



Energy efficiency is our motto.



E-mini instant water heaters provide the most efficient method for handwashing.



E-comfort instant water heaters turn your shower and bathroom into a real yet efficient spa area.



For us, good service means to be flexible and close to the customer.

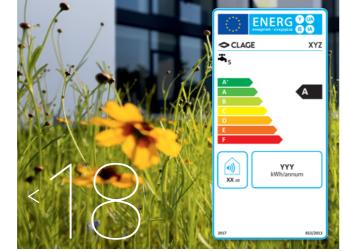


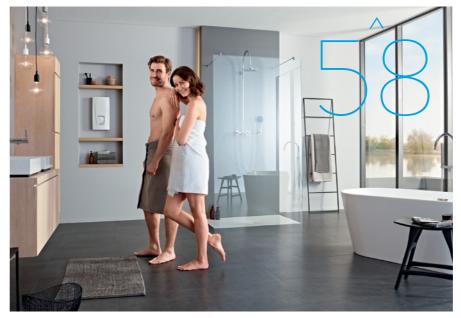
E-compact instant water heaters provide more efficiency and convenience in the kitchen.

The new European energy

instant water heaters!

efficiency label. Class A for our







Control your warm water supply with the iPad and smartphone or connect the units via modern KNX technology.

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CLAGE

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"Energy efficiency is our motto."





Made in Germany

In 1951, Claus-Holmer Gerdes started selling mini instant water heaters. Today, we are a third-generation, ownermanaged mid-size industrial company in the northern German Hanseatic city of Lüneburg. Around 290 employees work in the areas of R&D, production, sales and customer service. All of them pursue the goal of first-class quality in compliance with the ISO 9001:2015 quality standard.

Efficiency

The "E" in CLAGE is accentuated because it stands for efficiency. A criterion that decisively describes our actions for your benefit. You can choose from an extensive range of energy-efficient appliances that stand out for their clever technology, small size and robust construction. And this also corresponds to the way we work. This means that our customers are always "close" to our competent and welltrained employees.

Flexibility

We don't simply want to sell you "a water heater" but we are offering energyefficient, decentralised hot water solutions. This also requires a high degree of flexibility to be able to offer individual solutions. And we are aiming for many goals: Conserving energy and water, convenience, hygiene, durable products, simple installation and operation, fast and reliable service. Of course, smart technology is a given.

Responsibility

At CLAGE, it is easy to notice personal responsibility because of our great passion for everything we do. And it shows in our customer consultation and service as well. Durability is an important design feature, with components such as heating cartridges being easily replaceable in case of repair. Throughout the company, we pay attention to sustainability and continuously put our processes to the test. To this end, we comply with the ISO 14001 environmental management standard and have been climate-neutral according to Scope 1 and 2 since 2021 through continuous energy savings and the use of renewable energies. We offset the CO_2 emissions that we are currently unable to save through certified climate protection projects.

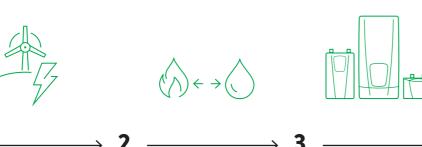


"Electric instant water heaters are the future!"

Specialist

As a pioneer and market leader for small instantaneous water heaters, we also see ourselves as thought leaders in the field of decentralised hot water supply. We are therefore constantly on the lookout for new solutions for our range of electric instantaneous water heaters. Numerous awards and a high level of customer satisfaction are confirmation of our claim to be the experts for electric instantaneous water heaters.

So why without electricity?!



Electricity is getting "greener"

In the course of the energy transition, electricity is increasingly being used as a sustainable energy, for example in e-mobility. Electric domestic heating technology is also playing an increasingly important role in the heating market. This is because it makes us less dependent on fossil fuels and allows us to use environmental energy. Almost half of electricity consumption already comes from renewable energies.

Separating heating and hot water

The heating requirements of buildings are steadily decreasing. And providing 60 degrees Celsius only for hot water is a waste of energy. So it seems to make sense to separate the two systems. A heat pump for space heating, for example, works optimally in the low-temperature range if the hot water supply is separated according to demand via electric instantaneous water heaters.

Electric instant water heaters are the future

They are comfortable, space-saving and provide hot water immediately. They heat the water only to the desired temperature. Storing and distributing hot water in the house with inevitable heat losses is completely unnecessary.

5 **Replace old** Sustainable,

economical This means avoiding losses and only producing what is actually needed. To do this, we use green electricity, i.e. electrical energy from environmentally friendly renewable energy sources. We for the production and you, if possible, for the use of the appliances.

efficient and

devices and plan the specialist for new ones

So what are you waiting for? Become an energy saver and update your outdated technology. Include electric instant water heaters when you start planning your next bathroom remodelling project.

Electricity makes it efficient!

CLAGE is

When you choose electric instant water heaters, you'll soon encounter CLAGE, because we are pioneers in the area of hot water systems and also provide excellent customer service.



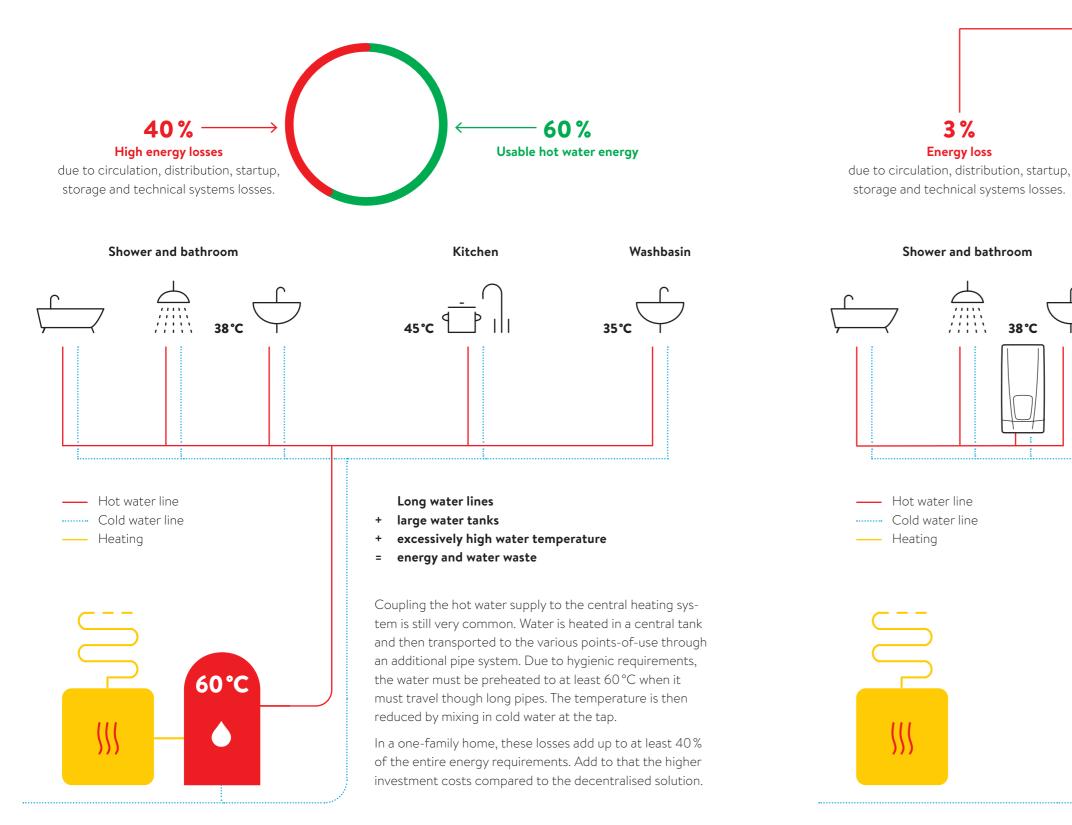


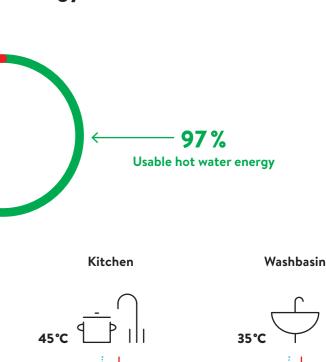
Centralised? Decentralised? It matters!

Central hot water supply with high energy losses

Decentralised hot water supply is energy-efficient

3%





Short water lines

- correct water amount +
- + correct water temeperature
- = energy-efficient, based on demand, modern

In decentralised systems, the hot water supply is separated from the heating system. Electric instant water heaters meet the specific requirements for each application if installed directly at the various points-of-use. The hot water is available without any lead times. Only the required amount of water is heated. Investment and Operating costs are saved. The central heating system can now be adjusted precisely to the requirements of the building and be turned off completely during the summer.

The distribution, start-up and systems losses only amount to 3% of the energy requirements.

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Central or decentral? Any questions?





What is my own hot water requirement actually?

Washbasin

Pleasantly tempered water is needed to wash hands in a relatively short time. Take a measurement: Washing hands often takes less than 10 seconds. It is therefore important to have hot water at the ideal temperature of 35 °C immediately, without having to mix it at the tap first. E-small instantaneous water heaters meet this requirement and supply washbasins, for example in private guest toilets or in restaurant and office buildings, in a particularly energy-saving way and with little effort. Our small devices are beautifully designed and are hardly noticeable under the washbasin or can be installed hidden.

Kitchen

The need for hot water at the kitchen sink is manifold. Washing hands, filling a glass of water, cleaning fruit and vegetables or just washing a saucepan. These are applications that require different temperatures. More than 45 °C is already considered hot. So it's great to be able to set the desired temperature at the touch of a button and get it directly from the E-compact instantaneous water heater without adding cold water to the tap. The units can be installed directly under the sink to save space. This avoids pipe and heat losses.



Our solution: E-mini instant water heater

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Our solution: E-compact instant water heater

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Shower and bathroom

Sensitivity is required in the bathroom, because the exact comfortable temperature varies from person to person, but is always close to the body temperature of 37 °C. That's why the water should flow at the desired temperature immediately after the tap is opened, without lengthy adjustment and mixing. At any time and for as long as you want. By the way, on average we only take a shower for 3 to 5 minutes, even though it usually seems longer to us. Our E-comfort instant water heaters can be conveniently set to the exact desired temperature and offer exactly the comfort we want in the shower and bathroom.



Our solution: E-comfort instant water heater

> page 58

That's how you make friends!



Instantly hot water

As soon as you open the tap, the water flows with your desired temperature. The water is only heated in the amount and for the time you actually need it. Due to short water lines and modern technology.



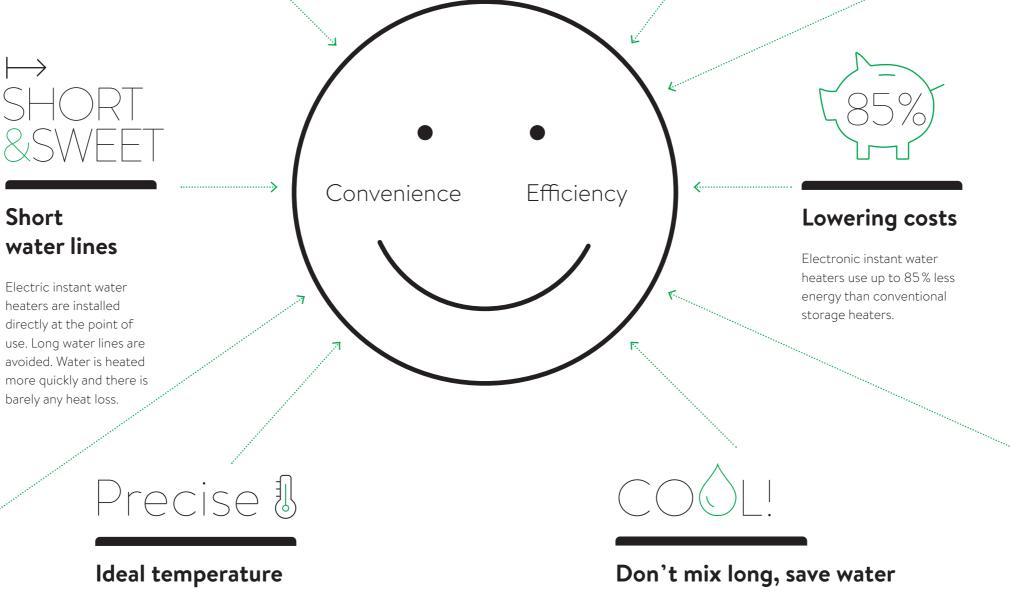
Saving energy

Electric instantaneous water heaters only heat the amount of water to the desired temperature that is currently required. Adding cold water to lower the temperature is not necessary. The water is not preheated and stored in large quantities. Standby and distribution losses are eliminated. This saves energy. Thanks to energy monitoring, "Eco" real-time feedback and energy-saving function, energy-saving user behaviour can also be promoted.



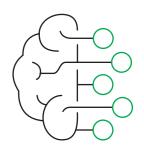
More hygiene

Electric instant water heaters heat up the cold water to the perfect temperature within seconds, directly at the tap, as it flows through the unit. The heated water is used immediately and unused water is avoided in the water line systems. That's why testing for Legionella bacteria becomes unnecessary. This is what makes decentralised water heating more hygienic and efficient.



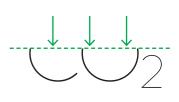
On many units, each user can set his or her individual temperature preference precisely. Directly at the unit, by remote control or via app. This also provides more security by avoiding scalding accidents.

Now that's cool! No water wasted. Hot water is available immediately with electric instantaneous water heaters. You don't have to or mix cold water and water that is too hot to get the desired temperature. With central systems, approx. 4.8 litres of water are wasted in 15 m long pipes.



Always smart

Electronically controlled instantaneous water heaters always respond precisely to the user's demand due to the technology and without a learning phase (real-time power control based on temperature demand and tapping quantity).



CO_2 down

The share of renewable energies in the electricity mix is rising, thus also reducing CO_2 emissions, which are emissions generated by the conversion of fossil fuels. Decentralised hot water supply reduces CO₂ emissions compared to centralised hot water supply. compared to centralised gas or oil systems by up to 35 %.

