Water purification and treatment equipment manufacturer and wholesale distributor Tel: +36 96 544-240 • Fax: +36 96 544-248 • E-mail: sales@euro-clear.eu • Web: www. euro-clear.eu

MECHANIC GUIDE

Time-controlled mechanical filter equipments

Hyper mechanical filter equipments with TURBIDEX charge

BlueSoft 1054HF-RX/67
BlueSoft 1354HF-RX/67
BlueSoft 1465HF-RX/67
BlueSoft 1665HF-RX/67
BlueSoft 1865HF-RX/75
BlueSoft 2162HF-RX/75
BlueSoft 2472HF-RX/75
BlueSoft 3072HF-RX/111
BlueSoft 3672HF-RX/111
BlueSoft 4272HF-RX/111
BlueSoft 4872HF-RX/112

Multimedia mechanical filter equipments with sand filter charge



Before using the equipment, please read the guide carefully!

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1. DEFINITION AND FUNCTION

The equipment is a column filled with activated carbon filtrating material of excellent quality, which holds back the dissolved solvents, mechanical contaminations and the flakes on the surface in the treated water, which are easily able to be backwashed in counter-current and can be emptied onto the channel.

2. TECHNICAL PARAMETERS

Filterina Control Surface Size Flow Backwash Weiaht Part number media valve / to filter (mm) m3/h Flow kg HXWXL liter Connection m2 BlueSoft 1054HF-RX-67C-DTF 43 0.7-1.5 0.05 1.8 m3/h 1600 x 270 x 300 78 **RX/67** 1″ BlueSoft 1354HF-RX-67C-DTF 71 1,2-2,4 0.08 2.8 m3/h 120 1610 x 340 x 340 **RX/67** 1" BlueSoft 1465HF-RX-67C-DTF 85 0.1 3.5 m3/h 150 1890 x 370 x 370 1,5-3,0 1″ **RX/67** RX-67C-DTF BlueSoft 1665HF-114 0.13 4.6 m3/h 190 1920 x 420 x 420 1,9-3,9 **RX/67** 1″ BlueSoft 1865HF-RX-75A-DTF 170 0.18 1980 x 500 x 500 2,7-5,4 6.3 m3/h 280 2″ **RX/75** BlueSoft 2162HF-RX-75A-DTF 198 0.22 3.3-6.6 7.7 m3/h 340 1980 x 560 x 560 2″ RX/75 BlueSoft 2472HF-RX-75A-DTF 255 4.2-8.4 0.28 9.8 m3/h 440 2170 x 620 x 620 RX/75 2″ RX-111A-BlueSoft 3072HF-311 DTF 6,6-13 0.44 15.4 m3/h 630 2490 x 770 x 770 **RX/111** 2″ RX-111A-BlueSoft 3672HF-566 9,6-19 0.64 22.4 m3/h 1110 2310 x 940 x 940 DTF **RX/111** 2″ BlueSoft 4272HF-RX-111A-792 0.88 1520 13-26 30.8 m3/h 2530 x 1210 x 1070 DTF 2" **RX/111** BlueSoft 4872HF-RX-112SM-991 16-34 1.12 39.2 m3/h 1740 2530 x 1210 x 1070 **RX/112** DTF 2,1/2"

Hyper mechanical filter equipments with TURBIDEX charge

Min. pressure during operation Max. pressure during operation Min. temperature during operation Max. temperature during operation Electrical connection

