

A RELIABLE PARTNER

ABOUT GRUNDFOS



Grundfos is a world-leading manufacturer of pumps for use in and around the home. We provide heating and water on demand and automatic control of the systems. We help you dispose wastewater efficiently and drain cellars in case of flooding. We collect rainwater and water the garden. In areas where water pressure is low or fluctuating, we have

systems for efficient pressure boosting and constant water supply. And our solutions are available to customers on every continent. With sales, support and service professionals in 45 countries around the world you are guaranteed easy access to extensive pump and pump application knowhow – in your local language.

GETTING CONDENSATE  
OUT OF YOUR WAY



MODERN  
COMFORT  
BY GRUNDFOS



# CONLIFT – A RELIABLE PARTNER IN CONDENSATE REMOVAL

**A COMPLETELY NEW GENERATION OF GRUNDFOS CONDENSATE REMOVAL LIFTING STATIONS OFFERS UNIQUE SOLUTIONS IF CONDENSATE CANNOT BE DRAINED BY NATURAL DOWNGRADE OR IF THE APPLIANCE IS PLACED BELOW BACKWATER LEVEL IN A BASEMENT.**

Condensate is likely to appear in a variety of applications. In combination with dehumidifiers, in air conditioning systems, in commercial refrigerators and in particular in the widely used modern condensing boilers. Grundfos' upgraded range of lifting stations, CONLIFT1, CONLIFT2 and CONLIFT2 pH+, is based on more than a decade of experience and covers different levels of demands.

Condensate from condensing boilers, for instance, is quite aggressive. In gas boilers the pH level is typically between 3 and 4, while in oil boilers it may be easily drop below pH 3. This challenges the material and requires an elaborate unit design. In case of oil condensing boilers and boilers >200 kW, the neutralisation of the aggressive condensate is basically recommended.

Easy installation, easy servicing and low noise operation are trademarks of the new CONLIFT range.

### THE PRINCIPLE

Grundfos' condensate lifting stations collect the condensate from the appliance and discharge it up to 5 m height and across several meter distance to the desired drainpipe. An

advanced design along with carefully selected components ensure that condensate removal with CONLIFT is as reliable as using the natural downgrade.

### CONLIFT HIGHLIGHTS

The motor/pump unit is able to turn 180° on the tank, which increases flexibility in the installation process. To further facilitate installation, four symmetric, well-sized inlets offer connectivity from all directions.

All CONLIFT units can be installed base standing or wall-hung. The required installation material is included as is 6 m drain hose and different connectors for boiler drain pipes and the discharge hose. The units come with a pre-installed non-return valve unit fixed by bayonet with a quick lock mechanism to avoid accidentally unlock. The discharge can handle 8 and 10 mm hoses. All units are IP24 protected what makes them suitable for application in tougher environment. Moreover, an alarm contact is equipped with 1.7 m wire operated by a floater to detect high water level inside the CONLIFT. The contact can be used to activate an external alarm device or to switch off the condensate source.

### UNIQUE FEATURES

All CONLIFT units come with a combination of elaborated, unique features to ensure reliable condensate removal:

- A sufficiently sized tank with a large effective volume keeps the pump intervals down
- Equipped with a motor that enables up to 60 start intervals per hour even large boilers are easily drained in spite of the compact design
- A special water lock underneath the four inlets and a condensing labyrinth on the float switch efficiently prevent evaporation from warm condensate inside the unit from creating corrosion on electric components
- The acid resistant stainless steel shaft is double-coated with a rubber sleeve
- A special sealing system prevents corrosion on bearings
- All level switches are carried out in very reliable and well-proven float switch design – sensitive electronics are avoided
- A manual test button enable quick operation check – after installation and for service.

If the safety demands are higher, the CONLIFT2 offers an integrated alarm device that will send an additional

acoustic signal in case of high water level. The alarm device is also capable of optionally operate an extra pump start once the malfunction is detected to ensure that there is no interruption of the condensate removal or to switch off the condensate source.

