

USER MANUAL

EUROMAX

DESCALING PUMP FOR HEATING COILS AND HEAT EXCHANGERS

WARNING:

Observe the following safety instructions to avoid any danger or damage to people and objects.

**To empty, clean and flush with water at the end of the descaling process.
Neutralize the residual acidity if possible**



Regulations

Maintenance intervention must comply with the accident prevention and environmental protection regulations.

Proper Use

EUROMAX is a system to descale heating coils and heat exchangers, thanks to the acid flowing. The warranty decays in case of irregular use.

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The product complies with national and European directives and it is therefore CE marked.
The Compliance certificate is available at Euroacque.

2. Description

Euroacque manufactures a range of descaling pumps with vertical axis and tank to facilitate the interventions on all types of plant. Descaling pumps are made of high quality anti-acid materials and they are subjects to tests. A new flow inverter (patent pending, see photo) allows to descale both side of the circuit. A self-regulating system controls the flow and the pressure depending on the consistency of the incrustation. Furthermore, the pump is equipped with a new ergonomic tank and a comfortable cap for an easier filling.

It is also available a version "FLUSH": suitable for the sanitation of heating systems and equipped with twin exhaust valves, water recovery tap and accessories.



TECHNICAL DATA

<i>Model</i>	<i>Tank</i>		<i>Weight Flow Max</i>			<i>Head</i>	<i>Protection°</i>
Modello	Serb. (lt)	HxLxP (cm)	Peso (kg.)	Port. max (lt/h)	Port. ass. (kW)	Prevalenza (pressione max bar)	Grado di protezione
Euromax 20	20	45X46X32	7	2600	0,12	1	IP 55
Euromax 20 turbo	20	45X46X32	8	5400	0,25	1,9	IP 55
Euromax 30	27	58X45X30	9	5400	0,25	1,9	IP 55
Euromax 40	37	69X45X30	13	5400	0,55	1,9	IP 55
Euromax T 1000		25X43X22	8	9000	0,55	-	IP 55
Euromax Flush	30	58x45x30	8	5400	0,55	1,9	IP 55

3. General Information

Warning: danger of death: It is forbidden to use petrol, solvents or other explosive substances with a flash point below 55 °C. Never operate the pump unattended.

damage to Objects: Do not wash or fill systems in the presence of strong sunlight. Do not run the pump without fluid.

4. Electric connection

- Always use a differential switch (circuit breaker) to stop the pump in case of failure for your safety.
- Extension cable's section must be equal to the pump cable. In case of distances greater than 20 m the extension cable's section must be wider than the pump cable. The windings of the electric motor can be destroyed if not complying, resulting in the loss of the warranty.

5. Working

Be sure to work in safety and gear up for the neutralization of the acid residue before proceeding with the washing.

INSTRUCTIONS TO BE FOLLOWED TO OBTAIN GOOD DESCALING

WARNING:

KEEP THE CAP OPEN DURING THE WORKING TO RELEASE ACID FUMES. MAKE SURE THE TEMPERATURE OF THE FLUID DOES NOT EXCEED 50°C

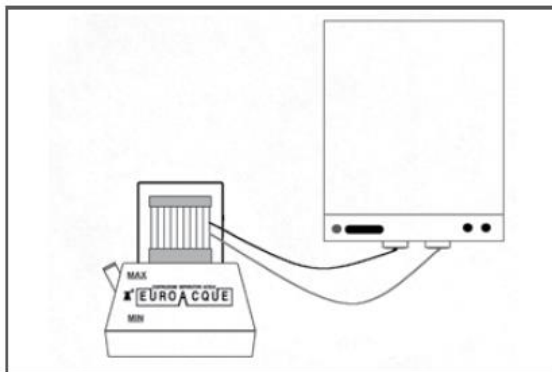
- 1) Connect the two flexible pipes to the inlet and outlet of the system to be treated so as to create a closed circuit.
- 2) Fill the tank with water up to the MIN mark.
- 3) start the pump by pressing the switch. Initially, the water will rise in both pipes but, as soon as the working pressure is reached, one of these will take prevalence. It will be possible to evaluate the amount of blockage in the heating coil based on the amount of water that circulates.
- 4) Add about ½ litre of descaling liquid to the water in the tank and check the circulation of the combined solution (water + descaling liquid). If this is abundant, a further 1 litre of descaling liquid can be added to accelerate the process; on the contrary, wait until a breakthrough in the scaling is created inside the coil, because in the case of a particularly badly scaled coil, the presence of excessively dense descaling fluid can cause big pieces of limestone to break away and completely block the pipes.
- 5) Wait until the ingoing and out-coming liquid are the same color and free from air bubbles. At this stage the coil can be considered to be unblocked. For perfect descaling, activate the flow inverter by pulling the lever in the opposite position to that used for the initial operation; leave the pump working for about 5 – 10 minutes.
- 6) Check the foam to does not exceed the MAX level. If limestone has an high concentration may happen that the descaling liquid produces an high amount of foam, creating turbulence inside of the impeller and impeding the aspiration of the liquid. In this case it seems that the pump does not work.
To overcome this problem use an anti-foaming product (EURO 800).
- 7) At the end of the descaling process, loosen one of the pipe connections of the system to enable the liquid in the coil to flow into the pump's tank.