Electric instant water heaters **are used all over the world.**



Private households

Electric instant water heaters are in use in nearly all residential properties: in one- and multi-family homes and, of course, in apartments as well. It makes a lot of sense to invest in decentralised warm water technology with modern electric instant water heaters, both in existing and in new buildings. At the washbasin, in the kitchen or in the bathroom: Electric instant water heaters provide more energy efficiency and convenience at home.

Housing construction

For renovation projects in buildings with outdated technology, one of the main issues is modern and energy-efficient heating and hot water technology. In new construction projects, the demand for general heating is constantly reduced due to technical advancements. For the highest savings potential, central heating and the hot water supply should be completely separated. Electric instant water heaters are an energy-efficient and hygienic solution. Our electric instant water heaters are utilised in private, business and public buildings all over the world. Owners, contractors, architects, developers and investors rely on our expertise and our special service in the area of energyefficient hot water preparation. Our large range of products nearly always provides a fitting and smart solution for their hot water supply needs. You can find CLAGE products in renowned hotels, in office buildings, in modern architectural houses and all other places where one would not want to do without the convenience of an efficient hot water supply.

References are available at clage.com



Commercial buildings

E-mini instant water heaters at washbasins for employees, customers and visitors make each bathroom facility more comfortable. Our energy-efficient units directly at the point of use are the optimal solution in large buildings with long water lines.

Hospitality

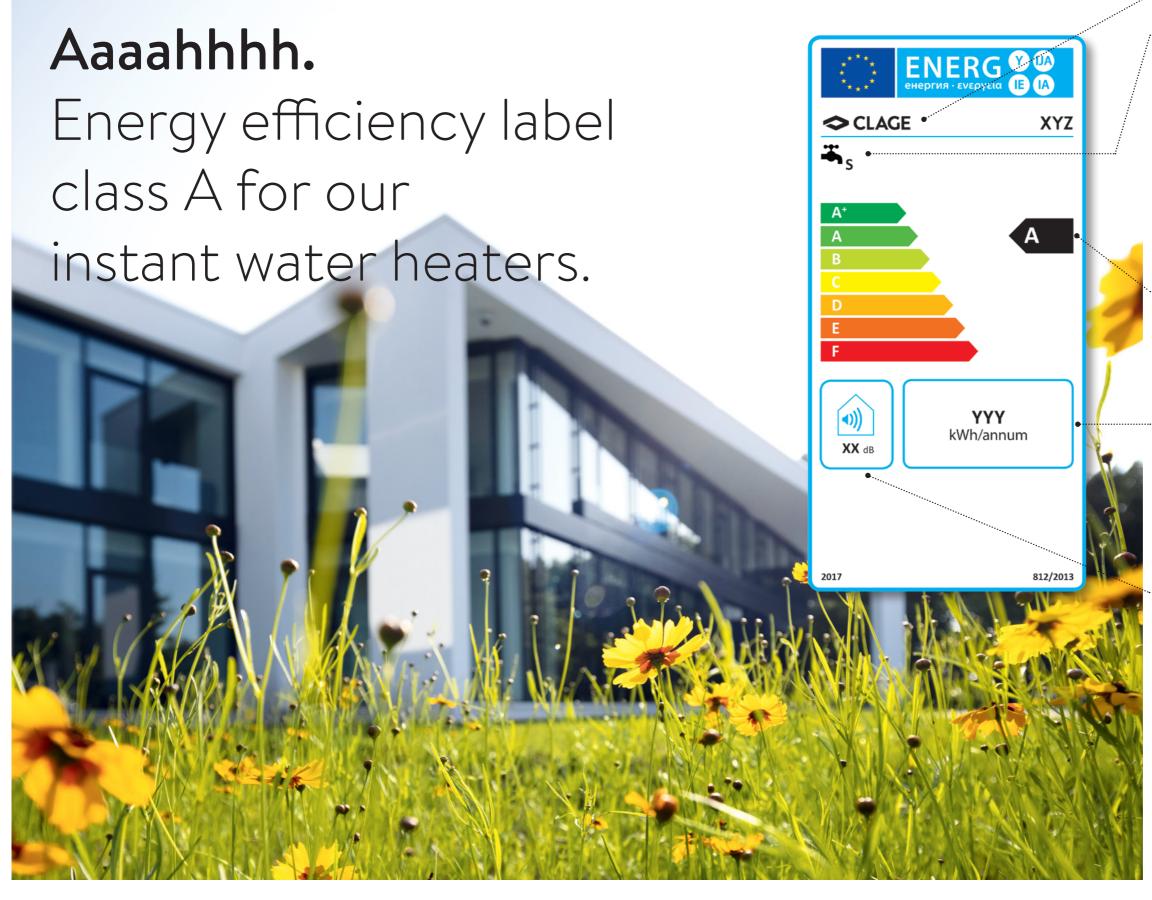
Electric instant water heaters are utilised in hotels, resorts and restaurants. You'll even find our Zip drinking water systems on cruise ships.

Industry

Workplaces and employee showers can be equipped with our units. Our product line also features special units for particular requirements.

Public buildings

Frequently used bathrooms in public areas should be equipped with efficient electric instant water heaters. In combination with the appropriate taps and faucets, they can provide optimum hygiene and corresponding savings.



Yes to renewable energy, No to less convenience.

Simply abandoning energy production from fossil energy sources is not enough, since the demand for technology and new household appliances is increasing constantly. We all must contribute our share to make this a reality. And it is only possible with energy-efficient technology and corresponding appliances.

Manufacturer and product

Dispensing profile

The required performance of the appliance is to be determined by the intended use. For example, a water flow of approx. 2 liters (tapping profile XXS) is required at the washbasin, approx. 5 liters (tapping profile XS) at the kitchen sink, and if there are several tapping points in the bathroom or in an apartment, a water flow of approx. 10 liters per minute is required (tapping profile S). With E-instant water heaters, power consumption - and thus energy consumption - is automatically controlled based on the desired temperature and water quantity set by the user (independent of defined tapping profiles). In addition, energy-saving user behavior can be supported by energy monitoring, "Eco" real-time feedback and energy-saving function.

Energy efficiency class

The seven energy efficiency classes for household appliances correspond to the traffic light system. In a comparison of the various hot water systems, electric instantaneous water heaters perform according to the "Efficieny First" principle and are classified with the very good energy efficiency class A.

Annual energy consumption

However, the energy efficiency class is not the only deciding factor but the detailed information on the label matters as well. Within each efficiency class, there are significant differences in energy use. The hot water unit should initially be selected according to its intended use – its tap profile. An important factor is the comparison of the annual energy consumption!

Noise level during use

The noise level for all CLAGE instant water heaters is at a low $15 \, \text{dB}$ and thus hardly noticeable.

By the way:

Did you know that the energy efficiency class not only considers the actual end-use energy efficiency of the appliance, but also the EU-wide energy mix and the (partly) still fossil energy generation? Some countries like Germany are well above the EU average in the share of renewable energy. In reality, instantaneous water heaters hence benefit from increasingly "green" electricity and are therefore even more efficient than shown on the energy label. It is best to operate the electric instantaneous water heater with green electricity to take a climate-neutral shower!

Conclusion

The new energy labels for hot water units confirm that decentralised hot water supply with electronically controlled instant water heaters is one of the most energy-efficient technologies.

"What can we do for you?"







Application and technical advice

You will receive comprehensive product advice, on request also on site, from our office and field staff.

> Phone: +49 4131 8901-0 > E-mail: export@clage.de

Object consulting

Our project team is at your disposal for tender recommendations, planning support and building owner advice. We are happy to support you from the initial enquiry to installation, even in the early planning or performance phases.

> Phone: +49 4131 8901-0> E-mail: export@clage.de

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Customer service



Telephone service

No call centre, but our customer service team in Lüneburg will be happy to advise you by telephone if you need help with installation or problem solving.

> Phone: +49 4131 8901-400



Service and maintenance

Experienced and competent technicians help with installation, maintenance and service.



On-site service

maintenance or repair, both by online form or by telephone.



Spare parts delivery

For spare parts deliveries, simply call us, order the parts order the parts and have them sent to you.

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The special CLAGE service



Device registration

For registered products, we have all device data at your fingertips. This also includes information for maintenance purposes, corresponding supplementary products or software updates.



Training courses and seminars

More and more customers also want comprehensive advice from their specialist tradesman on the subject of energy efficiency. For example, we offer the training course "Energy-efficient hot water supply" in our CLAGE Academy.



Marketing support

In order to make the world more and more energy efficient, we need our partners and the trade. We are happy to support with company presentations and outdoor advertising and link our partners online.



Customer satisfaction

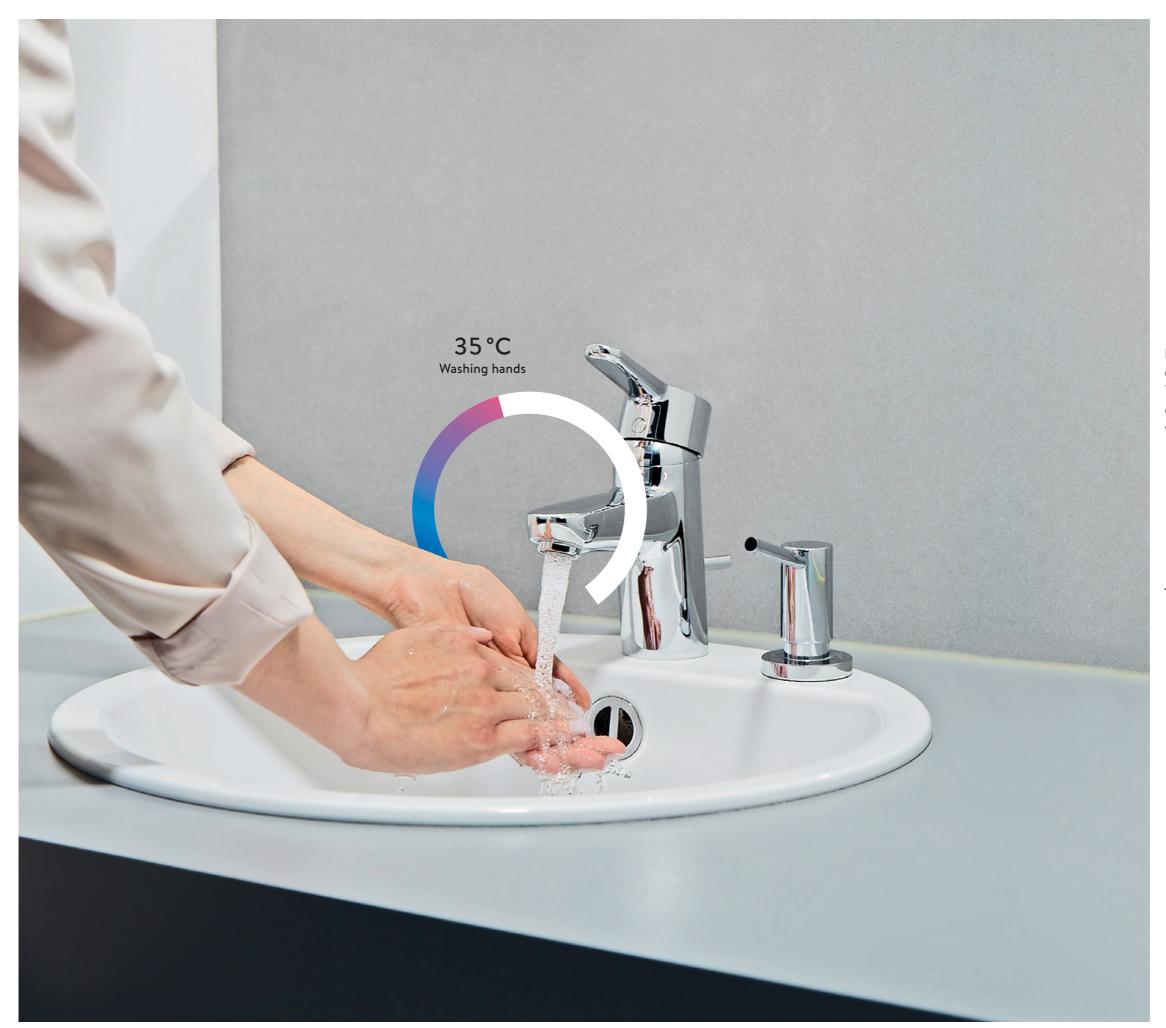
In order to continuously optimise our products and our service, we need your opinion. To this end, we regularly conduct customer satisfaction analyses.

CLAGE

Mmmhhh... The M-series.

E-mini instant water heater

An E-mini instant water heater is the most efficient hot water supply solution at the washbasin. The water is not preheated but is heated directly at the basin as it flows through the unit. This consistently avoids water line and heat losses.



Energy savers at the washbasin.

For hygienic reasons, we wash our hands several times a day, but each washing only takes approx. 10 seconds. That's why this activity should be efficient, effective and comfortable, for example, water-saving convenience without adding cold water by the mixing tap.

Advantages Lowers operating costs $\langle \mathbf{D} \rangle$ Energy savings at the washbasin Saves space 9 7 Can hide away under every sink: 14×19×9cm Instantly at the right temperature $(\bar{\phi})$ On demand and without waiting F No dripping taps There is no expansion water More hygiene \sim due to short water lines Environmentally friendly ₽^{*} Less water usage, less energy demand, less CO_2

At home, at the office, in public areas. **Simply everywhere!**

The range of uses for E-mini instant water heaters is very diverse: from commercial, industrial, office and administrative buildings to public wash-room facilities, doctor's offices, hotels and domestic guest bathrooms.



E-mini instant water heaters are perfectly suited for use at sophisticated washbasins.

Space-saving installation > E-mini instant water heaters can be easily used to save space in base cabinets.



I spy with my little eye. Something that is energy-efficient!

E-mini instant water heaters are an energy-saving solution. The water is not preheated and stored but only gets heated when it is needed.

You are not only saving water and energy but you are also saving space. Due to their small dimensions, the heaters are ideally suited for each room design and can also be used for small washbasins.

