

read

# **Electronic circulators for heating systems**







# **MADE IN ITALY**

#### **PERFORMANCE RANGE**

- Flow rate up to 3.5 m<sup>3</sup>/h (0.97 l/s)
- Head up to 6 m

# **APPLICATION LIMITS**

- Liquid temperature between +2 °C and +95 °C
- Ambient temperature between 0 °C and +40 °C
- Maximum working pressure 6 bar
- Minimum suction pressure:
   0.3 bar at +50 °C
   1.0 bar at +95 °C
- Maximum relative humidity  $\leq$  **95%**
- Sound pressure level < 43 dB(A)</li>
- Maximum glycol 30%
- Continuous service S1

#### **CONSTRUCTION AND SAFETY STANDARDS**

| EN 60335-1    | EN 61000-3-2 | EN 55014-1 |  |  |
|---------------|--------------|------------|--|--|
| EN 60335-2-51 | EN 61000-3-3 | EN 55014-2 |  |  |
| EN 62233      | EN 16297-1   | EN 16297-2 |  |  |

#### EU REGULATION N. 622/2012

EEI ≤ 0.20-Part2

The benchmark for the most efficient circulators is  $\text{EEI} \leq 0.20$ 







#### **MODES OF OPERATION**

The control panel allows one to select the preferred work curve by means of three programmes. A luminous LED, with different colours, provides information regarding the operating status of the circulator.

(GREEN LED)



FAL







MIN

MAX

Maintains a constant pressure (head) following a decreased demand for

Reduces the pressure in proportion (head) following a decreased demand

Maintains a constant pressure (head) following a decreased demand for heat from the system (reduced capacity).



CUSTOM-MADE PROGRAMME (BLUE LED)

Fixed speed curves of operation, adjustable by positioning the selector anywhere between the MIN and MAX positions.

### **INSTALLATION AND USE**

**DHL** electronic circulators have a low consumption of energy in the upper A class. Compared to traditional circulators with an equivalent performance they consume up to 85% less electricity. They are recommended for domestic and residential heating systems.

The electronic controls allow one to set up advanced features and to ideally meet the demands of each type of system.

Easy and intuitive installation with a LED interface.

Adjusting and choosing the desired operating programme is done by turning the regulator on the control panel. The available operating programmes can satisfy any requests and ensure that the circulators always work under good conditions thus reducing energy consumption and eliminating the annoying noise of water flow in pipes, valves and radiators.

Air in the system is indicated by a LED on the control panel. The fitted electronics provide for the automatic function of unlocking the motor should there be this anomaly. The installation must be undertaken indoors or anyway in an area protected from the weather.

# CERTIFICATIONS

for heat from the system (reduced capacity).

Company with management system certified DNV ISO 9001: QUALITY | ISO 14001: ENVIRONMENT







MIN-MAX CHARACTERISTIC CURVES US g.p.m. 10 Imp g.p.m. 7 feet MAX 20 5 (ш) Н 3 10 2 1 MIN **m³/h** 1 2 3 O 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1 l/s 0 Q

# **CONSTRUCTION CHARACTERISTICS**



| 1 | PUMP BODY                   | Cast iron<br>with an Epoxy Electro Coating<br>treatment   |
|---|-----------------------------|---|
| 2 | IMPELLER                    | Technopolymer   |
| 3 | SHAFT                       | Ceramic   |
| 4 | BEARINGS                    | Graphite  |
| 5 | THRUST BEARING              | Ceramic   |
| 6 | ELECTRIC MOTOR              | <ul> <li>Single-phase</li> <li>230 V (-10%; +6%) - 50 Hz</li> <li>Absorbed power P1:<br/>Min 3 W - Max 42 W</li> <li>Absorbed current 11:<br/>Min 0.03 A - Max 0.33 A</li> <li>Insulation: class H</li> <li>Protection: IP 44</li> <li>Appliance Class: II</li> </ul> |
| 7 | SEALS                       | EPDM  |
| 8 | ELECTRONIC<br>CIRCUIT BOARD |   |

#### **DIMENSIONS AND WEIGHT**



| MODEL         | PORTS |       | DIMENSIONS mm |    |    |      | kg    |      |
|---------------|-------|-------|---------------|----|----|------|-------|------|
| Single-phase  | DN1   | DN2   | h             | a1 | a2 | b1   | b2    |      |
| DHL 25-60/130 | G 1½″ | G 1½″ | 130           | 45 | 45 | 29.4 | 104.4 | 2.01 |
| DHL 25-60/180 |       |       | 180           |    |    |      |       | 2.60 |