e-ulTramix®

The next-generation of smart thermostatic mixing valves

e-ULTRAMIX® programmable mixing valve for DHW systems in collective facilities

Flow rate of 56 to 400 l/min - Adjustment range 30/70°C









THE **e-ULTRAMIX**® INNOVATION



WATTS:

ELECTRONIC PARAMETER SETTING

PROGRAMMING OF HEAT TREATMENT CYCLES

MONITORING OF SYSTEM HYGIENE

THE ONLY SCALABLE SYSTEM ON THE MARKET

SIMPLE, EFFECTIVE AND SAFE

e-ULTRAMIX® is a next-generation system designed to **electronically set the temperature** of mixed water in collective facilities, either locally or remotely.

This electronic system is fitted with a smart control unit used to **program automatic heat treatment cycles** safely and reliably so as to prevent all risk of Legionella bacteria forming inside the DHW system as well as 3 probes that ensure temperature measurements complying with the decree of 1 February 2010.

The programming control unit records all the parameters involved in the heat treatment process, as well as the various signals and alarms detected to ensure **effective monitoring of system hygiene**.

System data history can be retrieved, either from the data stored on a microSD card, or remotely by a **Building Management System** (MODBUS protocol) via the dedicated RS485 interface.

The e-ULTRAMIX® is also the only **scalable system** on the market. It can be used on a new system or an existing system already fitted with an e-ULTRAMIX® mixing valve with the simple addition of an e-Kit.





What is legionella?

Legionella bacteria (which cause legionellosis) are found naturally in water and pose *an extremely dangerous risk to public health*. Transmission occurs through inhalation. These bacteria multiply when the hot water temperature is too low or water stagnates inside the system, or due to a build-up of sediment and scale in the pipes. *The bacteria are destroyed when the water temperature reaches 60 °C* (and taking around 30 minutes).

THE ADVANTAGES OF THE e-ULTRAMIX® SYSTEM

- A complete system: easy to install, use and maintain.
- **Precision temperature measurement**: due to the bimetallic strip system (instant reaction, guaranteed comfort).
- Automatically controlled heat treatment: programmed using the smart control unit.
- The only scalable system on the market: it can be used on a new system or an existing system already fitted with an ULTRAMIX® mixing valve.
- Service continuity: it maintains a constant mixed water temperature precisely and offers the possibility of a manual adjustment of the desired temperature in the event of a power failure.
- Data traceability: data stored on the micro SD card for direct use on a computer (CSV format).
- Compatible with the Building Management System: remote control and monitoring (MODBUS protocol)

Fields of application

The e-ULTRAMIX® is required on all centralized systems in collective facilities: hotels, campsites, schools, health facilities, swimming pools, thalassotherapy centres, shopping centres, boarding schools, prisons, collective kitchens, hospitals, etc.





PRODUCT RANGE

New system

e-ULTRAMIX®, thermostatic mixing valve with flushing kit,

including: e-Cartridge. Electric actuator.

Programming control unit - microSD card supplied.

Cable and probes (supply and return).

Adjustment range 30/70°C: for the supply of 1 to 50 outlets in domestic hot water system

, ,		•		•
Part no.	Diameter	Outlets*	Flow rate (I/min)	Weight
22TX91E37ELECV3	M 3/4" 20x27	1 - 7	5 to 56	2.06 kg
22TX92E37ELECV3	M 3/4" 20x27	1 - 10	5 to 80	2.06 kg
22TX93E37ELECV3	M 1" 26x34	1 - 15	5 to 120	3.06 kg
22TX94E37ELECV3	M 1"1/4 33x42	1 - 21	5 to 175	4.86 kg
22TX95E37ELECV3	M 1"1/2 40x49	1 - 32	8 to 260	8.06 kg
22TX96E37ELECV3	M 2" 50x60	1 - 50	8 to 400	10.26 kg

^{*} As an indication - take into account the number of point of use connected to the same network and simultaneously in use.



Upgrading of an existing ULTRAMIX® system

e-Kit, including: e-Cartridge. Electric actuator.

Programming control unit - microSD card supplied. Cable and probes (supply and return).

Adjustment range 30/70°C: for the supply of 1 to 50 outlets in domestic hot water system

Part no.	Diameter	Outlets*	Flow rate (I/min)	Weight
22TX1E37EKITV3	M 3/4" 20x27	1 - 7	5 to 56	1.80 kg
22TX2E37EKITV3	M 3/4" 20x27	1 - 10	5 to 80	1.80 kg
22TX3E37EKITV3	M 1" 26x34	1 - 15	5 to 120	2.29 kg
22TX4E37EKITV3	M 1"1/4 33x42	1 - 21	5 to 175	3.16 kg
22TX5E37EKITV3	M 1"1/2 40x49	1 - 32	8 to 260	4.92 kg
22TX6E37EKITV3	M 2" 50x60	1 - 50	8 to 400	5.65 kg

^{*}As an indication - take into account the number of point of use connected to the same network and simultaneously in use.

