

Rainwater Unit OPTIMA



INSTALLATION INSTRUCTIONS

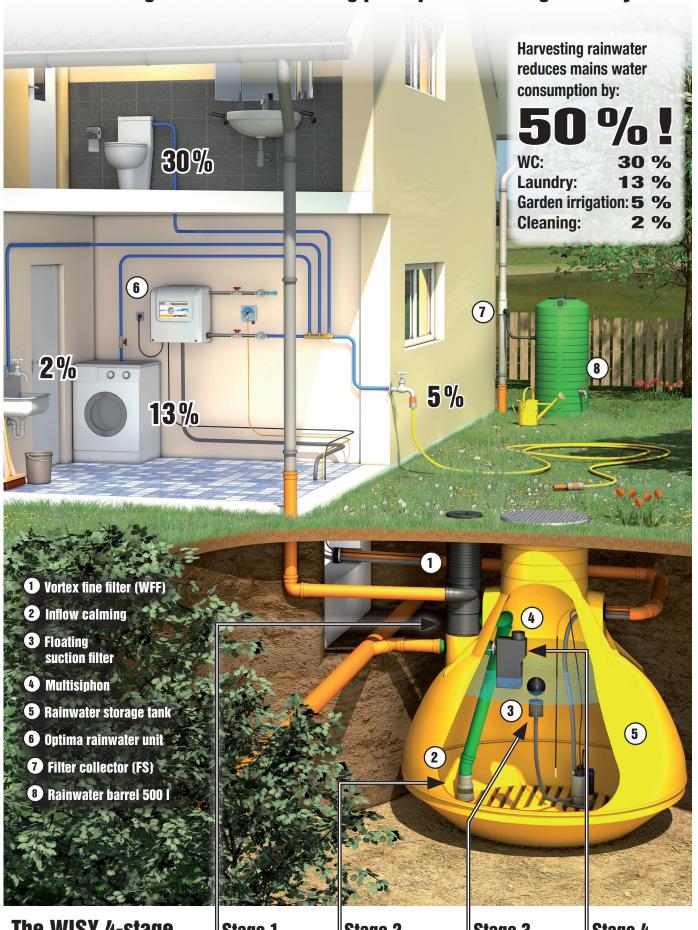
- Operating instructions for the OPTIMA rainwater unit
- Please read through these instructions carefully before you attempt to install and use the rainwater unit!
- 3- or 4-stage self-priming centrifugal pump
- Operates fully automatically to supply household appliances on demand
- Automatic mains water top-up with integral 9-litre top-up tank
- Energy efficient technology, standby usage less than 0.2 W





WISY Rainwater Harvesting

The WISY 4-stage rainwater cleansing principle in the single-family home



The WISY 4-stage rainwater cleansing system

Stage 1 Filtering with WISY vortex fine filter with separation of dirt particles and oxygen enrichment

Stage 2 WISY inflow calming prevents resuspension of sediment and distributes the fresh, oxygen-rich water in the storage tank

Stage 3
Water is extracted with the WISY floating suction filter suspended at the optimum height

Stage 4 Overflow with skim effect, odour seal, small animal guard and backflow prevention with WISY multisiphon

OPTIMA Rainwater Unit

Please read through these installation instructions carefully before you attempt to install and use the rainwater unit!

These installation instructions include the following information relating to:

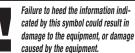
- Applications
- Handling and storage instructions, scope of delivery
- Components diagram
- Safety instructions
- Preparations for installation, assembly
- Commissioning
- Design and operating principle
- Maintenance, repairs
- Materials
- Troubleshooting guide
- Technical data
- Environmental guidance
- Declaration of conformity
- Guarantee conditions, device number



Failure to heed the information indicated by this symbol could result in serious or fatal injury.



Failure to heed the information indicated by this symbol could result in death by electric shock.





Applications

The OPTIMA rainwater unit by WISY is the control centre of the rainwater harvesting system.

