

# ecocirc series start up guide

STEP BY STEP INSTALLATION AND SET UP



# Circulator efficiency in a few steps

At Xylem we believe in products that do their job when expected that are easy to install, commission, operate and service. When it comes to circulators this means: high efficiency, robust design and high precision manufacturing, as well as controls and communication. In addition, it's important that products offer many years of trouble free operation: this is exactly what Lowara ecocirc range can do.

### ecocirc BASIC and PREMIUM

#### **CONTROL MODE SETTING**



ecocirc BASIC

Primary pump (primary secondary system): constant speed

Radiator heating: proportional pressure Thermostatic valve: proportional pressure



ecocirc PRFMIUM

Primary pump (primary secondary system): constant speed

Radiator heating: proportional pressure

#### **Additional features**

Underfloor heating: constant pressure Ventilation: constant pressure Mixing modules: constant pressure

Consult the IOM manual for further information.

#### **START UP**



# 1. LED Color indicating control mode (ecocirc BASIC):

Blue: differential pressure White: constant speed

# 1. LED Color indicating control mode (ecocirc PREMIUM):

Blue: differential pressure White: constant speed Green: constant pressure

- **2. Change control mode:** turn the rotary dial counter clockwise to the off position and the color of the LED will change.
- **3. Set duty point:** turn the selector switch to the desired duty point level (1-7).
- **4. Air Purge:** turn the selector switch counter clockwise to air purge mode and keep it there for 5 seconds, to correct duty point setting. When air purge is done, the circulator will automatically resume it's duty point setting.

## ecocirc XL and ecocirc XLplus

The Lowara ecocirc XL must be installed with the pump head in a horizontal position in order to avoid the electronic drive below the motor.

If the system features welded pipes, a washing cycle containing acid removes waste that might be attracted by the magnetic rotor (in this case remove the pump unit prior to pipe cleaning taking place). Xylem has developed an innovative function to purge the pump of troublesome air pockets quickly with the Air Purge function.

Once the circulator cover is open, all connections inside the circulator are accessible. Along with its packaging, the product is provided with a quick start guide illustrating all connectors and how to connect all sensors in the circulators.

The graphical user interface of the circulator features four buttons from left to right: with the first one you can view parameters, pressure, motor's revolutions, electrical consumption, flow rate. The second button enables the editing of functional mode, constant pressure, proportional pressure or fixed speed. Last two buttons edits the parameters.



#### **CONTROL MODE SETTING**

Radiator heating: Proportional pressure. Ventilation: Constant pressure. Mixing modules: Constant pressure. **Domestic hot water:** Constant pressure (ecocirc XL with bronze pump housing) Extra temperature based control modes are available only with ecocirc XLplus.

**Under floor heating:** Constant pressure.

Communication: Start/stop, potential free failure signal, 0-10V and 4-20 mA ports.



#### **START UP**

- 1. Mount the pump in the system according to the flow direction and with pump head in a horizontal position.
- 2. Connect the pump to the power supply
- 3. Connect all the needed auxiliary input/ output signals of the pump.
- 4. Fill the system and vent the air. Open all the valves of the system to facilitate the pump venting.
- 5. Power the pump and wait (follow the manual in case of error and alarm code on display).

The display and all the LED lights switch-on for one second and then a sequence of submenu options for advanced functions will be shown.

- 6. Wait: follow the instructions manual in case of error and alarm code on display.
- 7. Once operational, the circulator starts air purge cycles to get rid of air pockets inside the pump. The air purge cycle ends after







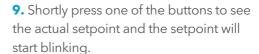


four minutes. At the end of the procedure, the pump starts to run with default settings. Wait: follow the instructions manual in case of error and alarm code on display. In case of residual air in the system, noise or high vibration: - Vent again the system

- Recall the automatic air venting procedure pressing the two setting buttons. At the end of the air venting process, the pump starts operating in the default setting (this removes the air only in the pump unit and not in the system).



