

# EVOSTA

ELECTRONIC CIRCULATOR FOR HEATING SYSTEMS





### TECHNICAL DATA

- Operating range:** 0.8 - 13.2 gpm with head up to 18 ft.
- Pumped liquid temperature range:** from +36 °F (2°C) to +203 °F (95°C).
- Working pressure:** 145 psi 10 bar (1000 kPa).
- Protection class:** IP 44.
- Insulation class:** F.
- Installation:** with horizontal motor axis.
- Standard power input:** single-phase 1 x 110-127 V~ 60 Hz.
- Pumped liquid:** Clean, free of solids and mineral oils, non-viscous, chemically neutral, with properties similar to water (glycol max 30%).

### APPLICATIONS

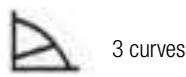
**Low energy consumption** electronic pump for hot water circulation in all types of domestic heating systems.

### ADVANTAGES

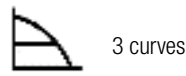
Thanks to the advanced technology employed, the **permanent magnet synchronous motor**, and the **frequency converter**, the new range of **EVOSTA** circulators ensures high efficiency in all applications, with significant benefits in terms of energy saving. The circulator has a built-in electronic device that detects the changes demanded by the system, and automatically adapts the circulator performance accordingly, always ensuring optimum efficiency and minimum energy consumption. The **EVOSTA** circulator is also suitable for replacing old three-speed circulators, both as far as size, as it has the same dimensions of the VA series, and for its capability of covering pumps with heads of up to 18 feet with one single model. It can also simplify the work of the user, thanks to a single sequential setting button and a breather plug used to degas the system and unlock the motor shaft if required.

The EVOSTA circulator can operate in 3 different modes:

- proportional differential pressure



- constant differential pressure



- Fixed curve

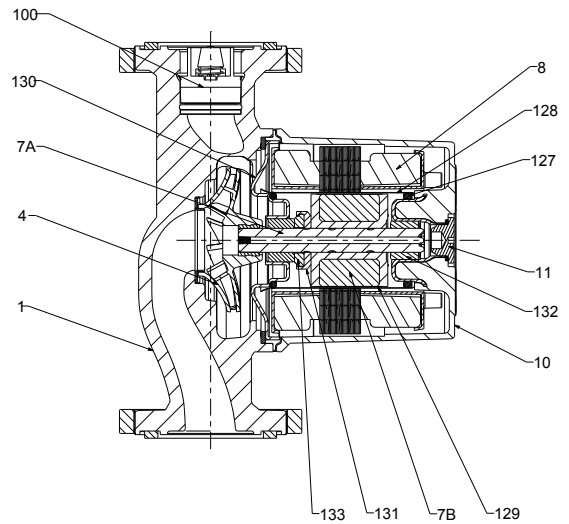


### CONSTRUCTION FEATURES

Cast iron pump body and wet rotor motor. Die-cast aluminium motor casing. Technopolymer impeller. Ceramic motor shaft on graphite bushings lubricated by the pumped liquid. Stainless steel rotor liner, stator liner and closing flange. Ceramic thrust ring. EPDM seal ring and brass air breather plug. Thanks to the internal protection of the motor, the pump does not require overload protection.

### MATERIALS

N.	PARTS	MATERIALS
1	PUMP BODY	CAST IRON
4	IMPELLER	TECHNOPOLYMER ULTEM
7A	MOTOR SHAFT	CERAMIC
7B	ROTOR	MAGNET
8	STATOR	-
10	MOTOR CASING	DIE-CAST ALUMINIUM
11	BREATHER PLUG	BRASS
100	CHECK VALVE	TECHNOPOLYMER PPE
127	SEAL RING	EPDM
128	STATOR LINER	STAINLESS STEEL
129	ROTOR LINER	STAINLESS STEEL
130	CLOSING FLANGE	STAINLESS STEEL
131	THRUST RING SUPPORT	EPDM
132	BUSHINGS	GRAPHITE
133	THRUST RING	CERAMIC