Nearly invisible >

E-mini instant water heaters are installed directly under the sink and are not visible at eye level, for example MCX with tap EWT. E-mini instant water heaters are also suitable for staff kitchens, for example, MCX 7.



Perfect for the pantry >

The "old one" has to go! Mini instant water heaters belong under the washbasin!

All-round carefree sets! Complete solutions with taps.

Before >

A 5-litre storage tank is installed under the washbasin. It causes heat losses. It can easily be replaced by a ready-to-use E-mini instant water heater.

After >

The energy-efficient E-mini instant water heater requires significantly less space, avoids heat losses, saves energy and provides more convenience.





e.g. MBX Lumino >

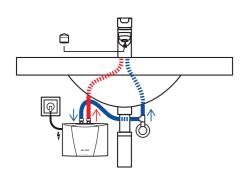
E-mini instant water heater with Lumino sensor tap > page 34

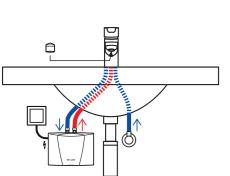


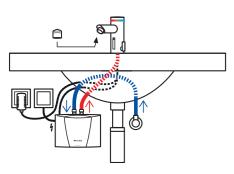
e.g. MCX Blue >

E-mini instant water heater with special tap > page 33

Please M_ake a note. Our M-series.







- Devices with 3.5 kW are ready to plug in
- Devices from 4 kW have a permanent connection



Simple and fast installation

MBH and MCX (unvented) - These E-mini instant water heaters are approved for open- and unvented installation.

The included connection kit (T-piece with pressure hose) simplifies upgrades of conventional taps.

M (vented) - The vented M-series E-mini instant water heaters are easy and simple to install and particularly cost-effective.

Due to their design they are installed with special open-outlet taps. Warm water can be available with very little installation work.

MBX Lumino (One-Pipe-System)

The set consisting of an electric instantaneous water heater and a touch-free tap ensures optimum hygiene at the washbasin.

One-pipe system: The tap has only one water supply pipe. This ensures complete flushing of all water paths with every use.

Simple unit exchange

The wall mount provides a very simple slide-on installation without having to open the unit. It can be easily fitted to the connection openings of many existing older units during upgrade installations.





Quick connections

The high-grade materials of our lead-free and flexible water connections allow for simple installation and prevent linking or twisting of the supply line hoses.

High-quality electronic

sensors and heating technology

as well as adjustable controls

and patented technology are

the reason why E-mini instant

water heaters are so efficient.



New flow technology with special aerator

The water stream is optimally formed while using low flow amounts. The special flow regulator for use in tap threads M 22 / 24 is included.



Pressing the sensor button sets the preferred temperature, which will then be indicated by discreetly glowing LEDs: 35 °C, 38 °C or 45 °C. The LEDs double as function and diagnosis indicators.

Optionally, the unit can also be operated with the FX Next/FX 3 remote control or via the "Smart Control" control app.



Convenient and practical

All technical details are conveniently listed on the back of the removable rating plate cover. Removing the plate also provides access to the enclosure screw and the water flow

Bare wire technology

The IES[®] heating system with replaceable heating cartridge ensures a sustainably longer service life, is efficient and easy to maintain. The water is heated just a few seconds after opening the tap.

Smart energy efficiency.

E-mini instant water heater MCX

	i I I	product design award
		2012

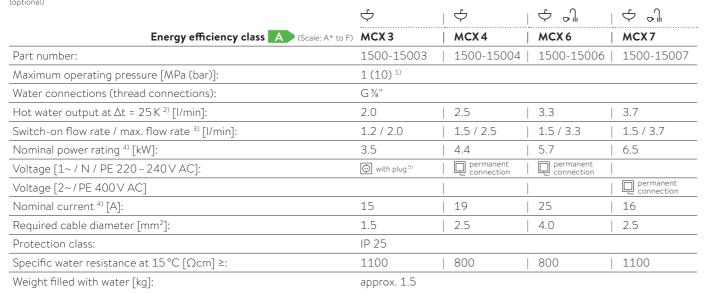
Solar-ready

suitable fo

reheating

Our top-of-the-line E-mini instant water heater combines great functionality with sophisticated design. Its compact design allows for installation under any sink.

- Electronically controlled instant water heater with a compact design for energy-efficient hot water supply of a sink or a staff kitchen
- > **The heating output is electronically controlled.** This provides an ideal hot water temperature without the need to add cold water at the tap
- > Touch button controls with colour LEDs to set the outlet temperature to 35°C, 38°C or max. 45°C
- Connection kit (T-piece and flexible pressure hose) for an angle valve is included
- > Works with unvented and vented taps
- > Use of the CLAGE "Smart Control" app is possible by retrofitting a Bluetooth adapter.



*) Inlet temperature ≤ 70 °C 1) Also approved for pressureless operation 2) Temperature increase e.g. from 15 °C to 40 °C 3) Limited flow amount for optimal temperature increase by water flow adjustment. 4) Related to rated voltage 230 V or 400 V 5) Also available as type MCX3 (E) (part number 1500-15013) with power supply cable for permanent connection



"MCX Blue", the combination of an E-mini instant water heater and a special tap, is the ideal system solution for the energy-efficient hot water supply of a washbasins.

- > Electronically controlled instant water heater with innovative single-lever mixing tap for energy-efficient hand-washing
- > Touch button sensor controls at the instant water heater to set the outlet temperature to 35 °C, 38 °C or max. 45 °C
- > Intuitive operation with perfect water temperature at the **middle position** of the control lever
- > Saves water because of intelligent flow technology and very short water supply lines
- > Meets the highest requirements for drinking water hygiene by separating water lines from the tap body as well as nickel- and lead-free materials
- > Very fast and simple system installation
- > Low-pressure fitting with EASY FIX mounting system, pull-up drain stopper and three flexible connection hoses ¾ inch

	¢
Energy efficiency class A (Scale: A+ to F)	MCXBlue
Part number:	1500-15133
Maximum operating pressure [MPa (bar)]:	1 (10) 1)
Water connections (thread connections):	G ∛8"
Hot water output at $\Delta t = 25 \text{ K}^{2}$ [l/min]:	2.0
Switch-on flow rate / max. flow rate ³⁾ [I/min]:	1.2 / 2.0
Nominal power rating ⁴⁾ [kW]:	3.5
Voltage [1~ / N / PE 220 – 240 V AC]:	(C) with plug ⁵⁾
Nominal current ⁴⁾ [A]:	15
Required cable diameter [mm ²]:	1.5
Protection class:	IP 25
Specific water resistance at 15 °C [Ω cm] ≥:	1100
Weight filled with water [kg]:	approx. 1.5
1) Also approximate for according approximation -2) Tomperature increases a promiting 15° C to 40° C	2) Limited flow amount for antimal temperature increase by water flow adjustment

1) Also approved for pressureless operation 2) Temperature increase e.g. from 15 °C to 40 °C 3) Limited flow amount for optimal temperature increase by water flow adjustment. 4) Related to rated voltage 230 V 5) Also available as type MCX (E) Blue (part number 1500-151332) with power supply cable for permanent connection.



The system solution for washbasins.

E-mini instant water heater MCX Blue with tap EWT



Perfect hand-wash temperature in the middle





The optimal lever position for energy-efficient warm water is in the middle (ideal temperature at 35 °C, 38 °C or max, 45 °C).



-readv

Bluetooth remote control (optional)

Efficient hygiene with sensor tap.

E-mini instant water heater **MBX Lumino**



Hot setting	Medium setting	Cold set
Red	White	Blue
LED ring	LED ring	LED ring

The optimal solution to supply wash-room facilities in public commercial buildings with hygienic and energy-efficient warm water.

- > Electronically controlled instant water heater with sensor tap for hygienic and efficient hand-washing
- > An infrared touch-free sensor at the tap turns the water on and off. The water temperature can be continuously adjusted with a lever at the tap
- > The temperature is controlled electronically by the instant water heater without having to add cold water
- > A colour LED ring visualises the chosen temperature from red = warm to blue = cold
- > **One-pipe-system:** The tap has only one water supply pipe. This ensures complete flushing of all water paths with every use.
- > Optional hygiene flush (automatic flush every 12, 24 or 48 hours)

The unvented E-mini instant water heater MBH is the energy-saving standard solution for installation with all conventional taps. The connecting kit is included for easy installation directly at the tap. And you'll have warm water right away when you need it.

- > Hydraulically controlled instant water heater (undersink model) with compact design for the energyefficient hot water supply for a sink
- > The full heating capacity turns on automatically as soon as water flows through the unit
- > Connection kit (T-piece and flexible pressure hose) for an angle valve is included
- > Works with unvented and vented taps

-ready (optional)	¢	今
Energy efficiency class A (Scale: A ⁺ to F)	MBX 3 Lumino	MBX 7 Lumino
Part number:	1500-15113	1500-15117
Maximum operating pressure [MPa (bar)]:	1 (10) 1)	
Water connections (thread connections):	G ¾"	
Hot water output at $\Delta t = 25 \text{ K}^{2}$ [l/min]:	2.0	3.7
Switch-on flow rate / max. flow rate ³⁾ [I/min]:	1.2 / 2.0	1.5 / 3.7
Nominal power rating ⁴⁾ [kW]:	3.5	6.5
Voltage [1~ / N / PE 220 – 240 V AC]:	\bigcirc with plug ⁵⁾	
Voltage [2~/PE 400 V AC]:		📮 permanent connection
Voltage sensor tap [1~ / N / PE 220 – 240 V AC]:	💮 with plug	
Nominal current ⁴⁾ [A]:	15	16
Required cable diameter [mm ²]:	1.5	2.5
Protection class:	IP 25	
Specific water resistance at 15 °C [Ωcm] ≥:	1100	
Weight filled with water [kg]:	approx. 1.5	

 1) Also approved for pressureless operation
 2) Temperature increase e.g. from 15°C to 40°C
 3) Limited flow amount for optimal temperature increase by water flow adjustment.

 4) Related to rated voltage 230 V or 400 V
 5) Also available as type MBX3 (E) Lumino (part number 1500-151132) with power supply cable for permanent connection.

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Energy efficiency class A (Scale: A ⁺ to F)	MBH 3		MBH 4	MBH 6	MBH 7
Part number:	1500-16003		1500-16004	1500-16006	1500-16007
Maximum operating pressure [MPa (bar)]:	1 (10) 1)				
Water connections (thread connections):	G ¾"				
Hot water output at $\Delta t = 25 \text{ K}^{2}$ [l/min]:	2.0		2.5	3.3	3.7
Switch-on flow rate / max. flow rate ³⁾ [l/min]:	1.3 / 2.0		1.8 / 2.5	2.2 / 3.3	2.4 / 3.7
Nominal power rating [kW]:	3.5		4.4	5.7	6.5
Voltage [1~ / N / PE 230 V AC]:	ith plug 4)		permanent connection	permanent connection	
Voltage [2~/PE 400 V AC]:					permanent connection
Nominal current ⁵⁾ [A]:	15		19	25	16
Required cable diameter [mm ²]:	1.5		2.5	4.0	2.5
Protection class:	IP 25				
Specific water resistance at 15 °C [Ωcm] ≥:	1100				
Weight filled with water [kg]:	approx. 1.5				

1) Also approved for pressureless operation 2) Temperature increase e.g. from 15 °C to 40 °C 3) Limited flow amount for optimal temperature increase by water flow adjustment. 4) Also available as type MBH 3 (E) (part number 1500-160032) with power supply cable for permanent connection. 5) Related to rated voltage 230 V or 400 V

Efficient, attractive and economical.

E-mini instant water heater MBH



Quick and safe installation.

E-mini instant water heater, vented M



For the replacement of conventional small storage tanks combined with low-pressure taps, the pressureless E-mini instantaneous water heater M is the right choice. Inexpensive and quickly installed, the unit saves precious standby power at every wash hand basin.

- > Hydraulically controlled instant water heater (undersink model) with compact design for the energyefficient hot water supply of a washbasin
- Cost-efficient and quick installation, ideally suited for replacing conventional storage heaters
- > The full heating capacity turns on automatically as soon as water flows through the unit
- > Vented design, only suitable for open-outlet pressure taps
- > Also available as oversink models, with water connections at the bottom:
 M3-O: 3.5 kW / 230 V, Part no. 1500-17113
 M4-O: 4.4 kW / 230 V, Part no. 1500-17114
 M6-O: 5.7 kW / 230 V, Part no. 1500-17116
 M7-O: 6.5 kW / 400 V, Part no. 1500-17117

	ф I	¢	t di	¢ °l
Energy efficiency class A (Scale: A+ to F)	M 3	M4	M6	M7
Part number:	1500-17003	1500-17004	1500-17006	1500-17007
Maximum operating pressure [MPa (bar)]:	0 (0)			
Water connections (thread connections):	G ¾"			
Hot water output at $\Delta t = 25 \text{ K}^{1}$ [l/min]:	2.0	2.5	3.3	3.7
Switch-on flow rate / max. flow rate ²⁾ [I/min]:	1.3 / 2.0	1.8 / 2.5	2.2 / 3.3	2.4 / 3.7
Nominal power rating [kW]:	3.5	4.4	5.7	6.5
Voltage [1~ / N / PE 230 V AC]:	i with plug 3)	permanent connection	permanent connection	
Voltage [2~/PE 400 V AC]				permanent connection
Nominal current ⁴⁾ [A]:	15	19	25	16
Required cable diameter [mm ²]:	1.5	2.5	4.0	2.5
Protection class:	IP 25			
Specific water resistance at 15 °C [Ωcm] ≥:	1100			
Weight filled with water [kg]:	approx. 1.5			

Temperature increase e.g. from 15 °C to 40 °C
 Limited flow amount for optimal temperature increase by water flow adjustment.
 Also available as type M3 (E) (part number 1500-170032) with power supply cable for permanent connection
 Related to rated voltage 230 V or 400 V

MBX Shower



Smart shower solution for economical requirements with wall rail and singlelever shower tap for installation on ½ inch wall connection.

