

a xylem brand

SUBMITTAL

A-428

JOB:

UNIT TAG: ENGINEER: CONTRACTOR: **REPRESENTATIVE:**

ORDER NO.

SUBMITTED BY:

APPROVED BY:

DATE: DATE: DATE:



Lead Free^{*}, Energy Efficient Recirculation of Domestic Hot Water for Large Residential Buildings and Tankless Water Heater Applications



Description

Ecocirc® circulators are energy efficient using permanent magnet, ECM (electronically commutated motor) technology. The ecocirc® B 23-5 ACT circulators are designed for large residential home and tankless water heaters. These circulators are lead free* and are assembled with a timer, cord, and plug.

Materials of Construction

Pump Body: Lead Free^{*} Brass O-Ring: EPDM Bearing: Carbon/Ceramic Impeller: Nylon/PPO Motor: High Efficiency ECM All Other Wetted Parts: Type 316 Stainless Steel Shaft-less and seal-less construction.

Operating Data

Pump

Maximum Working Pressure: 145 psi (10 Bar) Maximum Working Temperature: 203°F (95°C)

Motor

Electrically commutated motor with permanent magnet spherical rotor

115 Volts 60 HZ 60 Watts Power Consumption Automatic Overload Protection Low in-rush current

^{*}As defined by CA AB1953. Less than 0.25% Pb by weight on wetted parts surface areas.

Control Mode

A built-in temperature sensor automatically turns the pump ON when the water temperature in the hot water supply line cools down to 85° F (29°C). The pump then moves the cool water in the hot water supply line into the cold water supply line. Ecocirc® B 23-5 ACT pump turns OFF automatically when water temperature reaches 95° F (35°C), ensuring instant availability of shower warm water with maximum temperature hot water only seconds behind.

When the pump is OFF, a built-in auto closure device (non-return valve) prevents hot and cold water mixing.

Hot water will also be instantly available at all other faucets/taps between the water heater and the sink under which the ecocirc® B 23-5 ACT pump is installed.

Standard Features

Body Type

Ecocirc® B 23-5 ACT housing has (2)1/2" (12.7mm) and (2) 3/8" (9.6mm) hose connections.

Motor

Designed with a shaft-less spherical motor with permanent magnet technology for improved efficiency.

Lead Free^{*}

All ecocirc® B 23-5 ACT circulators are made from lead free* construction.

Plug

 $\mathsf{Ecocirc} \ensuremath{\mathbb{B}}$ B 23-5 ACT circulators are assembled with a 6ft (~2m) electrical plug.



Timer

Ecocirc® B 23-5 ACT circulators can provide an even greater increase in energy savings when the built-in 24-hour timer is used.

Weight

Light weight construction, weighs less than 7 lbs (3.2 kg)

Special Specifications

The contractor shall furnish and install in-line circulating pumps as illustrated on the plans and in accordance with the following specification:

- 1. The pumps shall be of the high efficiency type specifically designed for quiet operation
- 2. Pump to be suitable for 203°F (95°C) operation at 145 psi (10 Bar) working pressure
- 3. The pumps shall have a ceramic ball bearing lubricated by the system fluid.
- 4. Pump body shall be a lead free (less than 0.25% Pb) brass
- 5. Pump to have one of the following options: a) Pump to have fixed thermostat.
- b) Pump to have adjustable "ON" thermostat
- 6. Motor shall be spherical rotor permanent magnet electrically commutated motor (ECM).
- 7. Motor shall be non-overloading at any point on the pump curve and shall have built in overload protection.
- 8. Pumps to have a capacity of ____GPM (L/s) at _____foot (meters) of head.
- 9. All pumps to be supplied by Bell & Gossett Model____

Available Models

Part Number	Description	Model	Weight
6050B7016	Lead Free Brass [*] ACT 1/2" Fixed Thermostat with Timer	Ecocirc® B 23-5 ACT	7 lbs (3.2 kg)
Less than 0.25% Pb by weight on wetted parts surface areas.			



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