OPTIMA works without suction pipes. It pumps the rainwater out of the storage tank and feeds it under pressure into the rainwater supply circuit. At the same time, the OPTIMA checks the fill level of the storage tank and tops up the system with mains water when required.

The OPTIMA can supply toilet flush, washing mashine and garden Irrigation with prefiltered rainwater for detached/semi-detached houses up to three storeys. Optima needs a minimum flow of 5 Liter per minute for operation. All taps and pipes must be sealed and tight closing. For more than 20 starts per hour an additional surge tank is necessary. Sand or dirt must not be in the water as they can destroy the OPTIMA unit.

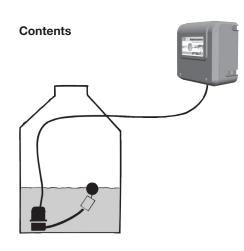
Delivery / shipment of the unit

The standard version of the Optima unit is generally shipped as a parcel containing two cardboard packages. The cardboard packages must not be dropped, crushed or handled with force. As soon as the packages are received, they must be checked for any signs of damage.

The cardboard packages or their contents must be stored in a safe, dry and frostfree location.

Scope of delivery

- Wall unit with normal-suction, multi-stage centrifugal pump with automatic switch and pressure indicator Zeta 02: Max. pressure in rainwater operation: 4.2 bar or 5.3 bar. In mains water operation 3.3 bar or 4,4 bar
- Automatic mains water top-up (to DIN EN 1717) of integrated top-up tank (9 litres) when rainwater runs out, with float valve, dirt filter and safety emergency overflow (DN 70).
- Cover, grey color, to protect the rainwater unit.
- Wall mounting kit.
- Separate submersible pump with 20 m connecting cable. Installation inside the storage tankwith fix mounted vertical float switch for dry run protection and fix mounted floating fine suction filter..
- Screw and rope to lift the submersible pump

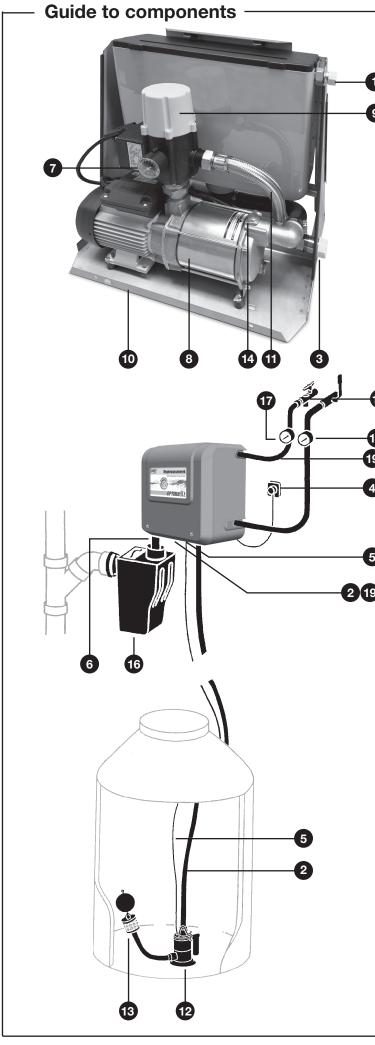


Read the operating instructions carefully before commencing assembly and installation work and store them in a safe place for later reference. Follow the safety instructions!



Wall unit

Storage tank equipment



- 1 Mains water connection (top-up)
- 2 Pumped rising main (submersible pump)
- 3 Pressurized outlet
- 4 Mains plug for complete system
- 5 Electrical connection (blue socket) for submersible pump
- 6 Emergency overflow drain connection (DN 70)
- 7 Operating pressure indicator (pressure gauge)
- 8 Normal-suction centrifugal pump
- 9 automatic switch ZETA 02
- 10 Base frame
- 11 Connecting hose to pressurized outlet
- 12 Submersible pump with float switch
- 13 Floating fine suction filter (FFSF)
- 14 Screw plug for venting/filling