MBX 4 Shower: Part no. 1500-15314 MBX 6 Shower: Part no. 1500-15316 MBX 7 Shower: Part no. 1500-15317



Kits for below and above.

Mini instant water heater kits with matching tap

M/END





Undersink model with single-lever mixer tap, with EASY FIX mounting system, pull-up drain stopper and three flexible % inch connection hoses.

M3/END: Part no. 1500-17243 **M3(E)/END:** Part no. 1500-172432

Undersink model with two-handle mixer tap, with spout, eyelet chain and three flexible $\frac{3}{2}$ inch connection hoses.

M 3 / SNM: Part no. 1500-17203 **M 3 (E) / SNM:** Part no. 1500-172032

Oversink model with two-handle mixer tap and 16 cm swivel spout for installation on ½ inch wall connection.

M 3/SMB: Part no. 1500-17103 M 3(E)/SMB: Part no. 1500-171032 M 4/SMB: Part no. 1500-17104 M 7/SMB: Part no. 1500-17107

The special mixer tap is also available individually as an addition for all oversink mini instant water heaters:

SMB/LS: Part no. 1100-04100

Single-lever mixer tap as addition for all oversink mini instant water heaters with swivel pipe spout for installation on ½ inch wall connection.

SME: Part no. 1100-04150





SME



And after washing your hands: Hygienic hand drying.

Hand dryer WHT





The hand dryer will turn on and off automatically via an electronic infrared sensor when you approach it with your hands. The optimised air outlet with a strong hot air flow allows for fast and comfortable hand drying. The WHT guarantees energy-saving operation.

- > Comfort hot-air hand dryer for washroom facilities
- > Contactless switching on and off
- Safety shut-off after approx. 35 seconds continuous use (e.g. in the event of chewing gum vandalism)
- > Low noise level: max. 69 dB (A)
- > The impact-resistant ABS case and the quiet, no-maintenance motor ensure a long service life
- > Easy, maintenance-friendly wall installation with integrated mounting plate (without having to open the unit)
- > Rating 1.0 kW 230 V (air flow: 381/s)
- > Dimensions (H × W × D): 30.4 × 26.8 × 18.2 cm

Using the correct aerator at the tap is particularly important for electric hot water heaters. The new special CSP aerators mix air into the water and thus create a uniform water stream that does not splatter but softly cascades down. The aerated water stream supports the energy- and water-saving operation of the mini instant water heater. The aerators are manufactured with high-precision plastics technology and are available as inserts or complete with a fitting tap adapter.

	¢	
	WHT	
Part number:	7000-70300	
Colour:	pure white RAL 9010	
Nominal power rating ¹⁾ [kW]:	1.0	
Voltage [1~ / N / PE 220 – 240 V AC]:	💮 with plug	
Nominal current ¹⁾ [A]:	4.3	
Motor output [kW]:	1.0	
Noise level [dB]:	69	
Air flow [l/sec]:	38	
Relative drying time [sec]:	17	
Protection class:	IP 23	
Weight with wall mount [kg]:	approx. 3.0	
1) Related to rated voltage 230 V		





Perfectly shapes the water stream.

Aerators for tap adapters, female and male threads

Aerators are available in three versions:



Aerator insert for tap adapter $M\,22/24$ at the tap

CSP 3 (< 21/min): Part no. 0010-00421 CSP 6 (< 3.51/min): Part no. 0010-00461



Aerator with chrome tap adapter M 24a (suitable for taps with female threads at the outlet)

CSP 3a (< 21/min): Part no. 0010-0043 CSP 6a (< 3.51/min): Part no. 0010-0047



Aerator with chrome tap adapter M 22i (suitable for taps with male threads at the outlet)

CSP 3i (< 21/min): Part no. 0010-0042 CSP 6i (< 3.51/min): Part no. 0010-0046





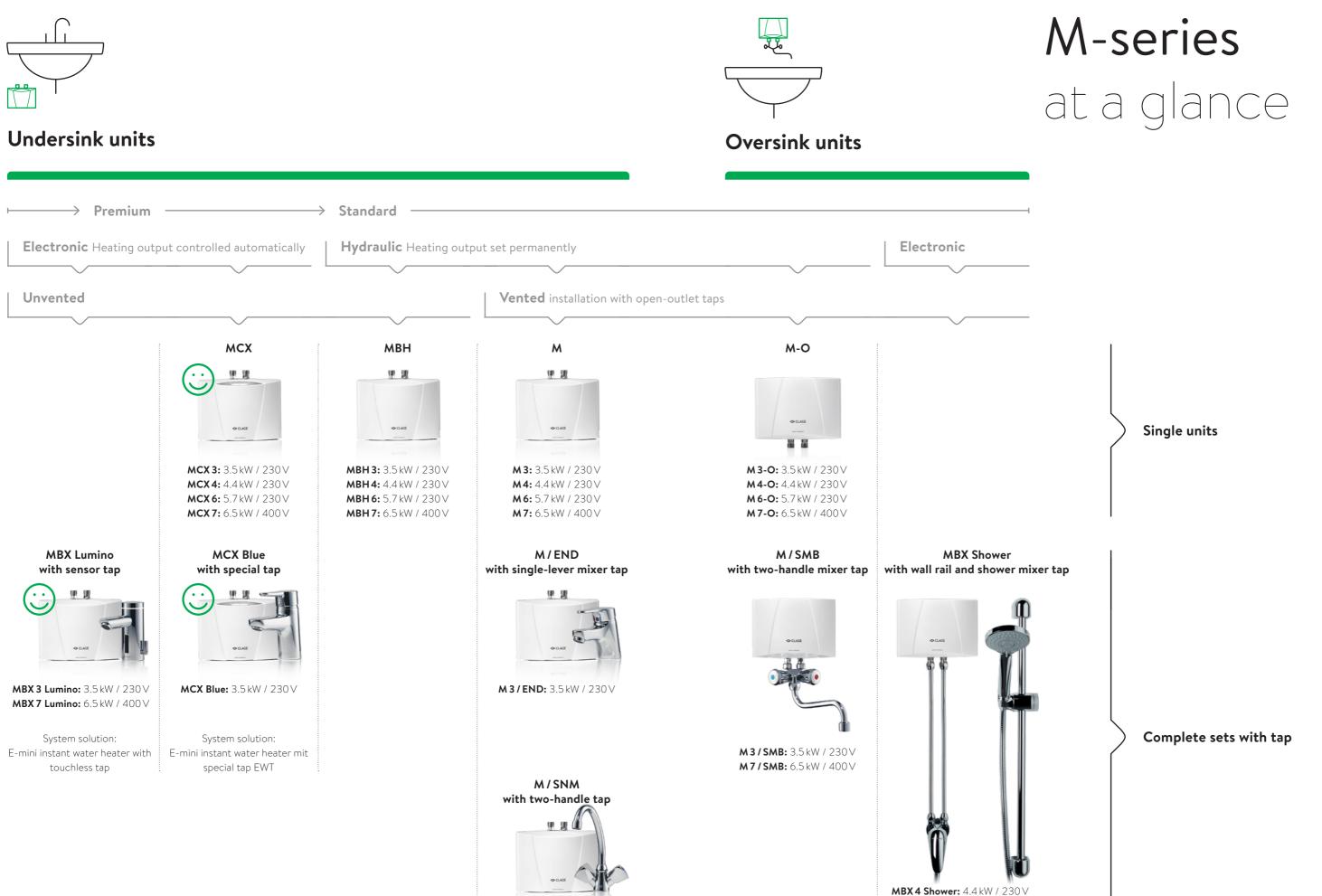
MCX 6 / 7

C-series

I



MBX 6 Shower: 5.7 kW / 230 V **MBX 7 Shower:** 6.5 kW / 400 V



M3/SNM: 3.5 kW / 230 V

40 < Catalogue

instant water heate

Kitchen helpers. The C-series.

(((•)))

E-compact instant water heater

The original! We have been offering E-compact instant water heaters as the ideal solution for kitchen sinks for more than twenty years. Their intelligent and compact design allows for installation directly at the fixture. The heating capacity of the compact units ensures ideal hot water convenience for use at the sink.



Convenience and efficiency in one sweep.

E-compact instant water heaters are the smart solution for energy-efficient hot water supply at the kitchen sink. The units heat the water only when it is needed – directly at the tap.

The compact unit allows for space-saving installation under the sink and the remote control enables convenient temperature adjustment. This avoids water line and heat losses. The desired temperature can be pre-set efficiently and precisely. You shouldn't be without this convenience anymore!

Advantages

) 7r	Saves space Fits under any sink: 29 × 18 × 10 cm
÷	Instantly at the right temperature On demand and without waiting
	Adjustable ideal temperature No addition of cold water
	More hygiene due to short water lines
W _{ECO}	Fosters energy-saving behavior Energy monitoring and "eco" real-time feedback
Ě	Environmentally friendly Less water usage, less energy demand,

less CO_2

The perfect solution for every use.

Our E-compact instant water heaters provide the right choice for every need. No matter if you have drawers or hinged doors – the unit can be installed almost anywhere, due to its compact dimensions and low-profile design. Depending on the instant water heater model, the temperature can be set directly at the unit or via remote control. The E-compact instant water heater provides the optimum temperature for easy dishwashing, comfortable handwashing and cleaning of fruit or vegetables.

Saving space >

The E-compact instant water heater CFX-U is installed under the sink and operated by remote control.





Convenience for two >

The E-compact instant water heater is a convenient solution for a wash hand basin, or even two.



Universally usable >

The E-compact instant water heater CEX is easy to install and provides a constant supply of warm water for a basin and shower.



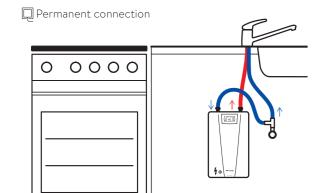
C_ool features. Our C-series.

More space

The unit's small dimensions leave plenty of space, i.e. for a waste separation system and cleaning supplies.

Precise temperature settings with modern technology

Adding cold water is not necessary. The power electronics with TWIN TEMPERATURE Control TTC® ensures temperature control accurate to the degree, even with fluctuations in water pressure. The position of the appliance under the sink without long pipe runs avoids waiting time and saves water.



Simple and fast installation

Water connections upwards -The models CDX-U, CEX-U and CFX-U have their ¾" water connections upwards. They are designed for undersink installation direct to the pipes or connection hoses of the tap. By this, the distance to the tap is as short as possible for best efficiency.

The connection set (T-piece and flexible connecting hose) included in the scope of supply facilitates the retrofitting of existing pressure taps.

You have the choice: The C-series compact instant water heaters are approved for unvented or vented installation. A selection of open-outlet taps and an installation kit for standard taps are shown on > page 54 and 55.

Water connections downwards - The model CEX with its 1/2" water connections downwards, can be used versatile.







The load shedding switch (also known as priority switching) allows for the joint use of an electrical connection by two 400 Volt units. For example, an instant water heater can be operated with the existing electrical connection of an electromechanical stove. When dispensing hot water, the instant water heater temporarily turns off the cooker. This is hardly noticeable, since the cooker maintains the required heat for cooking or baking during the short time when water is dispensed. > page 54



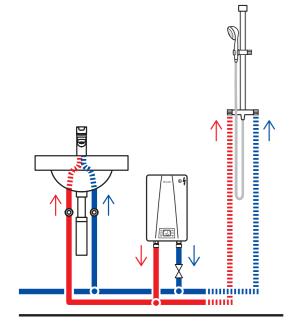
Flexible power rating

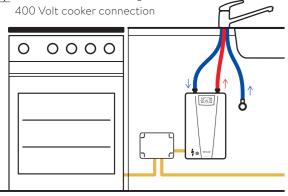
With the Multiple Power System MPS®, the maximum power rating is set at the time of installation: 6.6 or 8.8 kW 230 V, 11 or 13.5 kW 400 V.

Convenient operation

The remote control allows convenient temperature selection when the compact instantaneous water heater is hidden under the kitchen sink. At the touch of a button, the desired temperature for washing up or washing hands is set to the exact degree, without having to mix the water at the tap. The remote control is attached to the wall with the practical magnetic holder.

> page 82





Safe and long-lasting

The electronic safety system with air bubble detection increases the safety and service life of the units.

Fewer limescale deposits

The efficient heating system IES[®] reduces limescale deposits and provides an extended service life and easy maintenance. The water is heated just a few seconds after opening the tap.

As an option, the unit can also be operated via the "Smart Control" app.

Efficiency and convenience in one sweep.

E-compact instant water heater CFX-U



A particularly clever solution for the energy-efficient supply of hot water to the kitchen sink is the CFX-U E-compact instantaneous water heater. While the appliance is installed under the sink to save space, the practical remote control allows convenient temperature setting and energy monitoring.

- Electronically controlled undersink instant water heater with compact design and Bluetooth remote control
- > Temperature setting from 20 °C to 60 °C via sensor keys and **e-paper display** on the remote control
- > Adding cold water is no longer necessary
- > Easy installation under the kitchen sink facilitated by small dimensions and external ³/₆" water connectors for unvented or vented installation, connection Kit (T-piece and flexible connecting hose) for an angle valve is included
- > With power cable for 3-phase power supply
- > Integrated Bluetooth function for connection with smartphone and tablet

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	Y U#		
Energy efficiency class A (Scale: A ⁺ to F)	CFX-U (with Multiple Power System: 11 or 13.5 kW adjustable)		
Part number:	2400-26513		
Maximum operating pressure [MPa (bar)]:	1 (10) 1)		
Water connections (thread connections):	G ¾"		
Hot water output at $\Delta t = 33 \text{ K}^{23}$ [l/min]:	4.8	5.8 4)	
Switch-on flow rate / max. Flow rate ⁵⁾ [I/min]:	2 / 5		
Nominal power rating ⁶⁾ [kW]:	11.0	13.5	
Voltage [2~/PE 380-415 V AC]	permanent connection		
Nominal current ^{3) 6)} [A]:	16	20	
Required cable diameter ³⁾ [mm ²]:	1.5	2.5	
Protection class:	IP 24		
Specific water resistance at 15 °C [Ωcm] ≥:	1000		
Weight filled with water [kg]:	approx. 2.7		

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*) Inlet temperature ≤ 70 °C 1) Also approved for pressureless operation 2) Temperature increase e.g. from 12 °C to 45 °C 3) Depending on the selected power rating 4) Mixed water 5) Limited flow amount for optimal temperature increase 6) Related to rated voltage 400 V

With its electronic control, the CEX-U ensures an energyefficient hot water supply. The water is heated to the preset temperature directly as it flows through. The temperature is selected via sensor buttons on the LED control panel with two fixed value buttons, which are pre-programmed at the factory with 35 °C and 48 °C.