The CONLIFT2 pH+ combines all the excellent features of CONLIFT2 plus a top mounted neutralisation unit. The neutralisation unit lifts the pH value of the aggressive condensate before draining it into the building's drain system. Thanks to the unique flexibility the neutralisation unit can also be placed alternatively also next to the condensate lifting station.

# WHEN CONDENSATE REMOVAL IS REQUIRED





# A RELIABLE SOLUTION FOR ANY APPLICATION

Condensate is encountered in a variety of applications, including dehumidifiers, in refrigerators, in air conditioning systems and in modern condensing boilers. A lifting solution is the obvious solution when drainage via a slope is not possible.

Depending on where condensate appears is it more or less aggressive. In condensing boilers the condensate typically has a pH value far below 7, which calls for carefully selected materials that is resistant to the acidic liquid. In gas boilers

the pH value of the condensate is normally between pH 3 and pH 4. Condensate like this can be drained without any further treatment. The condensate generated in oil condensing boilers is, however, easily below pH 3 and requires a neutralisation of the acid condensate on a level around pH 7 to avoid damage on buildings drain pipes and sewer.

Whatever challenge you are facing, CONLIFT provides you with a safe solution tailored to the application securing reliable and durable condensate removal.



DE-HUMIDIFIER



REFRIGERATOR



AIRCONDITIONER



HEAT PUMP



BOILER



# SUPERIOR COMMON FEATURES ON A UNIQUE RANGE FOR MAXIMUM DEMANDS

THE COMBINATION OF USEFUL FEATURES, ADVANCED DESIGN AND SELECTED MATERIALS IN THE CONLIFT RANGE OFFERS MAXIMUM PERFORMANCE ON OPERATIONAL RELIABILITY, INSTALLATION AND SERVICE FRIENDLINESS.



4 sufficient sized inlets.  
Special inlet grommets seal and fix inlet hose.  
180° rotatable pump component to select discharge position.



IP 24 cover design protect towards splashing water.  
2 snap-fastener enable easy access to tank for service.



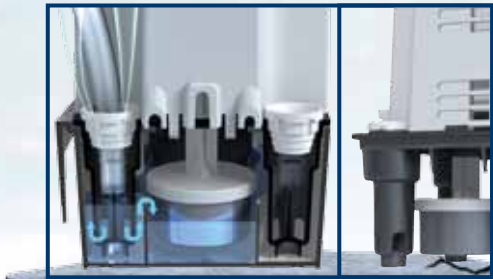
CONLIFT2  
Integrated acoustic alarm device.  
Optional extra pump start at high water level or off.



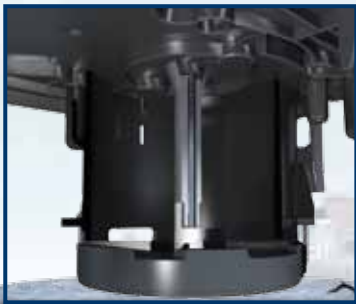
Manual test and operation function.  
...enables a quick function test w/o need for water filling, to check installation or after service.



Stepped outlet socket for hoses with di Ø8 and Ø10 mm.  
Bayonet fixing on non-return valve with smart lock for easy service and to avoid undesired release.



Special inlet design with sedimentation and evaporation stop caused from boiler.  
4 feet below inlets keep floater system load free in service cases.



Stainless steel motor shaft additionally protected by a bushing combination.  
Rotating lip sealing protects bearing and motor against evaporation from tank.  
Self venting hydraulic.



Special float switch design prevent verifiable and corrosion on micro switches.  
Moisture from tank side drip back into tank.  
Very reliable and robust sensitive electronics.