Cartridge for e-ULTRAMIX®

e-Cartridge: Spare cartridge for e-Kit and e-ULTRAMIX®

Adjustment range 30/70°C: for the supply of 1 to 50 outlets in domestic hot water system

Part no.	Diameter	Outlets*	Flow rate (I/min)	Weight
22TX1E37ECARTV3	M 3/4" 20x27	1 - 7	5 to 56	1.80 kg
22TX2E37ECARTV3	M 3/4" 20x27	1 - 10	5 to 80	1.80 kg
22TX3E37ECARTV3	M 1" 26x34	1 - 15	5 to 120	2.29 kg
22TX4E37ECARTV3	M 1"1/4 33x42	1 - 21	5 to 175	3.16 kg
22TX5E37ECARTV3	M 1"1/2 40x49	1 - 32	8 to 260	4.92 kg
22TX6E37ECARTV3	M 2" 50x60	1 - 50	8 to 400	5.65 kg

^{*}As an indication - take into account the number of point of use connected to the same network and simultaneously in use











THE ALLIANCE BETWEEN **TECHNOLOGY**AND **PERFORMANCE**AT THE SERVICE OF YOUR EXPERTISE!

WATTS®, the mixing valve expert

TRUBERT® eurotherm, a brand name of the Watts Water Technologies group, has become the **professional reference** of thermostatic mixing valves for systems in the collective, tertiary, industrial and individual housing domains.

The technology of the TRUBERT® mixing valves is based on the dual control principle by the indirect action of a bimetallic strip which this company invented.



WATTS® applies all its expertise and knowhow in offering a complete range for effective control of the temperature of domestic hot water networks:

- MINIMIXing® and INSTAmix® for protecting a draw-off point.
- ULTRAMIX® for distributing mixed water at a precise and constant temperature (up to 50 outlets).
- T70 for very high flow rate tertiary and industrial systems (up to 120 outlets).

Our "multi-level" approach guarantees water at the right temperature for all uses and ensures comfort and safety for the users.











Accessories

Anti-scald cartridges

Cartridge to be installed at each draw-off point to protect users against the risk of scalding if the system is used accidentally during heat treatment cycles.

Part no.	Description
2297155	Anti-scald cartridge M/F 1/2"
2297156	Anti-scald cartridge M 24x1 with aerator







Normally closed solenoid valve

Anti-scald accessory for the mixing valve (outside heat treatment phase).

Alarm relay managed as a control of this normally closed valve.

This solution is to be used in addition to the anti-scald cartridges.

It does not protect the draw-off points during the heat treatment.

220V/50Hz part no.	24V/50Hz part no.	24VDC part no.	Diameter
149B6969	149B6982	149B6995	3/4"
149B6970	149B6983	149B6996	1"
149B6971	149B6984	149B6997	1"1/4
149B6972	149B6985	149B6998	1"1/2
149B6973	149B6986	149B6999	2"



Anti-micro cut-off device (D.E.R.)

Keeps the solenoid valve open during a power failure (4 to 10 sec).

Part no.	Dimensions
22L0908905	165 x 140 x 155



Remote probe kit (Sensor kit)

The remote probe kit installed on DHW networks with or without recirculation loop is used to measure the temperature of the mixed water. This temperature measuring sensor is equipped with a pocket. It can be connected directly to the probe inlets of the e-ULTRAMIX®, mixed water flow, loop return and DHW, etc. or to other components according to the NTC electrical resistance specification 10 $K\Omega$ at 25°C. Accuracy (+- 0.5°C).

. 122 dt 20 017 toodi doy (1 010 0).			
Part no.	Diameter	Outlets*	
22029700	3/4" 20x27	1 - 10	
22029701	1" 26x34	1 - 15	
22029702	1"1/4 33x42	1 - 21	
22029703	1"1/2 40x49	1 - 32	
22029704	2" 50x60	1 - 50	



e-ULTRAMIX® IP 55 watertight case

Watertight wall cabinet with IP 55 degree of protection ideal for housing electrically cabled equipment and protecting it against all aggressive agents (dust, damp, splashes of water, ect.). Case and plate subassembly for fixing the e-ULTRAMIX® programming control unit.

Cable outlet with cable gland (4 x ISO16 and 1 x ISO20) and plugs. 4 wall mounting brackets. Wall mounting screws not provided.

Part no.	Dimensions
22029800	H. 240 x L. 190 x W. 94





^{*} As an indication - take into account the number of point of use connected to the same network and simultaneously in use