- > Electronically controlled undersink instant water **heater** with compact design
- > Sensor key control panel with LED display for temperature input accurate to the degree between 20 °C and 60°C (CEX-U)/ 20°C and 55°C (CEX9-U)
- > Two programming buttons for individual preset temperatures, optional temperature limitation as well as function indicators
- > Adding cold water is no longer necessary
- > Easy installation under the kitchen sink facilitated by small dimensions and external ³/₈" (CEX-U) / ¹/₂" (CEX9-U) water connectors for unvented or vented installation, connection Kit (T-piece and flexible connecting hose) for an angle valve is included
- > With power cable for 3-phase power supply

Energy efficiency class A (Scale: A+ to F)	С
Part number:	2
Maximum operating pressure [MPa (bar)]:	1
Water connections (thread connections):	G
Hot water output at $\Delta t = 33 \text{ K}^{23}$ [l/min]:	2
Switch-on flow rate / max. Flow rate ⁵⁾ [I/min]:	2
Nominal power rating ⁶⁾ [kW]:	6
Voltage [1~ / N / PE 220 – 240 V AC]:	Ę
Voltage [3~ / PE 380 - 415 V AC]:	
Nominal current ^{3) 6)} [A]:	2
Required cable diameter ³⁾ [mm ²]:	4
Protection class:	IP
Specific water resistance at 15 °C [Ωcm] ≥:	1
Weight filled with water [kg]:	ap

*) Inlet temperature ≤ 70 °C 1) Also approved for pressureless operation 2) Temperature increase e.g. from 12 °C to 45 °C 3) Depending on the selected power rating 6) Related to rated voltage 230V or 400 V



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Smart

-readv



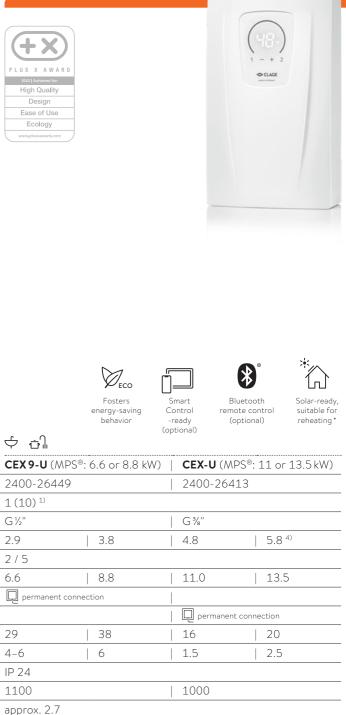
ไกไ Solar-ready suitable for reheating '

Precise hot water convenience.

E-compact instant water heater CEX-U

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Convenient under the kitchen sink.

E-compact instant water heater CDX-U



Although this E-compact instant water heater has no user controls, it operates with reliable electronics. The heating power is controlled automatically depending on flow rate and inlet temperature. During daily use, the temperature is set at the tap.

- Electronically controlled undersink instant water heater with compact design and without user controls, automatic heating adjustment base on flow rate and inlet temperature
- > The maximum outlet temperature is factory-set to 50°C, temperature setting as usual by mixing cold water at the tap
- > Easy installation under the kitchen sink facilitated by small dimensions and external %" water connectors for unvented or vented installation, connection Kit (T-piece and flexible connecting hose) for an angle valve is included
- > With power cable for 3-phase power supplybox

Versatile E-compact instant water heater with medium power rating for a bathroom sink, a disposal sink or a single shower.

- > Electronically controlled instant water heater with compact design
- > Sensor-key operation with LED indicator for precise temperature setting between 20°C and 60°C (CEX)/ 20°C and 55°C (CEX9)
- Two programming keys for individual preset temperatures, activatable temperature limit and operating displays
- > Adding cold water is no longer necessary
- > Easy installation facilitated by small dimensions and external ½" water connectors for unvented or vented installation
- > With power cable for 3-phase power supplybox

		¢ †]
Energy efficiency class 🔥 (Scale: A ⁺ to F	CDX7-U	CDX11-U
Part number:	2400-26607	2400-26613
Maximum operating pressure [MPa (bar)]:	1 (10) 1)	
Water connections (thread connections):	G ¾"	
Hot water output at $\Delta t = 33 \text{ K}^{2}$ [l/min]:	3.0	4.8
Switch-on flow rate / max. flow rate ³⁾ [I/min]:	2 / 4	2/5
Nominal power rating ⁴⁾ [kW]:	6.9	11.0
Voltage [3~/ PE 380 – 415 V AC]:	permanent connection	
Nominal current ^{3) 4)} [A]:	10	16
Required cable diameter [mm ²]:	1.0	1.5
Protection class:	IP 24	
Specific water resistance at 15 °C [Ωcm] ≥:	1000	
Weight filled with water [kg]:	approx. 2.7	

1) Also approved for pressureless operation 2) Temperature increase for example from 12 °C to 45 °C 3) Limited flow amount for optimal temperature increase 4) Related to rated voltage 400 V

	т
Energy efficiency class A (Scale: A+ to F)	С
Part number:	2
Maximum operating pressure [MPa (bar)]:	1
Water connections (thread connections):	G
Hot water output at $\Delta t = 33 \text{ K}^{23}$ [l/min]:	2
Switch-on flow rate / max. Flow rate ⁵⁾ [I/min]:	2
Nominal power rating ⁶⁾ [kW]:	6
Voltage [1~ / N / PE 220 - 240 V AC]:	Ę
Voltage [3~ / PE 380 – 415 V AC]:	
Nominal current ^{3) 6)} [A]:	2
Required cable diameter ³⁾ [mm ²]:	4
Protection class:	IP
Specific water resistance at 15 °C [Ωcm] ≥:	1
Weight filled with water [kg]:	ap

*) Inlet temperature \leq 70 °C 1) Also approved for pressureless operation 2) Temperature increase e.g. from 12 °C to 40 °C 3) Depending on the selected power rating 4) Mixed water 5) Restricted flow for optimal temperature increase 6) Related to rated voltage 230V or 400 V

Compact power, versatile use.

E-compact instant water heater CEX



Accessories









FXSNext

FX Next wireless remote control with high-contrast e-paper display, real glass cover and sensor keys for convenient temperature adjustment plus Bluetooth wireless adapter as a set for installation in the CEX/CEX-U instant water heater. In addition to user controls directly at the unit, the remote control allows a convenient temperature adjustment of the instant water heater at interior distances of up to ten metres. Secure Bluetooth wireless transmission, magnetic wall bracket and batteries (included), IP 24. Dimensions (H × W × D): 9.8 × 9.0 × 2.6 cm FXS Next (C): Part no. 3200-34024

FXS 3

FX3 remote control including Bluetooth remote control adapter in a set for installation in the CEX/CEX-U instantaneous water heater. In addition to the operation at the device, the remote control allows the comfortable temperature adjustment of the instantaneous water heater over a distance of approx. 10 metres in the building. Secure Bluetooth radio transmission, stepless temperature selection via two buttons, two fi xed value buttons and an LCD display, magnetic wall bracket and batteries (included in delivery). IP 20. Dimensions (H × W × D): 5.8 × 12.5 × 1.9 cm FXS3 (C): Part no. 3200-34027

FXE 3

Bluetooth wireless adapter for installation in the instantant water heater to connect the electric instantant water heater CEX/CEX-U or MCX with the smartphone / tablet or the CLAGE remote control. This extension is required if the units are not yet equipped with an FX3 or FX Next remote control. FXE3 (C): Part no. 3200-34026

LAB

Load shedding module (electrical installation kit) with pre-installed cables, contactor and load shedding relay, for joint connection of an 11 kW instant water heater and an electromechanical cooker at a cooker terminal outlet box, if no separate outlet is available for the instant water heater. IP 55. Dimensions (H × W × D): 17 × 13 × 8 cm LAB: Part no. 82260



Electronically controlled E-compact instant water heater as oversink appliance with vented wall-mounted single lever mixer tap CSO for installation on ½ inch wall connection with swivel pipe spout. **CEX / CSO:** Part no. 2400-26490

CSO

Single-lever wall-mounted mixer tap, unpressurised, for installation on ½ inch wall connection with swivel pipe spout. **CSO:** Part no. 1100-04165

CEX 9 Plus

Electronically controlled instantaneous water heater in compact format as oversink unit with optimal hand shower CXH. **CEX 9 Plus:** Part no. 2400-26470

Accessories for undersink installation

FVS

Flexible connecting hose, 50 cm long **FVS:** Part no. 89620

T-piece

¾ inch, with cap nut for an angle valve T-piece: Part no. 89610

Open-outlet taps for kitchen sinks and disposal sinks

EKM

Single-lever mixer tap with swivel spout and three flexible ¾ inch connection hoses. **EKM:** Part no. 1100-04223



ΕΚΑ

Single-lever mixer tap with pull-out rinse sprayer and three flexible ¾ inch connection hoses. **EKA:** Part no. 1100-04230

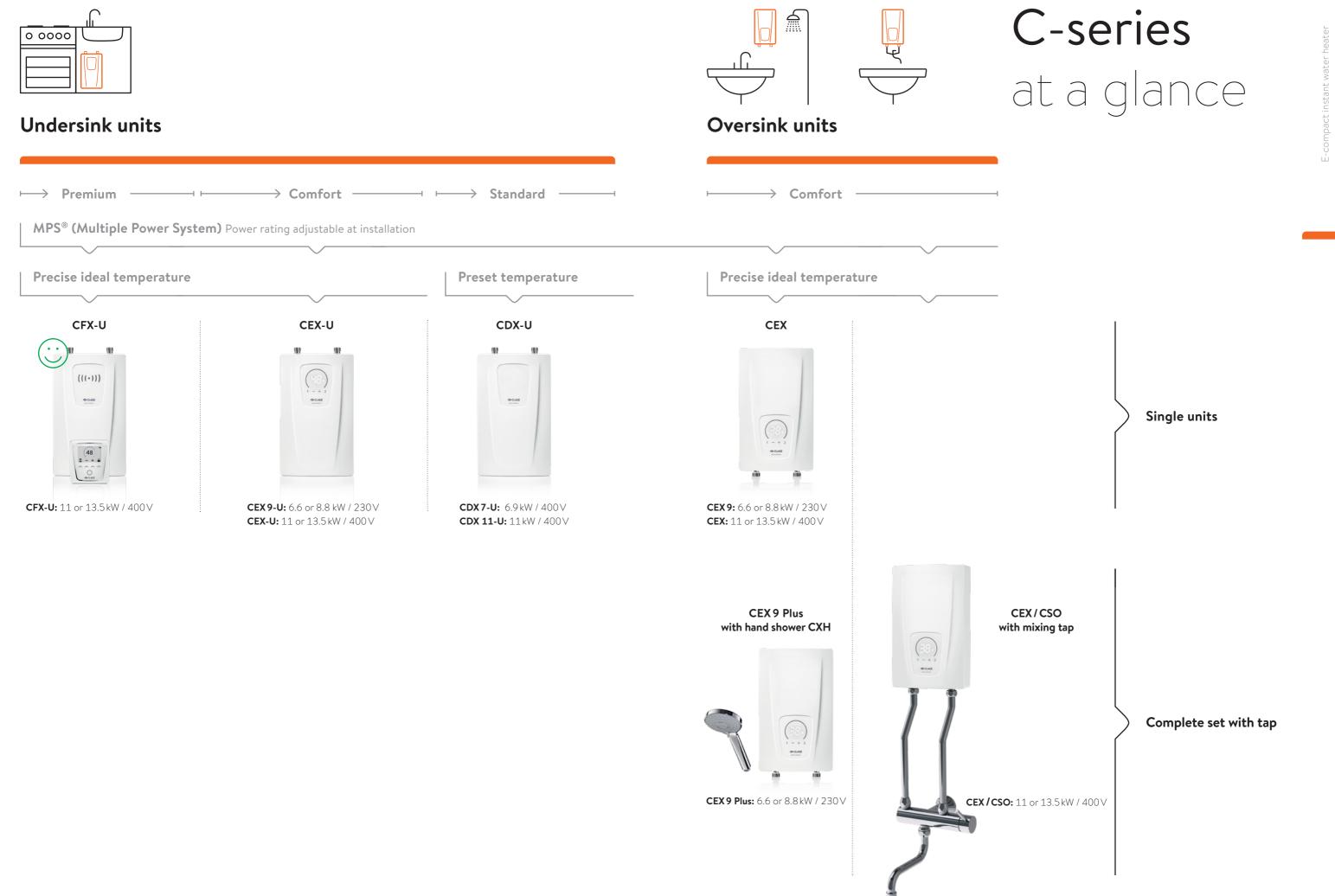
EAK

Single-lever mixer tap with side lever and swivel spout and three flexible ¾ inch connection hoses. **EAK:** Part no. 1100-04430

EKE

Sensor tap for the kitchen sink with activatable hygienic rinse and swivel spout and two flexible ¾ inch connection hoses. EKE: Part no. 1100-04235







Spa experience at a bargain. The D-series.