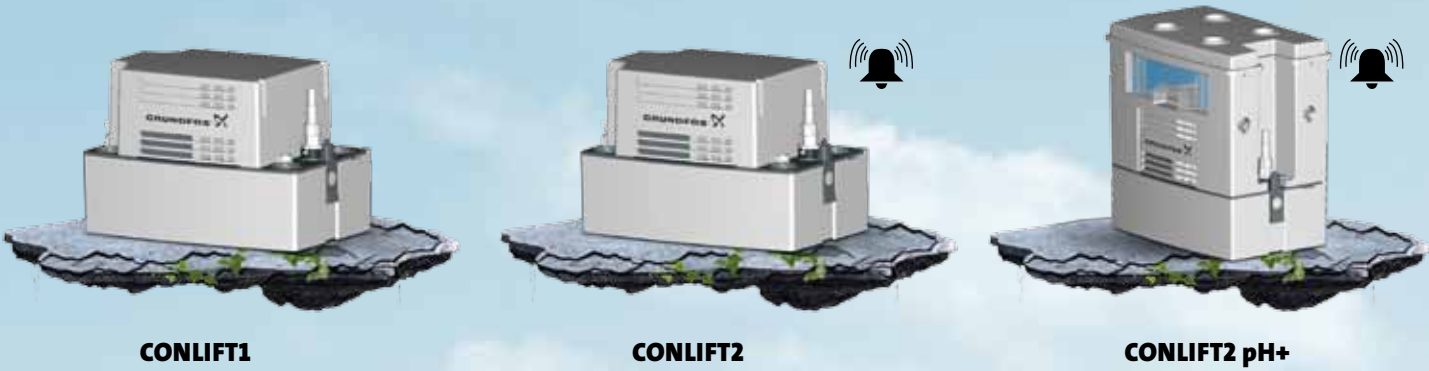
Smart balance enable easiest adjustment in wall-hung installation.



CONLIFT2 pH+ comes with a flexible re-fill neutralisation unit either:  
> compact on top or  
> next to the lifting station.  
With smart balance on lifting station and neutralisation unit.



# PERFORMANCE AND ACCESSORY



CONDIFT1 and CONDIFT2 are complete pre-assembled lifting station made for condensate removal with a pH value  $\geq 2.5$ . The units operate full automatic when the condensate enters the tank and require no particular maintenance.

CONDIFT1 comes with an integrated NC/NO contact detecting high water level enabling boiler switch off.

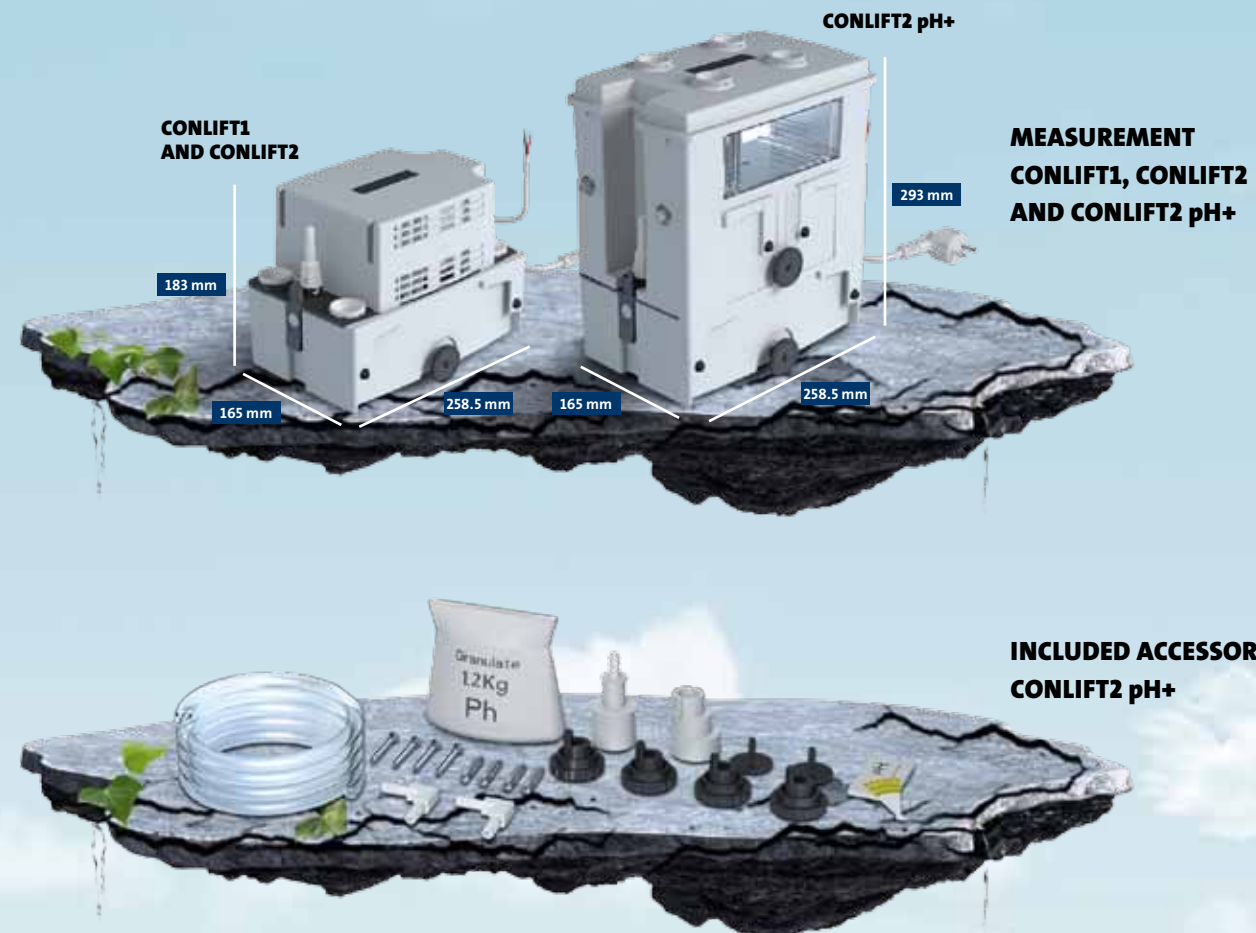
CONDIFT2 includes additionally an acoustic alarm device in case of high water with optional condensate source switch off or extra motor start to secure continuing condensate removal.