Accessories not included in the scope of supply:

- **15** Isolating valves for mains water pipe and rainwater circuit
- **16** Multisiphon (odour seal and backflow prevention)
- 17 Water meter/mains water top-up
- 18 Water meter/rainwater
- 19 Flexible connecting hoses

Illustration does not show connecting kit for extending the electric cable



Additional instructions



Delivery / shipment of the unit

Note regarding the backflow level and essential installation conditions



Flush pipes before connecting to the wall unit

Safety instructions

Read the operating instructions carefully before commencing assembly and installation work and store them in a safe place for later reference.

Do not lift or pull the float switch by its electric cable.

Never climb inside the storage tank when the OPTIMA rainwater unit is connected to the power supply. Always unplug the OPTIMA rainwater unit to disconnect it from the power supply before carrying out any inspection, maintenance or repair work to the OPTIMA rainwater unit or inside the storage tank.

Never leave the rainwater storage tank unsupervised when it is open! No one except specially trained personnel is allowed to climb inside the rainwater storage tank. When working inside the tank, personnel must be supervised at all times and must take appropriate safety precautions (e.g. wear a recovery harness).

If the residual current device or the fuse trips, the trip cause must be identified and rectified by the manufacturer / by a contractor appointed by the manufacturer.

If the power cable to the OPTIMA unit or the float switch is found to be damaged, it must be replaced by the manufacturer / by a contractor appointed by the manufacturer.

Installation work which involves particular hazards (e.g. risk to mains water supply or the electrical installation) must always be carried out by a properly trained, approved plumber or electrician who is at least qualified in the following technical areas:

- Selection of appropriate tools and suitable electrical and installation materials
- IP degrees of protection
- Correct methods of installing electrical and other materials
- TN-C system, TN-S system and appropriate additional measures where necessary.
- Drinking water protection in accordance with DIN EN 1717, DIN 1989
 Failure to install the equipment properly can endanger your own life and the lives of people who use the equipment.

The system must be connected to a 230 V, single-phase AC (50 Hz) supply. The OPTIMA unit must be operated with clean water (rainwater or mains water) which does not contain aggressive, abrasive or solid substances.

Failure to adhere to these instructions and/or unauthorized interference with the OPTIMA shall exempt WISY AG from any liability for any personal injuries, property damage and/or damage to individual components of the OPTIMA system.

The OPTIMA product is generally shipped in a cardboard box. The cardboard box must not be dropped, crushed or handled with force, and must be inspected for damage as soon as it is received.

The cardboard box or its unpacked contents must be stored in a safe, dry, and frost-free location and protected against the ingress of dirt or contaminants.

Preparations for installation

The OPTIMA rainwater unit should be installed by a specialist installation company. This is a basic requirement for maintaining the validity of the manufacturer's guarantee.

Please note: The OPTIMA must be installed above the backflow level. Special protective measures must be implemented if the unit is installed and operated below the backflow level!

If the maximum fill level of the storage tank is higher than the bottom edge of the installed OPTIMA wall unit, the pumped rising main connection at the wall unit must be equipped with a solenoid valve (normally closed) and possibly an isolating valve (for service work). The solenoid valve is opened only when the loading pump is started.

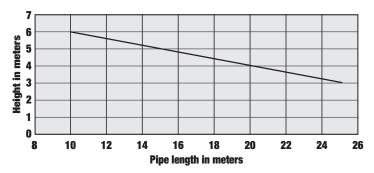
If a reliable, permanent connection cannot be made between the emergency overflow of the mains water top-up tank and a domestic drainage connection, a floor Drain must be provided.

The water column between the pump integrated in the wall unit and the highest operating point (valve at appliance) must not exceed 15 m!

Piping or hoses must be cleaned or flushed through before use to remove any deposits of dirt/dust caused by building work!

Important: The protective plugs fitted over the connectors on the wall unit and the submersible pump must be removed before hoses or pipes are connected to the units!

