

Calio Z High-efficiency Circulator Pump

Maintenance-free high-efficiency glandless twin pump, non-overloading synchronous motor with ECM technology, integrated continuously variable differential pressure control. Energy efficiency index (EEI) exceeds the ErP 2015 requirements. For heating and air-conditioning applications.

Operating modes:

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

Functions:

- Dual-pump operation, pump changeover after 24 hours runtime of a pump
- Peak load operation
- Redundancy by automatic start-up of the stand-by pump in the event of a duty pump failure
- 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 VDC analog signal or via Modbus
- Setpoint for rotational speed (open-loop control) set manually or via external 0 - 10 VDC analog signal or via Modbus
- Remote monitoring and control of pump via Modbus
- Control panel with integrated symbols, 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 venting
- Soft start with limitation of starting current
- Deblocking function
- Integrated motor protection function
- Characteristic curve monitoring by means of max./min. flow limit
- Energy meter / flow rate meter

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 twin pump operation
- Configurable general fault message relay (changeover contact, per drive)
- Configurable "in operation" message relay (changeover contact, per drive)

Operating data

Fluid handled:

Flow rate:

Head:

Fluid temperature:

Permissible fluid temperature min./max.: -10 to 110 °C

Maximum operating pressure:

Max. ambient temperature: 40 °C

Motor/electronics

Energy efficiency index (EEI):

Electromagnetic compatibility

Interference emissions: EN 61000-6-3

Interference immunity: EN 61000-6-1

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

Power input P1:

Speed min. ... max.:

Current input max.:
Enclosure IPX4D

Materials

Pump casing: grey cast iron with cathodic electrocoating (EN-GJL-200)
Impeller: plastic with glass fibre content (PSU-GF30)
Pump shaft: stainless steel 1.4034
Bearings: ceramics/carbon

Mating dimensions

Pipe connection:
Overall length:

Purchase order information

Approx. net weight:
Make: KSB
Type: Calio Z
Material price group: 54

Material number

Accessories

BACnet MS/TP communication module
Spacers
Pipe unions

Calio Z Typical Tender

1157.525/05-EN

Subject to technical modification without prior notice.

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