

## **CalioTherm Pro High-efficiency pump for circulating drinking water**

Maintenance-free high-efficiency glandless pump, non-overloading synchronous motor with ECM technology, integrated continuously variable differential pressure control. Suitable for drinking water to German TrinkwV 2001 drinking water regulations. Two-piece thermal insulation shell to EnEV (German energy saving regulations) included in the scope of supply.

### **Operating modes:**

- Constant-pressure control
- Proportional-pressure control
- Eco Mode with dynamic differential pressure setpoint adjustment
- Boost Mode (open-loop control)

### **Functions:**

- Operating mode set manually or via Modbus
- Setpoint settings 0 - 100 % in increments of 1 %
- Setpoint for differential pressure set manually or via external 0 - 10 V DC analog signal or via Modbus
- Setpoint for rotational speed (open-loop control) set manually or via external 0 - 10 V DC analog signal or via Modbus
- Remote monitoring and control of pump via Modbus
- Control panel with integrated symbols and display, showing the operating mode and, in alternation, the electrical input power, flow rate and head
- Error codes indicated on the display
- Automatic setback operation, can be disabled
- Automatic vent function
- Soft start with limitation of starting current
- Deblocking function
- Integrated motor protection function
- Dynamic Control

### **Communication interfaces integrated in the pump:**

- Terminal pair for Modbus RTU interface
- Terminal pair for external analog 0 - 10 V DC signal
- Terminal pair for external ON/OFF of the pump
- Terminal pair for dual-pump operation
- Configurable general fault message relay (changeover contact)
- Configurable "in operation" message relay (changeover contact)

### **Operating data**

Fluid handled:

Flow rate:

Head:

Fluid temperature:

Permissible fluid temperature min./max. 2 to 70 °C

Max. permissible total hardness in drinking water circulation systems: 20 odH

Maximum operating pressure: 10 bar

Max. ambient temperature: 40 °C

### **Motor/electronics**

Electromagnetic compatibility

Interference emissions: EN 55014-1, EN 61000-3-2, EN 61000-3-3

Interference immunity: EN 55014-2

Power supply: 1~ 230 V AC +/- 10 %. 50/60 Hz

Power input P1:

Speed min. ... max.:

Current input max.:

Enclosure: IPX4D

**Materials**

Pump casing: stainless steel 1.4308

Impeller: plastic with glass fibre content (PSU-GF30)

Pump shaft: stainless steel 1.4034

Bearings: ceramics / carbon

**Connection dimensions**

Pipe connection:

Overall length:

**Purchase order information**

Approx. net weight:

Make: KSB

Type: CalioTherm Pro

Material price group: 22

**Material number****Accessories**

BACnet MS/TP communication module

Pipe unions

**Typical tender CalioTherm Pro**

**1157.528/03-EN**

**Subject to technical modification without prior notice**

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