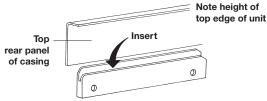
Ratio between Distance from loading pump to wall unit and the maximum Delivery height. When greater Heights or longer pipes are needed we recommend to use the Rainwater unit OptimaPlus or Maxima



Assembling the wallmounting bracket

Assembly

Attach the wall mounting kit horizontally according to the dimensions given.
The wall-mounting bracket can be used as a drilling template; the distance
between the two holes is 280 mm. The rainwater unit can then simply be
inserted in the groove of the bracket.



- We recommend the use of our hose connection kit (Item No. RW 7800) to connect the wall unit. Furthermore, all connections on the wall unit must be flat-sealing.
- Connect the incoming mains water pipe to the mains inlet connector on the OPTIMA unit. Use a ¾" connecting hose with stainless steel sheath (accessory) to connect the mains water pipe to the mains inlet connector on the OPTIMA wall unit. The top-up flow rate is approximately 95 l/min with a mains pressure rating of 3 bar (= 300 kPa).
- Important: If the mains pressure rating at the installation site is less than 3 bar (= 300 kPa), it may be necessary to increase the cross section of the mains pipe (e.g. to 1"). If the mains pressure rating is higher than 5 bar (= 500 kPa), it may be necessary to install a pressure reducing valve in order to limit the flow pressure to between 4 and 5 bar (= 400 to 500 kPa). Please consult your installation specialist or contact WISY AG directly. It is also advisable to install an isolating ball valve (with dirt trap) between the mains water supply and the connecting hose to the wall unit
- Connect the emergency overflow (DN 70) of the mains water top-up tank using an odour seal (siphon) to a domestic drainage connection or feed it back to the storage tank.
- If the unit is installed below the backflow level, an additional backflow prevention device (multisiphon) must be provided. I Connect the OPTIMA unit to the household rainwater circuit using a flexible connecting hose and an isolating ball valve with drain valve (accessory). In order to record water consumption, it is advisable to fit a water meter in the pressurized rainwater outlet hose and the mains water top-up hose, as shown in the illustration.
- In order to record water consumption, it is advisable to fit a water meter in the pressurized rainwater outlet hose and the mains water top-up hose, as shown in the illustration.
- Place the pump with float switch and fine suction filter in a vertical position on the base of the storage tank!
- Important: Never lift or pull the submersible pump by the cable! Please use the plastic carrying strap (supplied with the unit)! Use a pressure hose or a rigid PE pipe to connect the submersible pump to a flexible connecting hose (accessory) of the rainwater unit (diameter of pressure hose 1"). Do not install any flow resistances (e.g. water meters, backflush filters) in the pumped rising main between the loading pump and the wall unit.
- The mains electrical connection of the OPTIMA unit (alternating current, single-phase, 50 Hz, 230 V) must be protected by an earth-leakage circuit-breaker (0.03 A) and a 16 A fuse. It is essential that all electrical installation work is carried out in compliance with the relevant safety regulations!
- A blue socket is provided on the underside of the wall unit to connect the electrical supply to the submersible pump (loading pump). No other item of equipment may be connected to this socket! The loading pump must not be connected to the electrical supply at the wall unit until the pump has been vented.

Installing the wall unit



Installing the submersible pump



Electrical connection



<u>Important:</u> The pumps must <u>not</u> be put into operation, or even tested, unless the system is filled with water.

Make sure that the storage tank is filled with a sufficient quantity of water. The submersible pump should be completely immersed in water and the float switch must be floating.

Basic operating principle with two pressure pumps

Top-up with mains water

Shutdown of loading pump

Water exchange in the mains water top-up tank

Operating pressure indicator

Integrated dry run protection

If the mains connection cable of the wall unit becomes damaged, a replacement cable must be obtained from the manufacturer, from a service partner or from an authorized specialist supplier.