E-comfort instant water heater

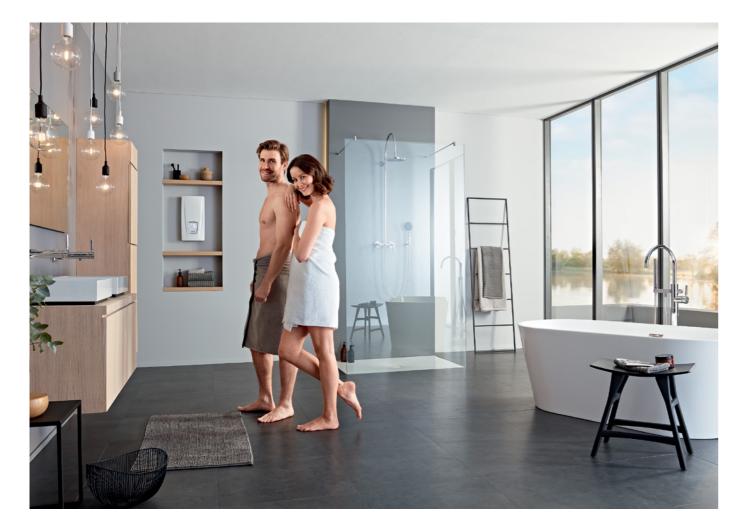
Fully electronic instant water heaters combine comfortable hot water convenience with energy efficiency. These units only heat the water that is actually used for a bath or a shower. And because it is heated to the desired temperature within seconds, there are no long wait times and no need to mix with cold water. These features conserve valuable energy and precious drinking water.



E-comfort instant water heaters are the perfect hot water solution for shower and bath. The units can be installed on panel. E-comfort instant water heaters provide comfort-

One bath and many possibilities.

E-comfort instant water heaters are suitable for every kind of bathroom. Whether on the wall at eye level, unobtrusive at the lower wall level for even shorter water lines, concealed in bathroom furniture hidden behind an inspection flap or in the duct area – the units provide hot water convenience for washbasins, showers and even bathtubs.



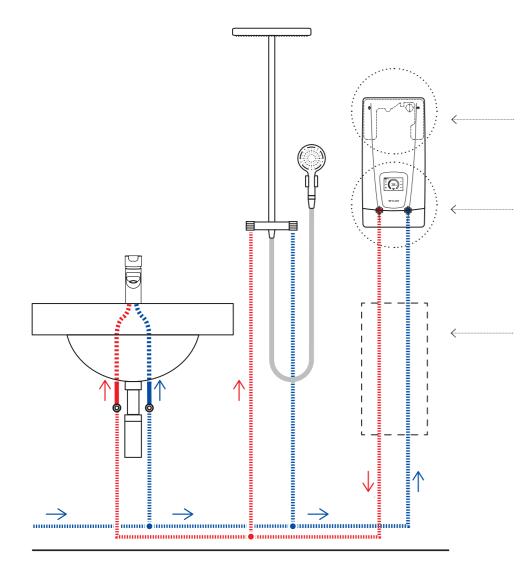




Hidden behind an inspection flap > The device is integrated into the wall and can be operated with the remote control or via app.



D_igital convenience. Our D-series.





Easy mounting and simple installation

Top area installation (alternative)

Easy mounting with wall bracket and hood screw behind the front panel. Electrical connection is also possible in the upper area without any problems.

Bottom area installation (standard)

Spacious electrical connection area at the bottom with removable frame and spacer sleeves to compensate for uneven tiles and wall irregularities.

Alternative installation for short water lines

If no user control of the E-comfort instant water heater is required at eye level, the unit can also be installed at a lower level. This shortens the water lines.

Easy replacement of old units

When replacing older units (also of other manufacturers) it is usually not necessary to drill new holes. The supplied wall bracket allows for flexible mounting.

Mounting frame for more mounting options

If required, the universal mounting frame RDX3 is available as an accessory which allows for an electrical connection at any position behind the unit.

RDX 3: Part no. 3200-36100





Attractive design

The integrated real glass touch display makes the device a valuable functional product in every modern bathroom. Thanks to its flat design, the device can also be easily installed in a concealed location.

Immediately at the desired temperature thanks to modern technology

Adding cold water is not necessary. The power electronics with TWIN TEMPERATURE Control TTC[®] ensures temperature control accurate to the degree, even with fluctuations in water pressure. SERVOTRONIC[®] for dynamic flow rate control reduces the flow rate when the power limit is reached.



Flexible power rating

With the Multiple Power System MPS®, the maximum power rating is set at the time of installation: 18, 21, 24 or 27 kW.

Attractive real glass touch display for more transparency

The playful approach to personal consumption values makes saving water and energy child's play. The integrated real glass touch display at the front allows to set individual user profiles, to define savings targets, to set individual needs and consumption data to be called up for a better overview of costs.

Optionally, the device can be operated with up to three Bluetooth remote controls FX 3, two remote controls FX Next or via the "Smart Control" app.

Safe and long-lasting

The electronic safety system with air bubble detection increases the safety and service life of the units.

Fewer limescale deposits

The efficient IES® bare wire heating system reduces limescale deposits and provides an extended service life and easy maintenance. The water is heated just a few seconds after opening the tap.

For your new wellness oasis.

E-comfort instant water heater DSX Touch



The top model among the E-comfort instant water heaters turns the bathroom into a wellness oasis with energy-efficient and cost-transparent hot water supply. At the same time, the unit meets the highest demands for comfort.

- > Fully electronically controlled high-tech instant water heater with real glass touch display for convenient and economical hot water supply
- > Always precise temperatures between 20°C and 60°C due to TWIN TEMPERATURE Control TTC® and SERVOTRONIC® dynamic flow rate control
- Suitable for water-saving taps due to particularly low switch-on water quantity from 1.5 l/min, thanks to innovative water flow technology
- > Function for **thermal treatment** with 70 °C for more hygiene
- With automatic bathtub filling function according to adjustable quantity (in litres) and with separate timer function
- **Integrated Wi-Fi and Bluetooth function** for connection to smartphone, tablet and smart speaker

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Energy efficiency class 🔥 (Scale: A ⁺ to F)		DSX Touch 🔘 / DSX Touch Black Edition 🌑				
Part number:	3200-366	600 / 3200-36602	2			
Maximum operating pressure [MPa (bar)]:	1 (10) 1)					
Water connections (thread connections):	G 1/2"					
Hot water output at $\Delta t = 28 \text{ K}^{23}$ [l/min]:	9.2	10.7	12.3	13.8		
Switch-on flow rate / max. flow rate [l/min]:	1.5 / auto	matic ⁵⁾				
Nominal power rating ⁸⁾ [kW]:	18	21	24	27 7)		
Voltage [3~ / PE 400 V AC ⁶]:	D permaner	nt connection				
Nominal current ³⁾ [A]:	26	30	35	39		
Required cable diameter ³⁾ [mm ²]:	4	4	6	6		
Protection class:	IP 25					
Specific water resistance at 15 °C [Ωcm] ≥:	1100					
Weight filled with water [kg]:	approx. 4.	.5				

*) Inlet temperature < 70 °C 1) Also approved for pressureless operation 2) Temperature increase e.g. from 12 °C to 40 °C 3) Depending on the selected power rating 4) Mixed water 5) Depending on line pressure, selected temperature and inlet temperature 6) Also connectable with 380 V 7) Only approved for rated voltage 400 V 7) Multiple Power System: 18, 21, 24 or 27 kW adjustable



Efficiency

Temperature, flow limit and user profiles can be set intuitively and conveniently. Thanks to "Eco" real-time feedback, energy-saving user behavior is also promoted.



Dispensing mode

If heated water is drawn from a tap, the main control changes to dispensing mode and, depending on the set outlet temperature, changes the colour from blue for low temperatures to red for high temperatures.



The last days The la

Main menu

The main menu is the DSX Touch navigation centre. Here the user can switch between the different menu items.

Statistics

The consumption values for electricity and hot water are stored by the appliance and displayed in the statistics over various periods.

Intuitive operation via touch display, tablet or smartphone

State-of-the-art technology, durable materials and the compact design of the DSX Touch ensure high quality and resource-saving. The unit is operated intuitively via the new touch display made of real glass. The display has a high colour depth and can show gradients. With the user-friendly icons, operation is simply fun.

Thanks to the integrated Bluetooth and WLAN function, the device can also be operated by remote control or via smartphone, tablet or modern voice control systems. The use of the "Smart Control" app facilitates the commissioning and maintenance of the device. Also the individual consumption values of several users can be easily and quickly displayed and determined. This is contemporary ease of use!

By the way, the DSX Touch can act as a home server for CLAGE instantaneous water heaters of the latest generation. Built-in future.



High-tech comfort in disguise.

E-comfort instant water heater DFX Next



The new DFX Next is ideally prepared for hidden installation, for example behind an inspection flap. It is no longer operated directly on the unit but with the remote control or even with a smartphone.

- Fully electronically controlled high-tech instant water heater with innovative Bluetooth remote control for convenient and economical hot water supply
- > Always precise temperatures between 20°C and 60°C due to TWIN TEMPERATURE Control TTC® and SERVOTRONIC® dynamic flow rate control
- Suitable for water-saving taps due to particularly low switchon water quantity from 1.5 l/min thanks to innovative water flow technology
- > Function for **thermal treatment** with 70 °C for more hygiene
- > With **automatic bathtub filling** function according to adjustable amount (in litres) and with separate timer function
- > Integrated Wi-Fi and Bluetooth function for connection to smartphone, tablet and smart speaker

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Energy efficiency class A (Scale: A ⁺ to F)		DFX Next (Multiple Power System: 18, 21, 24 or 27 kW adjustable)			
Part number:	3200-36	3200-36500			
Maximum operating pressure [MPa (bar)]:	1 (10) 1)				
Water connections (thread connections):	G 1/2"				
Hot water output at $\Delta t = 28 \text{ K}^{2334}$ [l/min]:	9.2	10.7	12.3	13.8	
Switch-on flow rate / max. flow rate [l/min]:	1.5 / auto	matic ⁵⁾			
Nominal power rating [kW]:	18	21	24	27 7)	
Voltage [3~ / PE 400 V AC ⁶⁾]:	D permaner	nt connection			
Nominal current ³⁾ [A]:	26	30	35	39	
Required cable diameter ³⁾ [mm ²]:	4	4	6	6	
Protection class:	IP 25				
Specific water resistance at 15 °C [Ωcm] ≥:	1100				
Weight filled with water [kg]:	approx. 4	.5			

*) Inlet temperature ≤ 70 °C 1) Also approved for pressureless operation 2) Temperature increase e.g. from 12 °C to 40 °C 3) Depending on the selected power rating 4) Mixed water 5) Depending on line pressure, selected temperature and inlet temperature 6) Also connectable with 380 ∨ 7) Only approved for rated voltage 400 ∨

The DEX Next is comfortable, economical and reliable. The high-contrast e-paper display behind the high-quality real glass cover is particularly impressive.

- > Electronically controlled comfort instant water heater
- > Temperature setting between 20°C and 60°C and energy monitoring via the control panel with sensor keys and e-paper display
- > TWIN TEMPERATURE Control TTC[®] for **temperatures** accurate to the degree up to the performance limit
- For water-saving taps suitable due to particularly low switch-on water quantity from 1.5 l/min thanks to innovative water flow technology
- > With the Multiple Power System MPS[®], the maximum power rating is set at the time of installation: DEX12 Next**: 8.8 or 11.5 kW 230 V DEX Next: 18, 21, 24 or 27 kW 400 V
- > With the optional Bluetooth radio extension FXE3, which is also available together with the remote control in a set FXS Next, the device can also be operated via Smart Control. FXS Next (D): Part. No. 3200-34025

Energy efficiency class A (Scale: A ⁺ to F)	D
Part number:	3
Maximum operating pressure [MPa (bar)]:	1
Water connections (thread connections):	G
Hot water output at $\Delta t = 28 \text{ K}^{23}$ [l/min]:	4
Switch-on flow rate / max. flow rate [l/min]:	1
Nominal power rating [kW]:	8
Voltage [1~/PE 220 - 240 V AC]:	Ę
Voltage [3~ / PE 400 V AC ⁶]:	
Nominal current ³⁾ [A]:	3
Required cable diameter ³⁾ [mm ²]:	1
Protection class:	IF
Specific water resistance at 15 °C [Ωcm] ≥:	1
Weight filled with water [kg]:	a

*) Inlet temperature \leq 70 °C **) The DEX 12 Next can be connected with the power connection only at the bottom of the unit 1) Also approved for pressureless operation 2) Temperature increase e.g. from 12 °C to 40 °C 3) Depending on the selected power rating 4) Mixed water 5) Limited flow amount for optimal temperature increase 6) Also connectable with 380 V 7) Only approved for rated voltage 400 V

Comfortable and efficient.

E-comfort instant water heater DEX Next



Optimal temperature selection.

E-comfort instant water heater **DEX Next L**



- The DEX Next L allows to select the temperature via sensor buttons on the LED control panel with two memory keys, which are pre-programmed at the factory with 38 °C and 42°C.
- > Electronically controlled comfort instant water heater with sensor control panel and LED display
- > Precise temperatures between 20°C and 60°C due to TWIN TEMPERATURE Control TTC®
- > Particularly low switch-on water quantity from 1.5 l/min thanks to innovative water flow technology
- > Electronic safety system with air bubble detection, temperature and pressure shut-off
- > With the Multiple Power System MPS[®], the maximum power rating is set at the time of installation: DEX12 Next L*: 8.8 or 11.5 kW 230 V DEX Next L: 18, 21, 24 or 27 kW 400 V

The electronic E-comfort instant water heater DCX Next is designed for easy operation. With the touch of a button, one of five typical water temperatures can be selected. This is indicated by an intuitively understandable signal colour.