NEW FLOW INVERTER (PATENT PENDING) ONLY FOR EUROMAX 20
Quick inversion of the cleaning flow

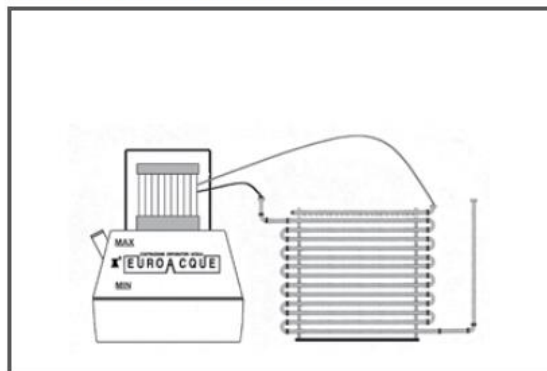


6. Connection Models

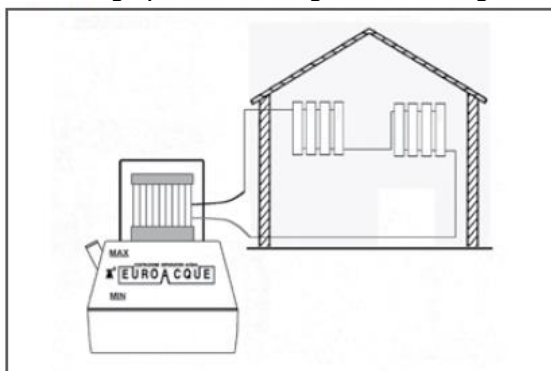
Euromax 20
Heating boilers



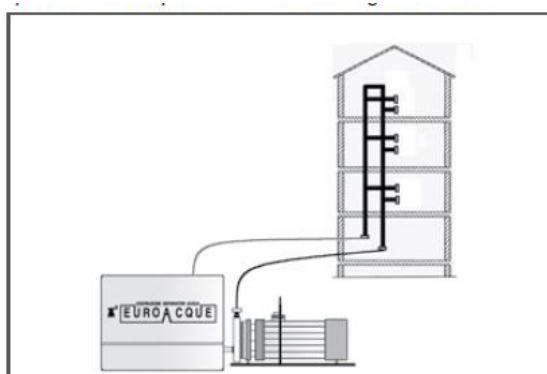
Euromax 40
Big heat exchangers and cooling towers



Euromax 20 T and FLUSH
Heating systems and big heat exchangers



Euromax 1000
Big Heating systems, hot water systems



7. Troubleshooting

FAILURE	POSSIBLE CAUSE	SUGGESTED INTERVENTION
NO PRESSURE	Circuit obstructed	<i>Open in-pressure valves or clean the pipes</i>
	Foam excess	<i>Clean the tank or use anti-foaming product</i>
	Closing tap damaged	<i>Open the closing tap and check</i>
IMPROPER ASPIRATION	Non water-tight aspiration	<i>Check the connection of the flexible pipes</i>
	Foam excess	<i>Clean the tank or use anti-foaming product</i>
	Circulation taps closed or empty tank	<i>Open the taps or fill the tank</i>



The Maintenance to the pump must be carried out only by trained personnel observing the safety regulations. unplug the system from the power supply prior to work.

Danger of death by electrocution



Danger of burns if high temperature.

Fill the circuit when cold only.

Danger of fire if motor hot.

Block the aspiration or pressure pipe briefly (60 sec. max) to avoid the pump overheating.



Danger of injury due to the liquid.

Attach the connections securely, check the tightness regularly.

Damage to objects due to the pump overheating.

Do not work the pump without liquid for more than 60 secs.



Damage to environment.

Collect the supply equipment and dispose according to the local regulation.

Damage to objects due to improper storage.

Clean the pump if not using it to avoid the impeller blockage.

Store in a place not subject to freezing

DICHIARAZIONE  **DI CONFORMITA'**
COMPLIANCE CERTIFICATE

Dichiariamo, sotto la nostra completa responsabilità, che i prodotti della serie
Accepting full responsibility, declares that the product:

EUROMAX

• *sono conformi*

alle prescrizioni di sicurezza sulla Direttiva Macchine 89/392/CEE, (e successive modifiche 91/368/CEE, 93/44/CEE, 93/68/CEE), delle Direttiva Bassa Tensione 73/23/CEE e della direttiva sulla compatibilità magnetica 89/336/CEE (e successiva modifica 92/31/CEE)

◦ *meet the requirements of the following regulations:*

Machines Directive 89/392/CEE, (and subsequent modifications 91/368/CEE, 93/44/CEE, 93/68/CEE), the low voltage Directive 73/23/CEE and the Electromagnetic Compatibility 89/336/CEE (and subsequent modification 92/31/CEE)