- : 2.5 bar
- : 6 bar
- : 4 C°
- : 25 C°
- : 230 V, 50 Hz

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Part number	Filtering media kg	Control valve / Connection	Flow m3/h	Surface to filter m2	Backwashing Flow	Weight kg	Size (mm) H x W x L
BlueSoft 1054KT- RX/67	83	RX-67C-DTF 1″	0.5-1.0	0.05	2.0 m3/h	94	1600 x 270 x 300
BlueSoft 1354KT- RX/67	135	RX-67C-DTF 1″	0.8-1.6	0.08	3.2 m3/h	140	1610 x 350 x 350
BlueSoft 1465KT- RX/67	165	RX-67C-DTF 1″	1.0-2.0	0.1	4.0 m3/h	180	1890 x 370 x 370
BlueSoft 1665KT- RX/67	218	RX-67C-DTF 1″	1.3-2.6	0.13	5.2 m3/h	230	1920 x 420 x 420
BlueSoft 1865KT- RX/75	290	RX-75A-DTF 2″	1.8-3.6	0.18	7.2 m3/h	310	1980 x 500 x 500
BlueSoft 2162KT- RX/75	350	RX-75A-DTF 2″	2.2-4.4	0.22	8.8 m3/h	390	1980 x 560 x 560
BlueSoft 2472KT- RX/75	450	RX-75A-DTF 2″	2.8-5.6	0.28	11.2 m3/h	490	2170 x 620 x 620
BlueSoft 3072KT- RX/111	750	RX-111A- DTF 2″	4.4-8.8	0.44	17.6 m3/h	840	2490 x 770 x 770
BlueSoft 3672KT- RX/111	1060	RX-111A- DTF 2″	6.4-12.8	0.64	25.6 m3/h	1260	2450 x 1070 x 940
BlueSoft 4272KT- RX/112	1325	RX-112SM- DTF 2 1/2"	8.6-17.2	0.88	35.2 m3/h	1740	2530 x 1210 x 1070
BlueSoft 4872KT- RX/112	1685	RX-112SM- DTF 2 1/2"	11.2-22.4	1.12	44.8 m3/h	1930	2530 x 1210 x 1070

Multimedia mechanical filter equipments with sand filter charge

Min. pressure during operation	: 2,5 bar
Max. pressure during operation	: 6 bar
Min. temperature during operation	: 4 C°
Max. temperature during operation	: 25 C°
Electrical connection	: 230 V, 50 Hz

3. MAIN PARTS

Basically, the equipment consists of the following main parts.

3.1. Tank to filter

It is meant to store the catalytic charge. The columns are PE pressure tanks developed especially for treating water with polyethylene padding. Outside they have epoxy resin coat rolled by fibre.

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Their features are that they last long, have little weight and resist to chemicals and corrosion.

3.2.1. Hyper mechanical filter charge

It is meant to execute the equipment's mechanical filter on the charge bed, high fineness filt

Туре	: TURBIDEX
Colour	: white
Density	: 0.8kg/l
Grain Size	: 0.6 – 1,4 mm

3.2.2. Various fractionated sand filter, gravel filter charge

It is meant to execute the equipment's mechanical filtration on the charge bed, high fineness filtration.

Туре	: quartz sand-gravel
Colour	: gray
Density	: 1.5kg/l
Grain Size	: 0.4 - 6 mm

3.3. Blocked regenerating valve-RX control valve

It is meant to ensure the equipment's mechanical operation process's programmed, regulated mode.



4. HOW IT WORKS

4.1. MECHANICAL OPERATION

During the equipment's operation the blocked valve's mechanical operation ensures the automatic execution of the water production and the regeneration processes.

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4.1.1. WATER PRODUCTION

During water production, the water gets into the column through the upper filter and it flows through the charge to remove carbon chloramines, chlorinated hydrocarbons and free active chlorine in treated water. The filtered water gets out of the equipment through the lower filter.

4.1.2. BACKWASH

During backwash the water gets into the column through the lower filter and it flows through the charge from down to up. Meanwhile, the filtrating charge gets stirred up. The water for backwash gets out into the channel through the drain.

4.1.3. DOWNFLOW WASHING

During the downflow washing the water gets into the upper filter into the column to store charge and it flows through the charge from up to down. It goes into the channel through the drain.During the downflow washing the recompression of the filtrating charge that has been stirred up is done.