Commissioning

before starting the operation the water level in the tank must be at least 0,5 m. The submersible pump must be completely immersed in water

- 1. Flush all pipes to make sure all dirt from construction is removed
- 2. Venting of the pump integrated in the wall unit by the loading pump: Undo the venting screw on the pump in the wall unit, connect only the loading pump to a nearby electrical supply and wait until water starts to flow from the opening of the venting screw, then close the screw. pull out the electrical plug of the loading pump and connect it to the wall unit (blue socket on underside of the wall unit).
- 3. Flush the mains water pipe and connect it to the wall unit. Connection is on top right side. Observe the filling of the 9 Liter container. The float switch must not touch the walls and must close in due time. Water must not overflow into the emergency overflow.
- 4. Open the valves at the appliances.
- 5. Connect the OPTIMA to the electricity supply.
- 6. Close the Cover of the water container
- 7. As soon as system all air is removed from pipes, close the valves at the appliances! The OPTIMA unit is ready to operate.

Design and operating principle

The OPTIMA system developed by WISY essentially operates with two pressure pumps: The submersible pump (or "loading pump") of the OPTIMA system is installed in the storage tank. It is equipped with a fine suction filter and a float switch. The loading pump pumps the rainwater to the normal-suction, multistage centrifugal pump in the wall unit. As a result of the admission pressure, the centrifugal pump is required only to pump and the mains water top-up inlet pipe remains closed.

If a valve at one appliance (e.g. toilet flushing system) is opened, the pressure in the circuit drops. When the factory-set pump starting pressure (1.5 bar) on the automatic switch is reached, both pumps of the rainwater unit start up. When the valves at all appliances are closed again, the pump control system (automatic switch) turns off both pumps when the operating pressure is reached.

Note: If a "drip irrigation" system (often computer-controlled) is to be connected as an appliance to the OPTIMA, a small expansion vessel (around 15 I capacity) must be installed downstream of the wall unit in the rainwater circuit. The expansion vessel used for this purpose must be of the "flow-through" type.

Switchover to mains water top-up is fully automatic. If the storage tank is empty, the flow switch turns off the loading pump. Since the admission pressure then drops to zero, mains water is automatically sucked out of the top-up tank of the OPTIMA system. The water level in the top-up tank then falls, causing the float valve for the mains water inlet to open so that mains water can be supplied to the centrifugal pump.

If it is necessary to temporarily operate the OPTIMA system exclusively in mains water operation (e.g. to carry out maintenance on the storage tank), then the loading pump need only be electrically disconnected from the wall unit (remove plug from socket on OPTIMA unit!).

The mains water top-up system is implemented as an open outlet in accordance with DIN EN 1717 (formerly DIN 1988/4). Furthermore, a continuous exchange of water takes place automatically in the mains top-up tank.

The tank can be topped up with approximately 95 litres of mains water per minute if required. The mains water top-up tank has a storage capacity of 9 litres and is also fitted with an emergency overflow (DN 70) as an additional precaution.

A pressure gauge in the sight glass of the OPTIMA indicates the relevant system pressure at which the rainwater unit is currently operating.

When the system is completely empty of water, the dry run protection system integrated in the automatic switch shuts down both pumps.



The OPTIMA rainwater unit must be disconnected from the mains power supply before any maintenance work is carried out on the open storage tank. Compliance with the safety instructions (see heading "Safety instructions" in this document) is absolutely essential

Maintenance and servicing

6-monthly control

- Inspect the water circuit connections for leaks
- Perform a function test on the pumps and check the system pressure indicator
- Test the pump start and stop points set on the automatic switch
- Check the level indicator (compare actual tank fill level with indicated fill level)
- Perform function test on mains water top-up system, for example, by disconnecting the electrical power supply to the loading pump at the wall unit and opening a valve at an appliance at the same time
- Inspect the mains water inlet; if necessary, clean the dirt trap at the inlet of the float valve and the dirt trap at the isolating valve
- Check the fine suction filter (inspect visually and clean if necessary)
- Inspect the vertical float switch at the loading pump (if necessary, clean the filter at the casing of the vertical float switch)

If it is necessary to perform maintenance work in the storage tank, the electrical supply to the submersible pump must be disconnected.