- > Electronically controlled instant water heater with simple operation
- > One-button operation for fast and easy five-level temperature selection: 35 °C, 38 °C, 42 °C, 48 °C and 55°C
- > TWIN TEMPERATURE Control TTC® provides precise temperature control even if the water pressure fluctuates
- > Electronic safety system with air bubble detection, temperature and pressure shut-off
- > With the Multiple Power System MPS®, the maximum power rating is set at the time of installation: DCX13 Next: 11 or 13.5 kW 400 V DCX Next: 18, 21, 24 or 27 kW 400 V

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Energy efficiency class A (Scale: A ⁺ to F)	DEX12 Next L (8,8 or 11,5 kW)	DEX Next L (18, 21, 24 or 27 kW adjustable)	
Part number:	3200-36452	3200-36451	
Maximum operating pressure [MPa (bar)]:	1 (10) 1)		
Water connections (thread connections):	G 1/2"		
Hot water output at $\Delta t = 28 \text{ K}^{23}$ [l/min]:	4.5 5.9 4)	9.2 4) 10.7 4) 12.3 4) 13.8 4)	
Switch-on flow rate / max. flow rate [l/min]:	1.5 / 5.0 5)	1.5 / 8.0 ⁵⁾	
Nominal power rating ⁷⁾ [kW]:	8.8 11.5	18 21 24 27	
Voltage [1~/PE 220 - 240 V AC]:	permanent connection		
Voltage [3~ / PE 400 V AC] ⁶⁾ :		permanent connection	
Nominal current ^{3) 7)} [A]:	38.3 50.0	26 30 35 39	
Required cable diameter ³⁾ [mm ²]:	10 10	4 4 6 6	
Protection class:	IP 25		
Specific water resistance at 15 °C [Ωcm] ≥:	1300	1100	
Weight filled with water [kg]:	approx. 4.2		

*) The DEX 12 Next L can be connected with the power connection only at the bottom of the unit 1) Also approved for pressureless operation 2) Temperature increase e.g. from 12 °C to 40 °C 3) Depending on the selected power rating 4) Mixed water 5) Limited flow amount for optimal temperature increase 6) Also connectable with 380V 7) Related to rated voltage 230V

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Energy efficiency class A (Scale: A ⁺ to F)	DCX13 Next (11 or 13.5kW)	DCX Next (18, 21, 24 or 27 kW adjustable)
Part number:	3200-36313	3200-36300
Maximum operating pressure [MPa (bar)]:	1 (10) 1)	
Water connections (thread connections):	G 1/2"	
Hot water output at $\Delta t = 28 \text{ K}^{2334}$ [l/min]:	5.6 6.9	9.2 10.7 12.3 13.8
Switch-on flow rate / max. flow rate [l/min]:	1.5 / 5.0 5)	1.5 / 8.0 ⁵⁾
Nominal power rating [kW]:	11 13.5	18 21 24 27 7)
Voltage [3~ / PE 400 V AC ⁶⁾]:	permanent connection	
Nominal current ³⁾ [A]:	16 20	26 30 35 39
Required cable diameter ³⁾ [mm ²]:	1.5 2.5	4 4 6 6
Protection class:	IP 25	
Specific water resistance at 15 °C [Ωcm] ≥:	1100	
Weight filled with water [kg]:	approx. 4.2	

1) Also approved for pressureless operation 2) Temperature increase e.g. from 12 °C to 40 °C 3) Depending on the selected power rating 4) Mixed water 5) Limited flow amount for optimal temperature increase 6) Also connectable with 380 V 7) Only approved for rated voltage 400 V

Saving energy in the bathroom is that simple!

E-comfort instant water heater DCX Next



Simply choose: 35°C, 45°C or 55°C!

E-comfort instant water heater DLX Next



Whenever simple operation at a reasonable price is important, the DLX Next presents an interesting alternative. The user can select one of three hot water temperatures with the touch of a button.

- > Electronically controlled instant water heater with simple operation
- > One-button operation for fast and easy **three-level temperature selection**: 35 °C, 45 °C and 55 °C
- > Stable temperature up to the unit's power limit
- > Electronic safety system with air bubble detection, temperature and pressure shut-off

The basic unit of our series of electronic instant water heaters comes without any user controls. That's why the DBX Next is surprisingly inexpensive.

- > Electronically controlled basic instant water heater without user controls
- > Automatic adjustment of output to flow rate and inlet temperature, outlet temperature factory-set to 50 °C (can be adjusted internally by a specialist)
- > Electronic safety system with temperature and pressure shut-off

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Energy efficiency class A (Scale: A+ to F)	DLX 18 Next	DLX 21 Next	DLX 24 Next	
Part number:	3200-36118	3200-36121	3200-36124	
Maximum operating pressure [MPa (bar)]:	1 (10) 1)			
Water connections (thread connections):	G 1/2"			
Hot water output at $\Delta t = 28 \text{ K}^{23}$ [l/min]:	9.2	10.7	12.3	
Switch-on flow rate / max. flow rate [l/min]:	1.5 / 7.0 4)	1.5 / 8.0 4)	1.5 / 8.0 4)	
Nominal power rating [kW]:	18	21	24	
Voltage [3~ / PE 400 V AC ⁵]:	permanent connection			
Nominal current [A]:	26	30	35	
Required cable diameter [mm ²]:	4	4	6	
Protection class:	IP 25			
Specific water resistance at 15 °C [Ωcm] ≥:	1100			
Weight filled with water [kg]:	approx. 4.2			

1) Also approved for pressureless operation 2) Temperature increase e.g. from 12 °C to 40 °C 3) Mixed water 4) Limited flow amount for optimal temperature increase 5) Also connectable with 380 V

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Energy efficiency class A (Scale: A ⁺ to F)	DBX 18 Next	DBX 21 Next	DBX 24 Next
Part number:	3200-36118	3200-36121	3200-36124
Maximum operating pressure [MPa (bar)]:	1 (10) 1)		
Water connections (thread connections):	G 1/2"		
Hot water output at $\Delta t = 28 K^{23}$ [l/min]:	9.2	10.7	12.3
Switch-on flow rate / max. flow rate [l/min]:	1.5 / 7.0 4)	1.5 / 8.0 4)	1.5 / 8.0 4)
Nominal power rating [kW]:	18	21	24
Voltage [3~ / PE 400 V AC ⁵⁾]:	permanent connection		
Nominal current [A]:	26	30	35
Required cable diameter [mm ²]:	4	4	6
Protection class:	IP 25		
Specific water resistance at 15 °C [Ωcm] ≥:	1100		
Weight filled with water [kg]:	approx. 4.2		

1) Also approved for pressureless operation 2) Temperature increase e.g. from 12 °C to 40 °C 3) Mixed water 4) Limited flow amount for optimal temperature increase 5) Also connectable with 380 V

The cost-effective alternative.

E-instant water heater **DBX Next**



For maximum shower convenience.

Installation kit DSX Touch Twin

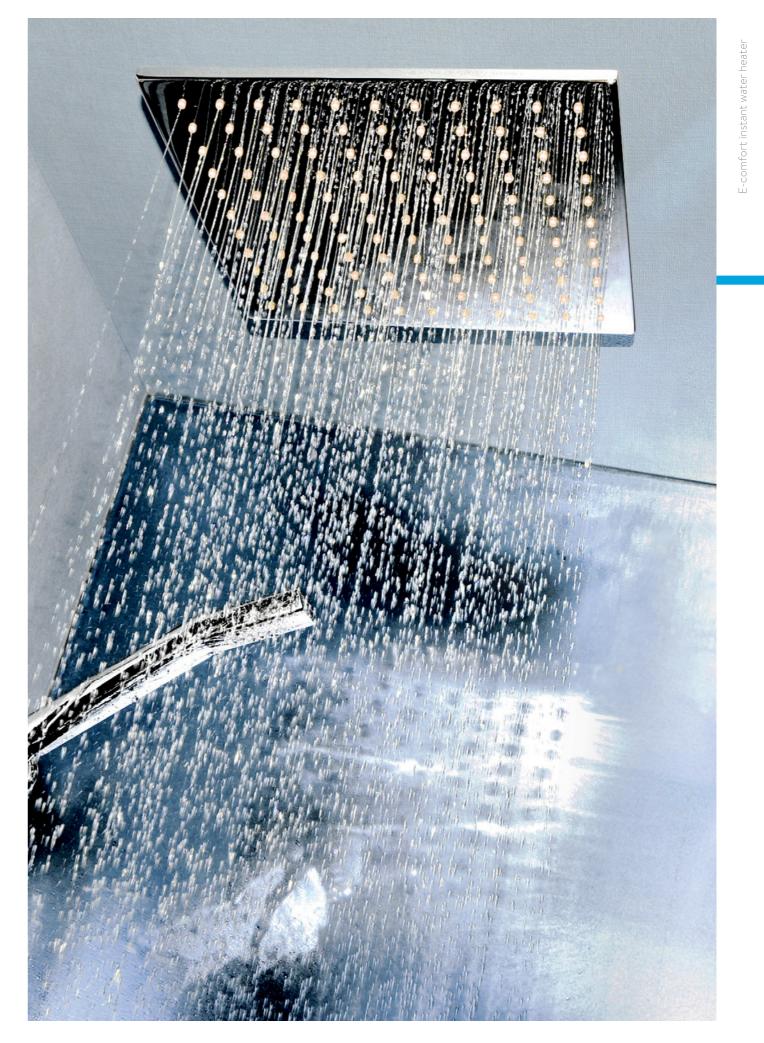


This solution combines two E-comfort instant water heaters to supply one or more tap points with high hot water requirements ¹⁾ (> 14 l/min, e.g. a wellness shower). The devices are synchronised via the special Twin software, temperature settings are automatically taken over by both devices.

- > Two fully electronically controlled instant water heaters with special installation frame and wireless remote control
- Complete with special piping set and mounting material for in-wall mounting
- > Always precise temperatures between 20°C and 60°C with TWIN TEMPERATURE Control TTC® and SERVOTRONIC® dynamic flow rate control
- > Integrated Wi-Fi and Bluetooth function for connection with smartphone, tablet and voice control
- > Also available as DEX Next S Twin (without Wi-Fi function) DEX Next S Twin: Part. No. 3200-36132
- > Dimensions of the flush-mounted cabinet (H × W × D): 81.6 × 60.3 × 14 cm

Energy efficiency class A (Scale: A ⁺ to F)	DSX Touch Twin (with MPS [®] : adjustable to 2×18, 2×21, 2×24 or 2×27kW)
Part number:	3200-36130
Maximum operating pressure [MPa (bar)]:	1(10)
Water connections (thread connections):	G1/2"
Hot water output at $\Delta t = 28 \text{ K}^{2)4}5$ [l/min]:	2×9.2 2×10.7 2×12.3 2×13.8
Hot water output at $\Delta t = 38 \text{ K}^{3)4}$ [l/min]:	2×6.8 2×7.9 2×9.0 2×10.2
Switch-on flow rate / max. flow rate [l/min]:	4.0 / automatic
Nominal power rating [kW]:	2 × 18 2 × 21 2 × 24 2 × 27 ^{6) 8)}
Voltage [3~ / PE 400 V AC ⁷]:	L two permanent connections
Nominal current per unit ⁴⁾ [A]:	26 30 35 39
Required cable diameter per unit ^{4) 6)} [mm ²]:	4.0 4.0 6.0 6.0
Protection class:	IP 25
Specific water resistance at 15 °C [Ωcm] ≥ :	1100
Weight of the kit filled with water [kg]:	approx. 22

*) Inlet temperature ≤ 70°C 1) Minimum flow rate per single tap: 4 l/min 2) Temperature increase e.g. from 12°C to 40°C 3) Temperature increase e.g. from 12°C to 50°C 4) Depending on the selected power rating 5) Mixed water 6) Min. required cable diameter per appliance; for cable connection at the top max 10 mm² 7) Also connectable with 380 V 8) Only approved for rated voltage 400 V



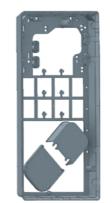
Accessories



FXS Next

FX Next wireless remote control with high-contrast e-paper display, real glass cover and sensor keys for convenient temperature adjustment plus Bluetooth wireless adapter as a set for installation in the DEX Next instantant water heater. In addition to user controls directly at the unit, the remote control allows a convenient temperature adjustment of the instant water heater at interior distances of up to ten metres. Secure Bluetooth wireless transmission, magnetic wall bracket and batteries (included), IP 24.

Dimensions (H × W × D): 9.8 × 9 × 2.6 cm **FXS Next (D):** Part no. 3200-34025

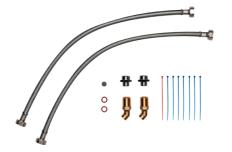






FXS 3

FX3 remote control including Bluetooth remote control adapter in a set for installation in the DEX Next instantaneous water heater. In addition to the operation at the device, the remote control allows the comfortable temperature adjustment of the instantaneous water heater over a distance of approx. 10 metres in the building. Secure Bluetooth radio transmission, stepless temperature selection via two buttons, two fi xed value buttons and an LCD display, magnetic wall bracket and batteries (included in delivery). IP 20. Dimensions (H × W × D): $5.8 \times 12.5 \times 1.9$ cm **FXS 3 (D):** Part no. 3200-34020





FXE 3

Bluetooth wireless adapter for installation in the instantant water heater to connect the electric instantant water heater DEX Next with the smartphone / tablet or the CLAGE remote control. This extension is required if the units are not yet equipped with an FX3 or FX Next remote control. **FXE3 (D):** Part no. 3200-34022



Accessories

RDX 3

Universal mounting frame for DSX Touch, DFX Next, DEX Next S, DEX Next, DCX Next, DLX Next and DBX Next with electrical wiring and brass extension for special installations, e.g. electrical connection at any point behind the unit. **RDX 3:** Part no. 3200-36100

UDX

Pipe extension kit for undersink installation with protruding water connectors G% inch above (mounting frame RDX3 required) **UDX:** Part no. 3200-34110

VDX

Pipe extension kit for offset mounting or exchanged water connectors when replacing gas water heaters (mounting frame RDX 3 required) **VDX:** Part no. 3200-34120



Wall-mounted units

→ Premium →			→ Comfort ──		
Fully electronically co	ntrolled with flow rate co	ontrol			
			Electronically controlled		
MPS [®] (Multiple Power	r System) Power rating adjus	table at installation			
	valuation	~	č	~	Ŭ,
Precise temperature s					
	-	-		·	Stepwise temperature selection
DSX Touch	DFX Next	DEX Next S	DEX Next	DEX Next L	DCX Next
	DIANEX	DEA NEXT 3	DEX Next	DEA NEXT E	DEA NEXT
		(a)	100		
â (38) +	(((•)))			(38.)	
◆ CLACE		◆CLAGE	◆ CLAE	◆ CLAGE	© CLARE
$\frac{1}{2}(38)^{+}$		$\frac{1}{2} \underbrace{38}_{-}^{+}$			
DSX Touch:	DFX Next :	DEX Next S :	DEX Next :	DEX Next L :	DCX Next:
18, 21, 24, 27 kW / 400 V	18, 21, 24, 27 kW / 400 V	18, 21, 24, 27 kW / 400 V	18, 21, 24, 27 kW / 400 V DEX 12 Next : 8,8 ou 11,5 kW / 230 V	DEX Next L : 18, 21, 24, 27 kW / 400 V DEX 12 Next L : 8.8 or 11.5 kW / 230 V	18, 21, 24, 27 kW / 400∨ DCX13 Next: 11 or 13,5 kW / 400∨
NEW	NEW			NEW	

D-series at a glance

 \mapsto Standard \longrightarrow

Preset temperature

DBX Next



DBX18 Next: 18 kW / 400 V DBX21 Next: 21 kW / 400 V DBX24 Next: 24 kW / 400 V



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CLAGE

#### **Smart Control**

If you want to install the electric instantaneous water heater invisibly in a cupboard or behind a wall would like to have convenient remote control of the devices. CLAGE offers various smart options for this. Several instantaneous water heaters in the house or flat can also be can be networked with each other.