4.2. DETAILED DESCRIPTION OF THE OPERATION CONTROL

The automatical blocked valve is solely time controlled during the operation and all the other working processes. There is an electronic clock for metering time. Apart from metering time, this clock gets the mechanisme of the blocked valve to work. The control unit has been programmed during production, the time for backwash is 2 o'clock at night. The backwash lasts for ~20 minutes. The frequency of backwash can be programmed between 1-99 days, depending on the system's needs.

5. INSTALLATION AND STARTUP

5.1. CONDITIONS OF INSTALLATION:

A room with flat, horizontal and hard flooring is needed for the installation of the equipment. The flooring and the direct surroundings of the equipment must resist to the corrosive effect of the brine. The equipment must be installed in a room the temperature of which is between +5°C to +40°C. The temperature of the raw water to be treated must not exceed +30 °C. The equipment must not be installed in a strongly damp or dusty room. It must be protected from frost, radiant heat and ultraviolet radiance.

Near the equipment, sewage connection and 230 V 50 Hz grounded, electric socket must be provided. In order to diminish risks, we advise to install the equipment into a room provided with floor drainage.

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Below water pressure of 2,5 bars, proper regeneration is not guaranteed, so in this case we advise to build in a equipment to increase pressure.

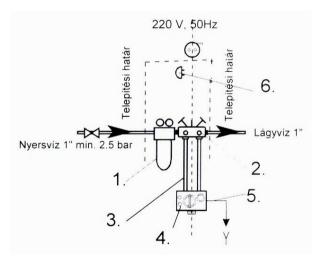
In case the water pressure from the water system exceeds 6 bars, a equipment to decrease pressure has to be fixed in front of the equipment.

Fluctuation of pressure higher than ± 0.5 bar is not allowed! Mechanical protective filter must be built in front of the equipment. It is important that the mechanical protective filter filtrates contamination bigger than 100 microns. The equipment does not have any extra protection against water or electricity shortage. If needed, it must be provided while installing.

5.2. CONNECTING THE EQUIPMENT (it is the *customer's/owner's* job)

It is the customer's task to have the equipment connected to the water, sewage and electricity systems. The operator of the equipment and the specialist to complete the installation should both check if the equipment has been installed as described in the guide for use and handling and if the conditions to diminish risks of damage are given. The setting up of the equipment can be completed by the partner of the Euro-Clear Hungary Ltd's service that has a partnership contract. Setting up the equipment only means the setting up of the automatical control valve fulfilling the local conditions.

When setting up, the valid local regulations, general instructions and hygiene regulations must be followed and the technical parameters given above must be respected.



- 1. Pre-filtering equipment
- 2. Montageblock or build by-pass branch
- 3. Flexible tube pair

4. Control valve of the water softening equipmen

- 5. Sewage disposal
- 6. Electrical outlet
- 7. Gravitation drainage on the floor

The pre-filtering device No. 1 and the montageblock No. 2's usage is operational and warranty condition. The montageblock can be replaced by a by-pass branch built from 3 valves. When building in this unit into the pipe, make sure that you connect the raw water onto the filter "1" and the softened water that comes out has to be connected onto the montageblock "2".

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The water softener and the montageblock can be connected by the flexible tube pair No. 3. When connecting, pay attention to the flow direction of the water which is marked by the arrows at the montageblock No. 2 and the control valve No 4.

There is a hose outlet on the control valve No. 4, which is the drain of the device. The water that comes out has to be led into the sewage canal. This job can be completed by the plastic hose No. 5. The hose must be pressure resistant as a simple garden hose breaks after a while and the narrow diameter can stop the completion of the regeneration. The sewage water comes out of the device under pressure, but it must be led by free outlet.

An electric plug underlaid of 230 V, 50 Hz must be built within a distance from the equipment that allows the completion of the connection of the prong plug number 6 without the electric cable's getting tight.

During backwash, water comes out from the pre-filtering device No. 1. It is advised to connect the sewage connection snag into the drain. In this case the sewage water will come out under pressure, too.