CONDIFT2 pH+ like CONDIFT2 but with additional packed neutralisation unit for application where condensate with a pH value of below 2.5 appear. The special granulate lift the

acid condensate on a neutral level. The neutralisation unit can be placed also left or right to the CONDIFT.

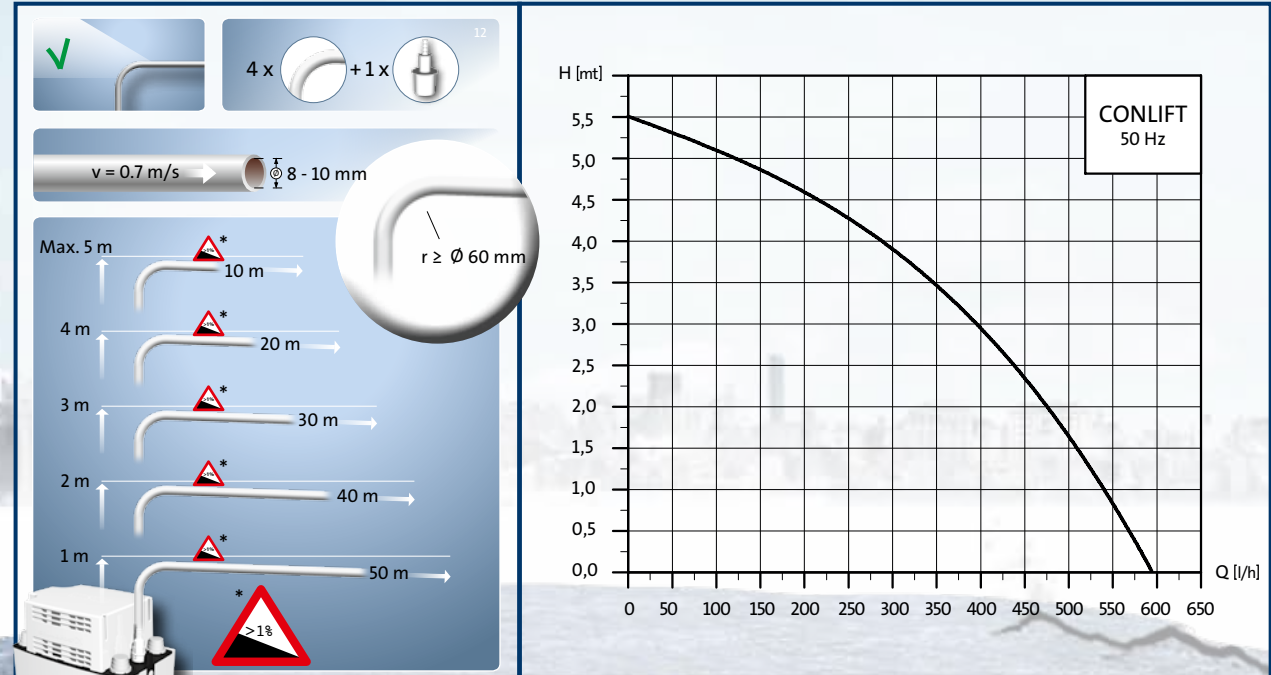
All units can be installed wall-hung or floor standing and comes with all required installation material, including 6 m discharge hose, connector for drain pipes from boilers up to 40 mm and adaptor for discharge hose connections to 21.5 and 40 mm buildings drain pipes.