# Smart

These are either included in the scope of delivery or can To do this, they are connected directly via Bluetooth to the

Another option is voice control. This requires one of the top the DSX Touch or the DFX Next. The Home Server is already integrated in these models and they can be connected via Wi-Fi, e.g. with an Echo Dot (Alexa®). The integrated Home Server can also be used to operate other Bluetooth-enabled electric instantaneous water heaters throughout the house by voice control. With an additional gateway, it is also possi-

Building automation via KNX® connection

# Control via "Smart Control"-App

# Operation on tablet or smartphone





#### Requirements for tablet or smartphone control:

- > iOS devices from version 11 or
- > Android devices from version 5.1
- > App »Smart Control«

## CLAGE "Smart Control" app free of charge:





Android / Play Store

Electric instantaneous water heaters can be conveniently operated with the CLAGE "Smart Control" app on a tablet or smartphone. Simply download the app, connect it to the instantaneous water heater via Bluetooth and off you go! The app offers a wide range of functions (depending on the instantaneous model), for example:

#### Users



Settings that can be adjusted by five different users and quickly accessed via their icons.

#### Automatic



Activation of the automatic bath filling function according to adjustable quantity (in litres) and with separate timer function of your instantaneous water heater quite simply via app (DSX Touch and DFX Next).

#### Statistics



One glance at your display will show usage time as well as water and energy use. This provides cost transparency.

#### Saving



Enter electricity and water price and activate the Eco mode. Saving is fun this way.

In addition to convenience, tracking usage data is essential. Usage time, water and energy consumption and of course the costs for the selected period can be quickly viewed on the smartphone or tablet. The user can adjust his consumption behaviour, save costs and thus protect the environment.

The following electric instantaneous water heaters from CLAGE can be controlled with the "Smart Control" app:



DSX Touch, DFX Next, DEX Next S, DEX Next, CFX-U, CEX-U, CEX and MCX from year of manufacture 2022.

You would like to control your hot water supply by voice? Or would you rather connect everything to the KNX<sup>®</sup> bus system? No problem!

#### Voice control (e.g. Alexa®)

"Alexa, water to 38 degrees!" - The new DSX Touch and DFX Next can be easily controlled by voice. This offers maximum comfort in the bathroom. Thanks to the Home Server integrated in the unit, additional electric instantaneous water heaters with Bluetooth function can also be connected and controlled by voice. This applies to the following devices:

- E-comfort instantaneous water heater:
   DEX Next S, DEX Next (from year of construction 2021)
- E-compact instantaneous water heaters:
   CEX-U, CEX and CFX-U (from year of construction 2022)

#### KNX<sup>®</sup>-Connection with gateway

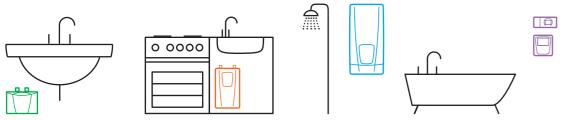
With our KNX<sup>®</sup> gateway module for the KNX<sup>®</sup> bus system, this can be implemented without any problems. The bidirectional gateway is used to connect a DSX Touch / DFX Next to the KNX<sup>®</sup> bus system of the building automation. **HS-K KNX<sup>®</sup> Gateway:** Part no. 3200-34034

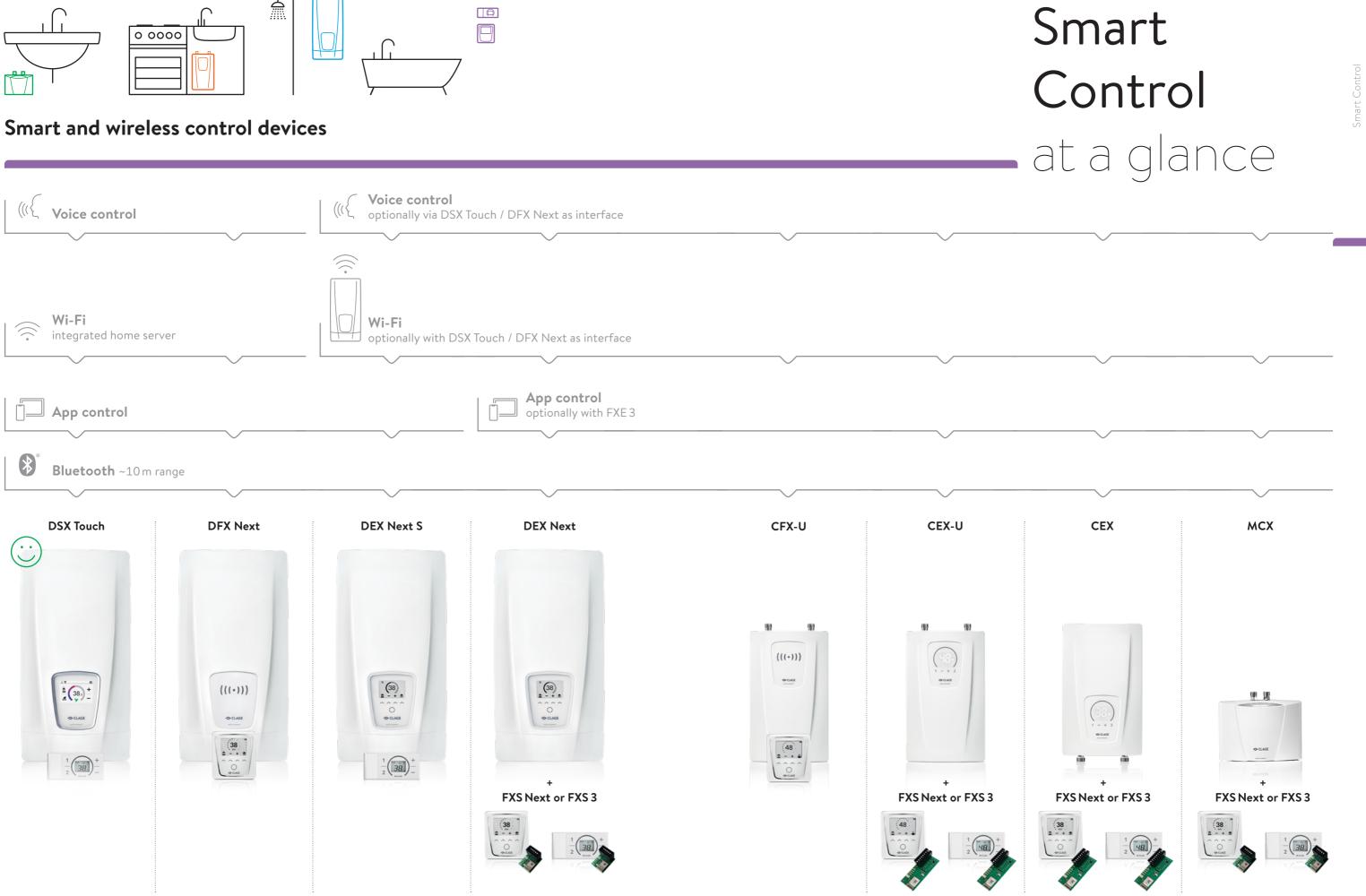
## Smart hot water control

# Intelligent solutions for your home









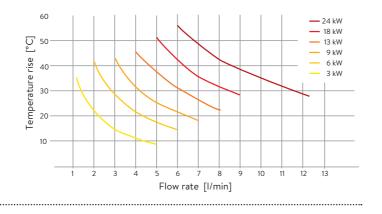
## General data for water heating

#### Power conversion table

| 1~ 220 – 240 V AC (single phase) |         |         | 3~ 400 V AC (three phase) |         |         |  |
|----------------------------------|---------|---------|---------------------------|---------|---------|--|
| 220 V                            | 230 V   | 240 V   | 380 V                     | 400 V   | 415 V   |  |
| 3.2 kW                           | 3.5 kW  | 3.8 kW  | 12.2 kW                   | 13.5 kW | 14.5 kW |  |
| 4.0 kW                           | 4.4 kW  | 4.8 kW  | 16.2 kW                   | 18.0 kW | 19.4 kW |  |
| 5.2 kW                           | 5.7 kW  | 6.2 kW  | 19.0 kW                   | 21.0 kW | 22.6 kW |  |
| 6.0 kW                           | 6.6 kW  | 7.2 kW  | 21.6 kW                   | 24.0 kW | 25.8 kW |  |
| 8.0 kW                           | 8.8 kW  | 9.6 kW  | 24.4 kW                   | 27.0 kW |         |  |
| 10.5 kW                          | 11.5 kW | 12.5 kW |                           |         |         |  |

#### Instantaneous performance chart

Mean temperature of mixed water



#### Instantaneous performance calculations

| T* [9C]                  | Nominal power rating [kW] × 14.3 | Flow per minute [litres] = | Nominal power rating [kW] × 14.3 |  |  |
|--------------------------|----------------------------------|----------------------------|----------------------------------|--|--|
| Temperature rise* [°C] = | Flow per minute [litres]         | Flow per minute [litres] - | Temperature rise [°C]            |  |  |

Mean

[°C]

#### Power required Nominal power

Litres/minute × Temperature rise [°C] rating required to 14.3 heat water [kW]

#### Physical constants

| Temperature conve | Volume conve                     |               |
|-------------------|----------------------------------|---------------|
| Temperature [°C]  | = (Temperature [°F] – 32 ) ÷ 1.8 | 1 litre       |
| Temperature [°F]  | = Temperature [°C] × 1.8 + 32    |               |
|                   |                                  | 1 gallon (GB) |

| Volume conversion: |               |   | Pressure conversion: |                    |   |                       |
|--------------------|---------------|---|----------------------|--------------------|---|-----------------------|
|                    | 1 litre       | = | 0.1 MPa              | 1 bar              | = | 0.1 MPa               |
|                    |               |   | 14.5 psi             |                    | = | 14.5 psi              |
|                    | 1 gallon (GB) | = | 4.54 litres          |                    | = | 100 kN/m <sup>2</sup> |
|                    | 1 gallon (US) | = | 3.78 litres          | 1 ft head of water | = | 0.434 psi             |

temperature = \_+ (Cold water [litres] × Cold water temperature [°C])

Hot water [litres] + Cold water [litres]

(Hot water [litres] × Hot water temperature [°C])

#### General site requirements

- > Electric instantaneous water heaters may only be installed by a plumber and /or electrician.
- > The installation must comply with current **IEC and national local** regulations or any particular regulations, specified by the local electricity supply company.
- > Material of water pipes must be **stainless steel or copper.** Plastic pipes may only be used if they conform to the relevant standard.
- > Best performance is guaranteed at a **flow pressure between** 2 and 4 bar (30 – 60 psi), avoiding the maximum pressure stated on the appliance rating plate.

#### No problem with the E-installation!

88 < Catalogue

> When using heat pumps, e-cars, etc., 3 × 63A are common in single-family houses (apartment buildings ≥ 3 × 80 A) and are also completely sufficient for E-instant water heaters.

\*Temperature rise [°C] = Hot water temperature - Cold water temperature

- > Electrical water heaters must be connected to the protective earth conductor!
- > An all-pole disconnecting device (e.g. via fuses) with a contact opening width of at least 3 mm per pole should be provided at the installation end.
- > To protect the appliance, a fuse element must be fitted with a tripping current commensurate with the nominal current of the appliance.
- > For maintenance work, **a shut-off valve** should be installed in the supply line. The appliance must be accessible for maintenance work.

#### Guidance on sizing of electrical building connection:

- > Primarily: constantly running electrical consumers (elevators, room heating, ventilation, air conditioning, lighting etc.)
- > Decentral electric instant water heating: Low simultaneity
- > Electronic power control based on consumption (delta T, I/min)
- > Short usage times: e.g. 30 sec hand washing, 3 5 min shower)
- > For example: Simultaneity at 10 housing units 25%, at 50 units only 7.3%, at 100 units only 4.4%

## Awarded and certified!

























VDE-certified acc. to ISO 9001:2015 ISO 14001:2015 Quality Management







👐 KLIMAPATENSCHAFT



## Further informations



#### Brochure Hot water guide for house construction

The new hot water guide from CLAGE is aimed at architects, planners and private builders and is designed to help you make the right decision in good time with regard to the hot water supply hot water supply when building a house.

#### Catalogue Zip boiling and water systems

Whether boiling, still chilled or bubbling: With Zip we always have the right water system for you.

Product video  $\triangleright$ DSX Touch

Product video  $\triangleright$ CFX-U

 $\triangleright$ 

Product video

MCX Blue





#### Catalogue Hot water storage heaters and boiling water heaters

5- to 120-litre storage tanks for different applications can be found in this catalogue.

#### www.clage.com

Here you will find our online product advice, product information, further material to download, installation videos, references and of course everything about our products and the company. Follow us!





# Spots









CLAGE GmbH Pirolweg 4 21337 Lüneburg Germany

Phone: +49 4131 8901-0 www.clage.com

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