Repairs

All repair work must be carried out by the manufacturer or by contractors whohave been explicitly approved.

Repairs, modifications to components or modifications to the OPTIMA installation carried out by unauthorized persons shall invalidate the guarantee!

Materials

Horizontal, multi-stage centrifugal pump

- Stainless steel 1.4301 (pump casing, casing cover)
- Nickel-plated brass (screw plug (for filling))
- Stainless steel 1.4401 (pump shaft)
- NORYL (impeller)
- Aluminium alloy (motor enclosure)

Submersible pump

- Stainless steel 1.4301 (outer casing, motor enclosure, bottom cover, suction foot, base plate)
- Stainless steel 1.4305 (pump shaft)
- NORYL (pump casing, handle, top bearing, impeller)
- Polypropylene (float switch)

Mains water top-up tank

- Polystyrene (tank)
- KTW-approved plastic (float valve)

Floating fine suction filter (FFSF)

- Stainless steel 1.4301 (suction strainer)
- Polyurethane (suction tube)
- Polyethylene (float)

Automatic switch

Polyamide, polypropylene (casing)

Screw connections, pump connections, valve

Brass, stainless steel

Connecting hoses

Natural rubber with stainless steel braiding

OPTIMA casing

- Stainless steel (base frame)
- Polystyrene (cover)

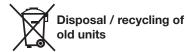
Troubleshooting guide

Type of fault	Cause	Remedy
OPTIMA is not supplying water to the appliance(s)	a) The storage tank is empty and the mains water con- nection is closed (air suction, dry run protection is active).	a) Absperrventil am TW-An- schluß zur OPTIMA öffnen. Haube abziehen und fest installierte Pumpe über Auffüllstutzen neu befüllen. Schraube zudrehen. RESET- Taste am Schaltautomaten drücken. Pumpe startet und schaltet bei max. Druck wie- der aus. OPTIMA ist wieder betriebsbereit
	b) The automatic switch does not start the pumps.c) The pump is blocked.d) Power supply to OPTIMA is interrupted.	 b) Netzstecker der OPTIMA ziehen und wieder einstecken. Sofern die Störung nicht behoben ist, bitte den Kundendienst rufen. c) Abhilfe wie unter b). d) Elektroanschluß überprüfen (eventuell hat der FI-Schutzschafter ausgelächt).
Switchover from rainwater to mains water is not working and the automatic switch is set to "Fault"	a) The float valve in the mains water top-up tank is blocked or does not open. b) The loading pump in the storage tank has fallen over when the water level was low and the float switch has not switched off the pump. The pump is sucking in air. c) The floating suction filter is caught against the wall of the storage tank and the pump is drawing in air.	schalter ausgelöst)! a) Check that the float valve is operating correctly, clean if necessary, contact customer service if necessary. b) Check the position of the loading pump; if necessary, change the pump position or secure it in the correct position. c) Check the position of the loading pump and the FFSF set and change if necessary. d) Contact customer service or
OPTIMA is not producing	d) The loading pump is defective. OPTIMA pumps have not been	installation specialist. Vent the pumps again.
enough pressure	fully vented.	
Integral (centrifugal) pump is running continuously	a) Water loss of more than 0.7 I/min from the system.	a) Inspect the entire installation and the valves at all appliances, seal and repair if necessary.
	b) Printed circuit board in the automatic switch is defective.	b) Contact the installation spe- cialist or customer service.
The integral (centrifugal) pump is switching on and off continuously	Leak in the system.	Inspect all appliances supplied by the rainwater circuit for minor water losses (e.g. drip- ping taps, valve failing to close completely in toilet cistern) and repair.
Continuous top-up with mains water despite suf- ficient fill level in storage tank	a) Suction filter in submersible pump is dirty. b) Interruption in pumped rising main between loading pump and OPTIMA wall unit. c) Interruption in electric cable between loading pump and automatic switch. d) Float switch at loading pump is blocked or defective. e) Loading pump is defective	a) Clean external surface of suction filter with a brush. b) Inspect the pumped rising main and replace if necessary. c) Inspect the electric cable and replace if necessary. d) Check whether the float switch reaches the ON level; contact customer service if necessary. e) Contact customer service.
Mains water is continuo- usly running out through the emergency overflow of the mains top-up tank (audible!)	Float valve in the mains water top-up tank is not closing or is clogged	Clean the valve; contact customer service if necessary.
Inadequate top-up with mains water	The float valve in the top-up tank is blocked or the dirt filter at the valve inlet is clogged	Clean the float valve and/or the dirt filter, replace if necessary
The pressure gauge (pressure indicator) is showing a raised pressure.	An external heat source (e.g. radiator) is causing a pressure increase in the OPTIMA system.	Contact customer service of your installation company (it might be necessary to install a pressure relief valve).

