance/repair works on the device. Only qualified personnel are authorized to make cable extensions and to open the device. The manufacturer's warranty and other guarantees will become void when opening the device. Only qualified personnel are authorized to make the assembly.

### **Safety standards**

This device complies with the standards EN 292-1; EN 292-2 ; EN 294; DIN EN 414; EN 954-1; EN 1050; EN 60204-1; EN 60529; DIN 1988 part 4; DIN EN 1717

## 2.0 Declaration of conformity



CERT

### DVGW CERT Konformitätsbescheinigung DVGW CERT Conformity Certificate

AS-0625CP0362

Registriernummer  
registration number

<b>Anwendungsbereich</b> <i>field of application</i>	Anschlussichere Produkte für das Trinkwassernetz <i>products for safe connection to the water supply</i>
<b>Vertreiber</b> <i>distributor</i>	Hans Sasserath GmbH & Co. KG Mühlenstraße 62, D-41352 Korschenbroich
<b>Produktart</b> <i>product category</i>	Geräte und Apparate mit Trinkwasseranschluss: Geräte für den gewerblichen Einsatz (0625)
<b>Produktbezeichnung</b> <i>product description</i>	Sicherheitstrennstation
<b>Modell</b> <i>model</i>	SicherheitsTrennStation STS 5
<b>Prüfberichte</b> <i>test reports</i>	Baumusterprüfung: FA 030/14 vom 06.10.2014 (TZW) Baumusterprüfung: FA 031/14 vom 06.10.2014 (TZW) Baumusterprüfung: FA 032/14 vom 06.10.2014 (TZW)
<b>Prüfgrundlagen</b> <i>test basis</i>	DVGW W 540-VP (01.08.2010)

Das Produkt ist zum unmittelbaren Anschluss an die Trinkwasser-Installation geeignet. Die Anforderungen zum Schutz des Trinkwassers vor Verunreinigungen durch Rückfließen entsprechend der DIN EN 1717 werden erfüllt.

**Ablaufdatum / AZ** 06.10.2017 / 14-0607-WNR  
*date of expiry / file no.*

180806-042E

18.11.2014 GIB-1/2  
Datum; Beschriftung; Blatt; Leiter der Zertifizierungsstelle  
*date; issued by; sheet; head of certification body*

DVGW CERT GmbH ist von der DAKKS nach DIN EN 45011:1998  
akkreditierte Stelle für die Zertifizierung von Produkten der Energie- und  
Wasserversorgung.

*DVGW CERT GmbH is an accredited body by DAKKS according to EN ISO/IEC  
17024 for certification of persons for energy and water supply industry*



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