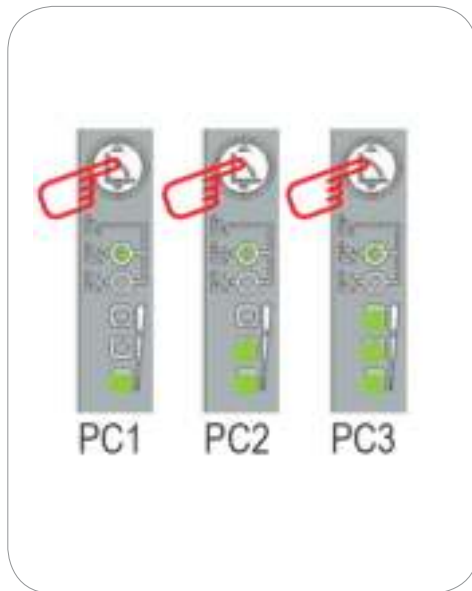


### OPERATING MODES

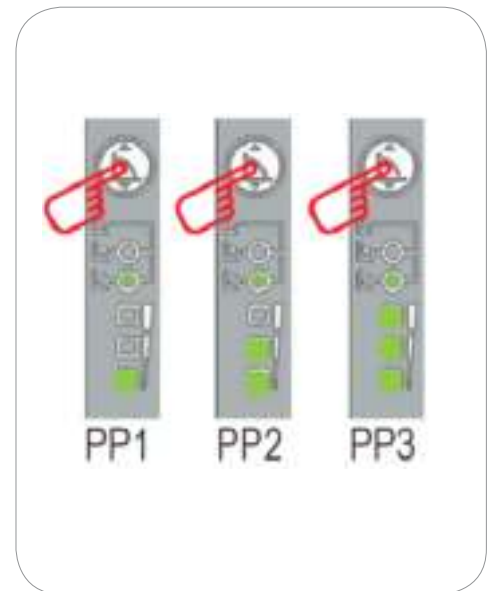
#### CONSTANT SPEED OPERATION



#### CONSTANT PRESSURE OPERATION



#### PROPORTIONAL PRESSURE OPERATION



#### 2 BOLT FLANGE



#### CHECK VALVE

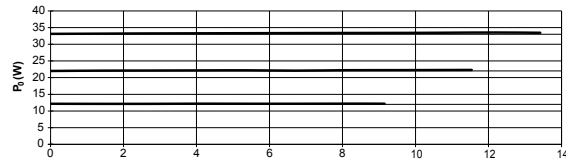
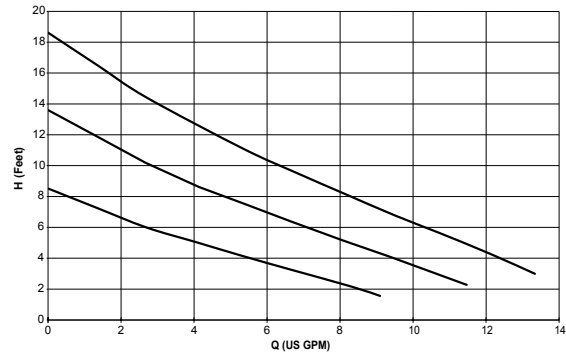
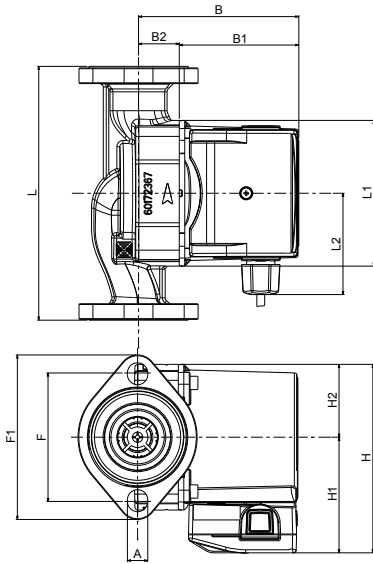


#### 360° Rotation around a vertical access

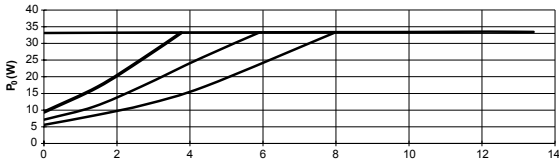
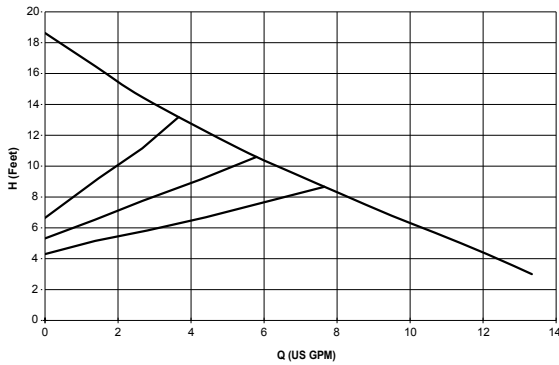


# EVOSTA - ELECTRONIC CIRCULATORS FOR DOMESTIC HEATING SYSTEMS - SINGLE, WITH UNIONS

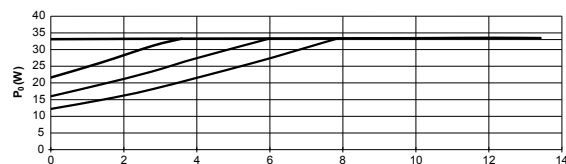
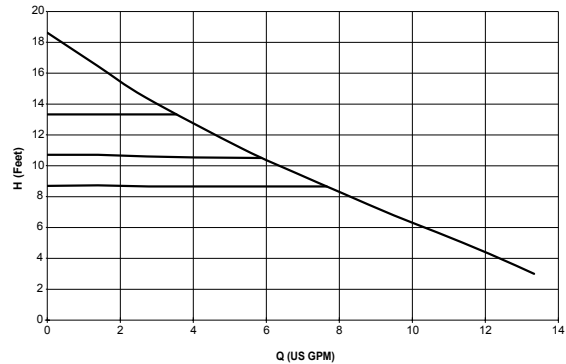
Pumped liquid temperature range: from +36 °F to +203 °F - Maximum operating pressure: 145 psi 10 bar (1000 kPa)



**CONSTANT SPEED**



**PROPORTIONAL PRESSURE**



**CONSTANT PRESSURE**

The performance curves are based on kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.

MODEL	Q=gpm	0	2	4	6	8	10	12
EVOSTA 110-127v	H (ft)	18.4	15.5	12.8	10.3	8.2	6.2	4.3

MODEL	CENTRE DISTANCE mm	FLANGE	POWER INPUT 60 Hz	P1 MAX W	In A	EEI *	MINIMUM SUCTION PRESSURE	
							t°	194 °F
EVOSTA 110-127v	6 3/8"	OVAL 2 BOLT	1 x 110-127 V ~	12 34	0.19 0.50	EEI ≤ 0,23	ft.c.w.	32.8

MODEL	L	L1	L2	B	B1	B2	H	H1	H2	A	F	F1	PACKING DIMENSIONS			VOLUME ft <sup>3</sup>	WEIGHT lbs
													L	B	H		
EVOSTA 110-127v	6 3/8"	3 2/3"	2 1/3"	4"	3"	1 1/32"	4 3/4"	2 7/8"	2"	1/2"	3 7/64" 3 15/64"	4 9/64"	5 1/8"	7 1/2"	5 29/32"	0.095	5.29