Technical data

	OPTIMA 4 bar	OPTIMA 5 bar
Power consumption	Of ThinA + Bui	
- horizontal centrifugal pump	600 W Prisma 15/3	800 W Prisma 15/4
- submersible/loading pump	510 W Provedo VX	510 W Provedo VX
- Standby (W)	< 0,2	< 0,2
Mains connection	230 V, 50 Hz	230 V, 50 Hz
1-phase alternating current		
Total maximum power consumption for both pumps	10 A	10 A
Degree of protection		
- horizontal centrifugal pump	IP 55	IP 55
- submersible/loading pump	IP 68	IP 68
- automatic switch	IP 44	IP 44
Water connections of OPTIMA		
system:	1" OT	1" OT
- Inlet connection of loading pump	¾" OT	¾" OT
- Mains water connection	1" OT	1" OT
- Outlet connection to appliances	1" grommet / 1¼" IT	1" grommet / 1¼" IT
 Suction inlet / discharge outlet of loading pump 		
(OT=outside thread, IT= inside thread)		
Sound pressure level dB (A) (in decibels)		
- in rainwater operation	52	57
- in mains water operation	63	63
Horizontal centrifugal pump		
Delivery head H /Flow rate Q		
Rainwater operation: H _{max} / Q _{min}	35 m / 20 l/min	45 m / 20l/min
H_{min}/Q_{max}	16 m / 65 l/min	17 m / 65 l/min
Mains water operation: H _{max} / Q _{min}	30 m / 20 l/min	40 m / 20 l/min
H _{min} / Q _{max}	8 m / 65 l/min	7 m / 65 l/min
Submersible Loading pump		
Delivery head Hat Q = 25 I/min	8 m	8 m
Max. immersion depth	5 m	5 m
Cut-in pressure of automatic switch	1.5 bar	1.5 bar
Max. operating pressure in RW operation	4,2 bar	5,3 bar
Max. operating pressure in mains operation	3,3 bar	4,4 bar
Max. permissible operating pressure	8 bar	8 bar
Max. water temperature	35° C	35° C
Capacity of mains water top-up tank	9 Liter	9 Liter
Mains water connection:		
- min. inlet water pressure	2,5 bar (250 kPa)	2,5 bar (250 kPa)
- max. inlet water pressure	4 bar (400 kPa)	6 bar (= 600 kPa)
Top-up flow rate (mains pressure	approx. 95 l/min	approx. 95 l/min
rating 3 bar (300 kPa), pipe cross section ¾")	Specific of William	Sprow of Willi
Dimensions of OPTIMA system Depth x width x height (in mm)	315 x 500 x 510	315 x 500 x 510
Electr. connecting cable wall unit	1,5 m (3x 1,0 mm²)	1,5 m (3x 1,0 mm²)
Electr. cable for submersible pump	15 m (3x 1,00 mm²)	15 m (3x 1,00 mm²)

Disposal / recycling of transport packaging



Environmental guidance

The OPTIMA is shipped in recyclable packaging. Please recycle it! Waste electrical and electronic equipment contains valuable materials which can be reused / recycled. Do not dispose of an old unit as general (non-recyclable) household waste. Use the recycling centres provided in your area to return defective electrical or electronic equipment so that it can be recycled!