On the side of the regenerating tank of the water softening device there is an overflow snag which the superfluous water can get through in case of a breakdown. The liquid has got a hydrostatic pressure, so it can be led only by using floor drainage *or* a siphon drainage fixed at a low level.

An overflowing snag can be found on the water softener equipment's regenerating tank's side, on which in case of malfunction the unnecessary water can leave. The safety overflow snag of the tank can be led to the drain point by a $\frac{1}{2}$ " pressure resistant plastic tube. The water that eventually comes out does not have any pressure, so it must be led to the drain or into the raiser by a slope.

The drain of operation of the water softening device and the overflow of the brine tank can be connected to the sewage leading points respecting the following rules.

- Respecting DIN 1988, the tube of the rinsing water and the overflow tube must be fixed at the sewage water connection point, at least at a distance of 20 mm compared to the highest sewage water level, so that the water can get out of the device smoothly.

Szennyvíz vezeték min. 20 mm Szifonos szennyvíz elfolyó

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5.3. SETTING UP OF THE EQUIPMENT

After the jobs mentioned in point 5.2 have been completed, you have to order the setting up of the machine from Euro-Clear Hungary Ltd at one of the contact details below:

Fax:+36 96 / 544 - 248Mailing address:9071 Gönyű, Kossuth L. út 65/AE-mail address:sales@euro-clear.euWeb address:www.euro-clear.eu

After the device has been set up, the copy of the warranty document filled in by the person having completed the setting up has to be sent to the address above in a verifiable way.

The fee of the setting up jobs gets calculated on the basis of the actual price list.

6. INSTRUCTION ABOUT HANDLING

The device is operated automatically, it does not need a permanent operator or inspection. Before or after a longer (for example 1 week long) outage, start the manual regeneration, cleaning process, and make sure that the device starts its operation under complete capacity.

1./ Check daily the pressure of the incoming water on the pressure gauge. In case the pressure decreases by more than 0,5 bars, clean the pre-filter.

2./ Clean the device with a dry cloth every two weeks.

3./ The pre-filtering device must be rinsed back depending on the extent of the contamination but at least once a week. It must be done with the sewage water drain tap that you can find on the bottom of the device. Rinsing back must last for at least 15-20 seconds.

4./ Make sure that the device keeps getting 230 V, 50 Hz electricity all the time, for 24 hours and it is under system pressure continuously.

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7.WARRANTY, GUARANTEE

In case of non-perfomance by the producer, the owner of the device can benefit from all warranty rights in 306-309. § in the Civil Code.

The owner of the device can claim for warranty and guarantee only by showing both the receipt that has been received when buying the device and that proves the payment of the complete price and the warranty document that has been filled in.

Warranty and guarantee do not cover faults that have been caused by the following:

- The product has not been used properly, the instructions of the way of handling, using, installing or maintaining etc. have not been respected
- The operation diary has not been kept
- the necessary corrective maintenance has not been completed, or has not been done by the designated professional servicing company,
- the product's nature has been transformed, changed
- the owner of the device has not completed their liability of reducing risks of damage
- Defects, damages and other problems caused by improper transportation and storage of the product.

Warranty and guarantee claims can be validated only in case the operator of the device sends to the producer both pages of the operation data sheet filled in and signed by the professional mechanic in charge of setting up of the device. It must be sent in a provable way.

Please send back to the address below both pages of the data sheet of setting up that have been filled in and signed:

Euro-Clear Hungary Ltd. Mailing address: 9071 Gönyű, Kossuth Lajos út 65/A E-mail: <u>sales@euro-clear.eu</u> Fax: +36 96 / 544 248

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DATA SHEET FOR SETTING UP

Name of the specialist to complete setting up:						
Contact details of the specialist completing the setting up:						
•	Mailing address:					
•	Telephone number:					
•	E-mail address:					
Name of the company having sold the device:						
Contact details of the company having sold the device						
•	Mailing address:					
•	Telephone number:					
•	E-mail address:					
Name of the operator of the device:						
Contact details of the operator of the device						
•	Mailing address:					
•	Telephone number:					
•	E-mail address:					
Type of the de	evice that has been set up:	BlueSoft				
Date of setting	g up:					

signature, stamp

Warranty and guarantee are only valid in case the setting up has been completed by Euro-Clear Hungary Ltd or its agent. You can order the setting up of the device at the contact details mentioned below.