- Constant pressure
- Proportional pressure
- Constant speed
- Night mode





- 11. Without touching any button for three seconds the new setpoint is activated. On the display the setpoint stops blinking and the previous parameter will be displayed.
- 12. Press the button to change the unit of measurement displayed.
- **13.** To change the unit of measurement of head or flow, press the button for more than one second

Flow:  $m^3/h => gpm (US)$ 

Head: m => ft

14. The graphical user interface can be locked/unlocked, simultaneously pressing the upper setting button and the parameter button for two seconds. The user interface is automatically locked after ten minutes of inactivity.

#### only for XLplus

Built in Modbus/Bacnet. Wi-Fi: extra module required.

#### Lowara ecocirc XLplus: communication capabilities.

The optional Wi-Fi module that comes with the Lowara ecocirc XLplus features simple wiring to enable connection with other devices such as a smartphone, tablet or pc. The circulator automatically configures Wi-Fi as soon as the circulator is switched on.

#### **STEP BY STEP WIRELESS MODULE USE**

1. When the wireless module is assembled and Lowara ecocirc XLplus is correctly configured, a wireless network accessibility is available for connection via smartphone, tablet or laptop. Serial number (S/N) and password (PWD) are printed on the label positioned on the side of the circulator's drive.

- 2. Circulator's network is "xylemecoxl\_\_\_S/N\_\_\_" . The serial number (S/N) is a 8-character word and password "xylem\_\_\_PWD\_\_\_" is a 8-character word.
- 3. Type "https://xylemecoxl" web address or

"192.168.1.10" to browse circulator's web page for easy and quick connection via an external device.

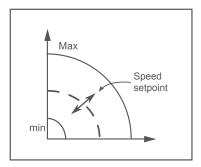






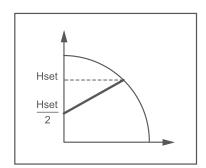


# Control modes



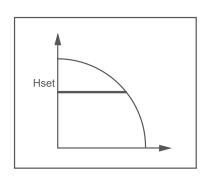
#### Constant speed (BASIC, PREMIUM, XL, XLplus)

The pump maintains a fixed speed at any flow demand. The speed of the pump can be set via user interface.



# Proportional pressure (BASIC, PREMIUM, XL, XLplus)

The pump pressure is continuously increased / decreased depending on the flow demand. The maximum head can be set via user interface.



# Constant pressure (PREMIUM, XL, XLplus)

The pump maintains a constant pressure at any flow demand. The desired head of the pump can be set via user interface.











#### Remember that

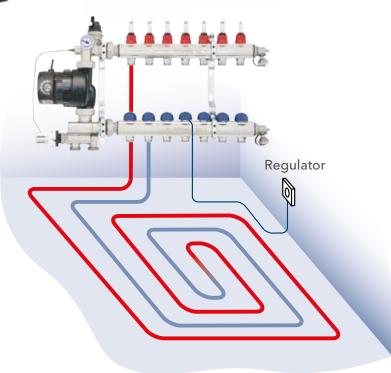
A normal  $\Delta t$ 

(temperature drop in the circuit) is 5K

Lots of bends and high velocity in the pipe system can cause noise

#### Recommendation

ecocirc PREMIUM 15/20/25-60 fits most underfloor heating systems



ecocirc XL should be used in larger systems

## Xylem |'zīləm|

- 1) The tissue in plants that brings water upward from the roots;
- 2) a leading global water technology company.

We're a global team unified in a common purpose: creating innovative solutions to meet our world's water needs. Developing new technologies that will improve the way water is used, conserved, and reused in the future is central to our work. We move, treat, analyze, and return water to the environment, and we help people use water efficiently, in their homes, buildings, factories and farms. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise, backed by a legacy of innovation.

For more information on how Xylem can help you, go to xyleminc.com

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