

# EVOLUSC

**ELECTRONIC CIRCULATOR FOR HOT WATER** 









HEATING

CONDITIONING





Display (d- version)
Shows the real working point



Energy saving



Ideal for replacement



Water resistant



Airvent plug



DABPUMPS.COM





Hot Water recirculating



Drinking Water approved



Pump body in stainless steel

# **EVOSTA2**

# WET ROTOR ELECTRONIC CIRCULATORS



# **TECHNICAL DATA**

**Operating range:** 0.8 - 15.1 gpm with head up to 18 ft.

**Pumped liquid temperature range:** from +14 °F (-10°C) to +230 °F (110°C).

Working pressure: 145 psi 10 bar (1000 kPa).

Protection class: IP X5. (NEMA 4X ) Protected against jets of water.

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 its **electronic driver (also called ECM: Electronic Commutation Motor** or **BLDC motor: Brushless DC motor)**, the new range of **EVOSTA2** 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 **EVOSTA2** 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 EVOSTA2 circulators can operate in 3 different modes:

• Proportional differential pressure

 $\geq$ 

3 curves

• Constant differential pressure

 $\triangleright$ 

3 curves

• Fixed curve



3 curves

#### **CONSTRUCTION FEATURES**

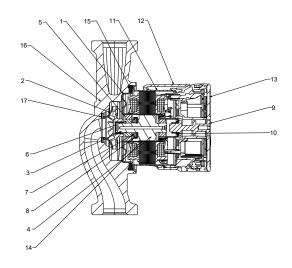
- Pump body in cast iron with cataphoresis treatment EVOSTA2 SAN version with Stainless Steel
- · Motor casing in stainless steel
- · Motor casing cover in technopolymer
- Motor shaft in ceramic (alumina)
- IPX5: Protected against water jets



# WET ROTOR ELECTRONIC CIRCULATORS

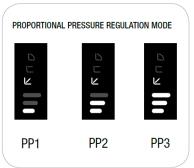
# **MATERIALS**

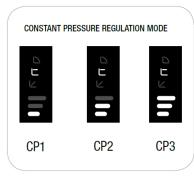
N.	PARTS	MATERIALS
1	ROTOR CAN FLANGE	STAINLESS STEEL AISI 316
2	IMPELLER	ULTRASON
3	MOTOR SHAFT	CERAMIC (ALUMINA)
4	ROTOR	Fe
5	BEARING HOUSING	BRASS
6	BEARING	ALUMINA
7	AXIAL BEARING	GRAPHITE
8	AXIAL HOUSING	EPDM
9	PLUG	BRASS
10	0-RING	EPDM
11	STATOR HOUSING	STAINLESS STEEL AISI 304
12	OUTER SHELL	POLYCARBONATE
13	COVER	POLYCARBONATE
14	ROTOR SLEVE	STAINLESS STEEL AISI 304
15	SEAL	EPDM
16	PUMP HOUSING	Standard version CAST IRON with cataphoresis treatment SANITARY version STAINLESS STEEL
17	NECK RING	POLYCARBONATE

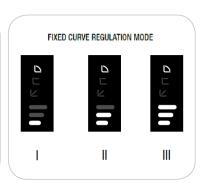


# **OPERATING MODES**

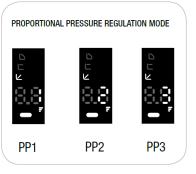
# EVOSTAZ

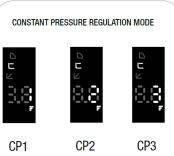


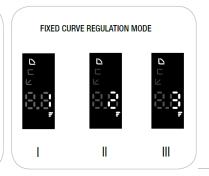












2 BOLT FLANGE





CHECK VALVE



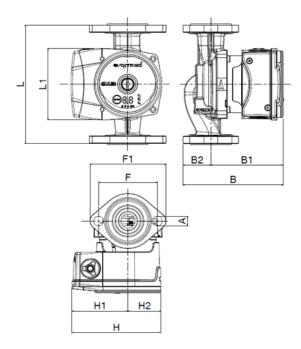
360° Rotation around a vertical axis

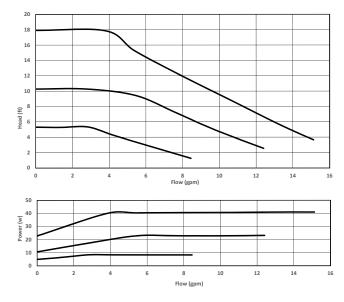




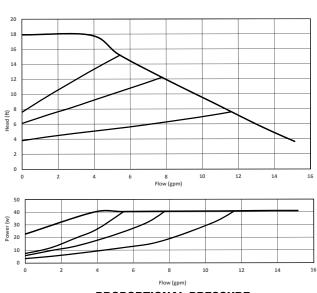
# **EVOSTA2** - ELECTRONIC CIRCULATORS FOR DOMESTIC HEATING SYSTEMS - SINGLE, WITH UNIONS

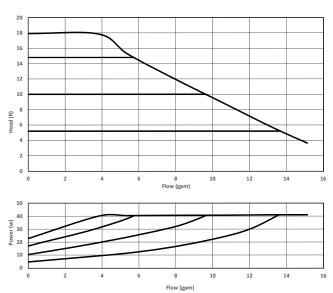
Pumped liquid temperature range: from +14 °F to +230 °F - Maximum operating pressure: 145 psi 10 bar (1000 kPa)





### **CONSTANT SPEED**





**CONSTANT PRESSURE** 

# PROPORTIONAL PRESSURE

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

MODEL	Q=gpm	0	2	4	6	8	10	12	14	15.12
EVOSTA 110-127v	H (ft)	17.92	17.85	17.81	14.38	11.98	9.42	7.01	4.79	3.34

MODEL	CENTRE DISTANCE	FLANGE	POWER INPUT	P1 MAX	ln	EEI *	MINIMUM SUCTION PRESSURE	
MODEL	CENTRE DISTANCE	FLANGE	60 Hz	W	A	CCI	t°	194 °F
EVOSTA 110-127v	6 3/8"	OVAL 2 BOLT	1 x 110-127 V ~	4 41	0.064 0.61	EEI ≤ 0,23	ft.c.w.	32.8

MODEL		14	D	B1	B2	u	H1	H2		_	E4	PACK	PACKING DIMENSIONS			WEIGHT
MUDEL	L	LI	D	DI	DZ	П	пі	П2	А	Г	FI	L	В	Н	ft <sup>3</sup>	lbs
EVOSTA 110-127v	6 3/8"	5 55/64"	5 25/64"	3 57/64"	1 1/2"		3 13/64"	1 13/64	33/64	3 3/16"	4 9/_"	5 23/64	7 1/4"	6 17/32"	0.1467	5.37