Euro-Clear Hungary Ltd. 9071 Gönyű, Kossuth Lajos út 65/A Tel: +3696/544-240 Fax: +3696/544-248 sales@euro-clear.eu

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Data sheet for setting up

					C 11		Yes
	1.1. 1.2. 1.3. 1.4. 1.5.	Is a mee Is the p Are the Is the ri	chanical pro ressure of t directions of nsing wate	otection filte the raw wate of water flo er outlet of t	ons as follows: r built in front of the er convenient? (2,5 – w convenient? (on th ne device connected 230V, 50HZ)	- 6 bars) ie montage block, on the device)	
2.Progra	am the o	control h	ead of the	filtrating de	vice		
	2.1.			ate and time			
	2.2. Setting the time for regeneration2.2 1. In case the device is time controlled, has the time between the two washings been set up?						en
	0.0	If yes, it				da	ays
	2.3. 2.3.1				ced settings) Has the time been	set up?	
	2.3.2.		(Rinse)		Has the time been		
3.Startin	3.Starting manual wash, checking operation cycles:						
	3.1. Backwash (water comes intensively into the channel).						
					operation cycle?	channel close?	
	3.2.	After washing, is the water that comes out into the channel clean?					
		After washing, is the water that comes out into the channel clean?					
	3.3. Repeat points 3.1. and 3.2. several times in a row as long as the outcoming water into the channel gets clear.						
			charge got				
					eat points 3.1. and 3	3.2. ?	
4. Train the staff that handle the equipment.							
5. Filling the warranty document.							

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WARRANTY DOCUMENT

In case the device is properly used, the producer undertakes a warranty of **12 months** starting from the setting up, but maximum **18 months** starting from the date of issuing the quality certificate.

DATE OF SETTING UP:

.....

signature, stamp

The warranty and guarantee are only valid in case the setting up has been completed by Euro-Clear Ltd. or its agent. You can order the setting up of the device at the details mentioned below.

Please send us back the warranty document, setting up data sheet completely filled. In other case the warranty is not valid.

Please keep the warranty document, setting up data sheet and quality certificate for administration purposes in the future.

In case of a breakdown or fault, please inform us in written at the e-mail address <u>sales@euro-clear.eu</u> or on the fax number +36-96-544-248 about the problem that has occured.

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QUALITY CERTIFICATE

1. Issuer of the quality certificate:		2. Producer:				
Euro-Clear Ltd.		Euro-Clear Ltd.				
3. Punctual name of product (its function):						
Automatic water softening device. Type: BlueSoft						
4. Quantity	5. Weight and		6. Date of production:			
1						
7. Can be used		8. Identifying p				
		a./ Control valve number: b./ ITJ-number: 36-10				
		c./ Part numbe				
		d./ Other identi				
9. Delivery and storage regulat	tions:	10. Wrapping:				
Transportation and storage must be		Cardboard.				
position. Store in a dry, cool place, a						
and precipitation. Do not expose to						
UV radiation. Extremely frost-hazar						
11. Important features of the p	roduct (with pu	nctual technical	data, results of measurement):			
Flow of volume:	m ³ /h					
Quantity of the charge:						
, ,						
Quality and classifying: Conve	enient!	•				
14. Other details:		12. Method of inspection for checking the quality				
Serial number:		of the product: During production				
		13. Regulation for use and handling:				
		As it is mentioned in the guide for use and handling				
		15. Signature of the person issuing the quality certificate:				
		contineate.				
		Date:				
		Gönyű, 20				
			signaturo stamp			
			signature, stamp			