Product name

Relevant EU directives

Applied harmonized

standards

Declaration of conformity

In compliance with the EU Machinery Directive 2006/42/EC, Annex II Part 1 Section A

We hereby declare that the machines named below comply with all provisions of version 2006/42/EC of the EU Machinery Directive.

Multimat type 205, type 407 rainwater units Optima 4, Optima 5, Optima Plus rainwater units Maxima type 205, type 407 rainwater units Sigma 3, Sigma 4 rainwater units Delta rainwater unit

Machinery directive 2006/42/EC dated 17.05.2006

Directive 2004/108/EC relating to electromagnetic compatibility dated 15.12.2004

EN ISO 13849-1:2008 Safety of machinery -Safety-related parts of control systems - Part 1: General principles for design (ISO 13849-1:2006)

EN 809:1998+A1:2009 Pumps and pump units for liquids - Common safety requirements

EN ISO 12100:2010 Safety of machinery -General principles for design - Risk assessment and risk reduction (ISO 12100:2010)

EN 60204-1:2006 Safety of machinery -Electrical equipment of machines – Part 1: General requirements

EN 60529 (VDE 0470-1) Degrees of protection provided by enclosures

DIN 1989 Rainwater harvesting systems,
Parts 1+4 DIN EN 1717 and DIN 1988-100 Drinking water protection

WISY AG Oberdorfstraße 26 D-63699 Kefenrod

WISY AG Oberdorfstraße 26 D-63699 Kefenrod

Arnold Denk
Managing Board
of WISY AG

Jan Maurer Managing Board of WISY AG

Other applied national standards and specifications

Manufacturer

Authorised person with responsibility for technical documentation

Kefenrod, February 14, 2013

WISY Rainwater Harvesting



Period and commencement

Terms and conditions of the

Content and scope of the guarantee

Limitation of the guarantee

of the guarantee

guarantee

Guarantee

This guarantee is valid for a period of 24 months and becomes effective on the date of purchase by the customer. Replacement of the product under guarantee will not extend the original period of the guarantee.

WISY shall meet its guarantee obligations for the OPTIMA rainwater unit If it can be demonstrated that the following conditions are fulfilled:

- 1. The product has been purchased from a specialist WISY retailer in the Federal Republic of Germany.
- 2. The product has been commissioned by the WISY customer service or by a specialist installation company.

Claims can be made under the guarantee only if WISY receives notification in writing of any defect within 14 days of discovery of the defect.

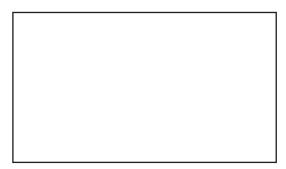
During the guarantee period, WISY shall repair or replace free of charge any defective part. Additional claims for damages shall be excluded to the extent permitted by law.

Faults or defects which arise as a result of the following factors are not covered by the guarantee:

- Faulty assembly or installation, e.g. failure to comply with the valid VDE regulations or with the Installation Instructions.
- Failure to connect the emergency overflow of the mains top-up tank to a domestic drainage connection or failure to provide a floor drain.
- Inappropriate use or exposure to excessive mechanical strain
- The connection of equipment other than the submersible pump supplied with the OPTIMA system to the blue socket provided for the submersible pump.
- External influences, e.g. shipping damage, damage caused by shock impacts, damage caused by exposure to weather or other natural phenomena.
- Repairs or modifications undertaken by unauthorized third parties

Device no.

The registered manufacturer device number of your product is as follows:





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