CONDIFT2 pH+ includes additionally connectors for neutralisation unit when placed next to the condensate pump, 1.2 kg neutralisation granulate and pH tester to monitor neutralisation capacity.



## PERFORMANCE

CONDIFT grants the drain of boilers with 200 kW generating up to 32 l condensate per hour up to 5 m head.





ACCESSORY AND DATA



**pH+ BOX**  
The pH+ Box is a single neutralisation unit that can be used to upgrade CONLIFT1 and CONLIFT2 in retrofits when neutralisation of aggressive condensate from gas and particular oil condensing boilers is required. The box can be

installed on top of or next to the lifting station and comes with the required accessories for wall-hung or floor-standing installation. 1.2 kg granulate and a pH tester to measure the acid level of condensate is also included. The pH+ Box is applicable also with other lifting station brands.



ACCESSORY	P/N
6 m hose extension with connector for Ø10/14 mm discharge hose	97936177
Alarm device to upgrade CONLIFT1	97936209
Granulate refill package, 4 x 1.4 kg for CONLIFT2 pH+ and pH+ Box, with pH level tester	97936178
pH+ Box with accessory and 1.2 kg granulate	97936176



GENEREL DATA	CONLIFT1	CONLIFT2	CONLIFT2 pH+
Power supply	1 x 230 V + -6%, 50 Hz**		
Size L x H x W	258 x 183 x 165		258 x 293 x 165
P1	75 W		
Nominal current	0.65 A		
Inlets/size	4 x Ø28 mm		
Discharge/hose length/material	Ø10(8) mm/6 m/PVC		
Weight	3.1 kg		4.3 kg
Tank volume/effective volume	2.65/0.9 l		
Max head/max flow	5.7 m/588 l/h		
Max head to drain 200 kW boiler = 32 l/h	5.0 m		
Max starts per hour	60 start/h		
pH	>2.5		<3*
Max. media temp.	50 °C/90 °C for 5 min.		
Ambient temp.	5-50 °C		
Motor duty pattern	S3 30% 1 min.***		
Aux. changover contact	230 V, 5 A		
Supply cable type/length	H05W-F36/1.7 m		
Noise level	<47 dB(A)		
Noise level alarm	n.a.	80 dB(A)	
Alarm contact cable wired	250 V/2.5 A/1.7 m		

\* Oil boilers basically and gas boilers >200 kW recommended  
\*\* 60 Hz on request  
\*\*\* Motor with build-in thermal overload protection

PRODUCT NO.	CONLIFT1	CONLIFT2	CONLIFT2 pH+
With Schuko plug	97936156	97936158	97936172
Without plug	97936173	97936174	97936175