



in line with European Directive  
ErP 2009/125/CE (formerly EuP)

## TECHNICAL DATA

**Operating range:** from 0,4 - 4,2 m<sup>3</sup>/h with head of up to 8 metres.

**Pumped liquid temperature range:** from -10°C to +110°C.

**Working pressure:** 10 bar (1000 kPa).

**Protection class:** IP X4.

**Insulation class:** F.

**Installation:** with horizontal motor axis.

**Standard power input:** single-phase 1 x 230 V / 50/60 Hz.

**Pumped liquid:** Clean, free of solids and mineral oils, non-viscous, chemically neutral, with properties similar to water (glycol max 30%).

**Special versions on requests:** alternative voltages and/or frequencies.

## APPLICATIONS

**Low energy consumption** electronic pump for water circulation in pressurised closed circuit, or open circulation type, domestic heating and air conditioning systems.

## ADVANTAGES

Thanks to the advanced technology employed, **the permanent magnet synchronous motor, and the frequency converter**, the new range of **EVOTRON** circulators ensures high efficiency in all applications, with significant benefits in terms of energy saving. For this reason, all the new range of **EVOTRON** circulators belongs to European Directive ErP 2009/125/CE. 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.

Easy operation and easy to read control panel, with the display always showing the mode of operation selected.

The **EVOTRON** circulator can operate in three different control modes:

- proportional pressure



3 curves

- constant pressure



3 curves

- constant number of revolutions



3 curves

Possibility of economy regime operation (automatic night-time reduction, SMART SLEEP function).

Supplied as standard with electric connector for quick connection to the electric power network.

Insulation casing supplied as standard for all the range.

## CONSTRUCTION FEATURES

Single body consisting of the cast iron hydraulic section, and the wet rotor motor.

Die-cast aluminium motor casing. Technopolymer impeller.

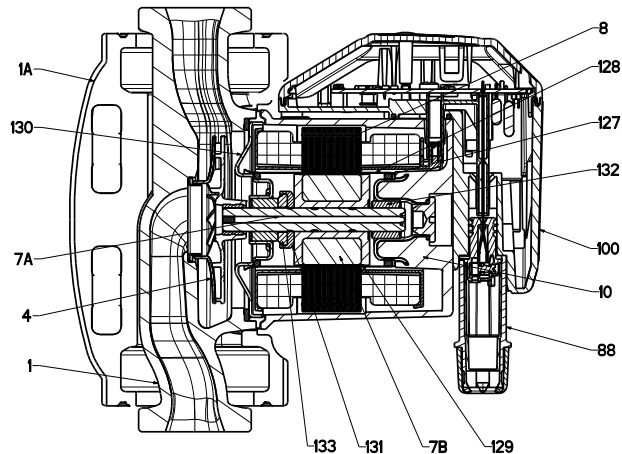
Ceramic motor shaft on graphite bushings lubricated by the pumped liquid.

Stainless steel rotor liner, stator liner and closing flange.

Ceramic thrust ring, ethylene-polypropylene seal ring and brass bleed cap. The wet rotor synchronous two-pole motor is controlled by a frequency converter, and does not require overload protection.

### MATERIALS

N.	PARTS	MATERIALS
1	PUMP BODY	CAST IRON
1A	THERMAL INSULATION	EXPANDED POLYPROPYLENE
4	IMPELLER	ULTRASON
7A	MOTOR SHAFT	CERAMIC
7B	ROTOR	MAGNET
8	STATOR	-
10	MOTOR CASING	DIE-CAST ALUMINIUM
88	POWER INPUT CONNECTOR	NYLON
100	ELECTRONIC BOX	POLYCARBONATE
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



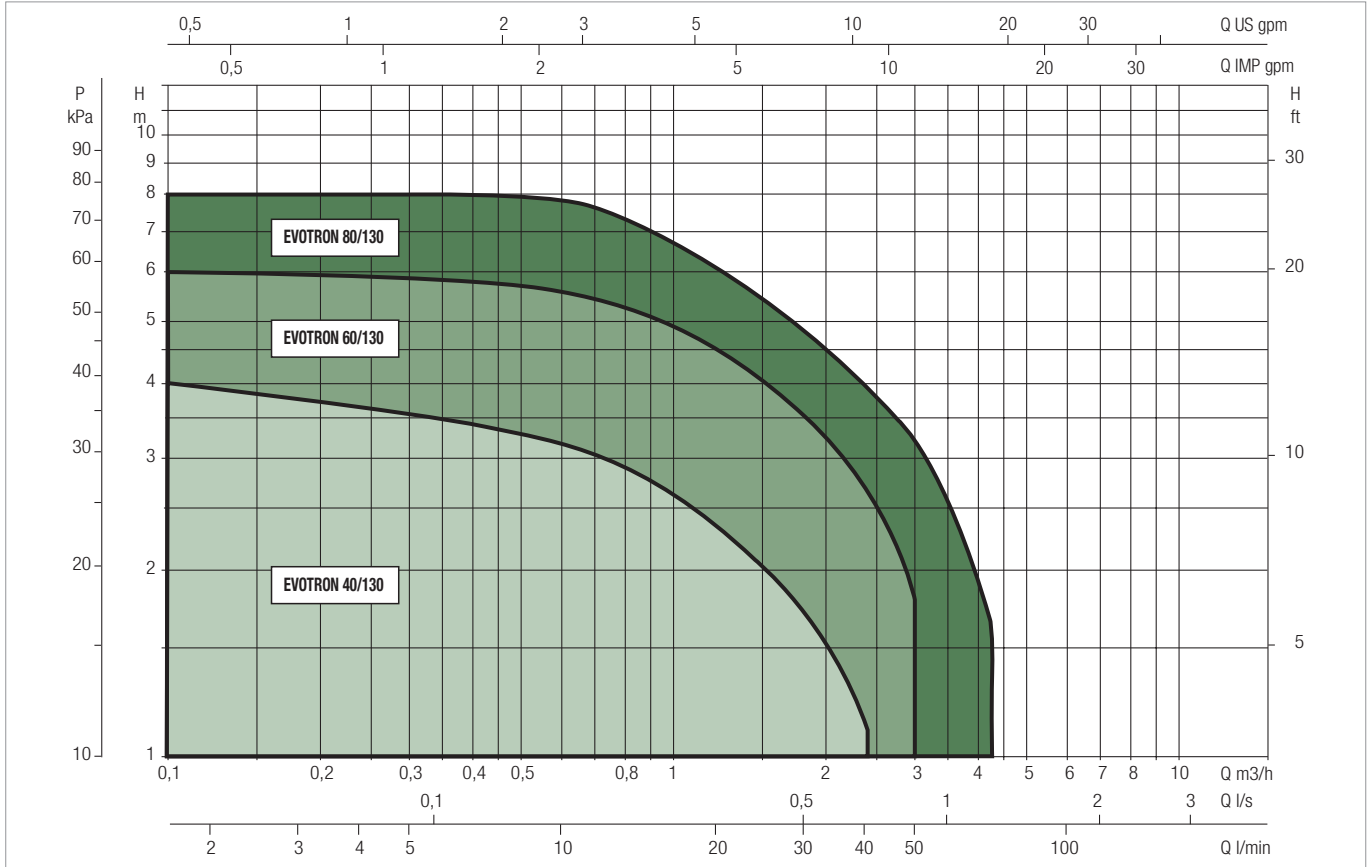
**- Legend:  
(example)**



### PERFORMANCE RANGE

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.

### GRAPHIC SELECTION TABLE

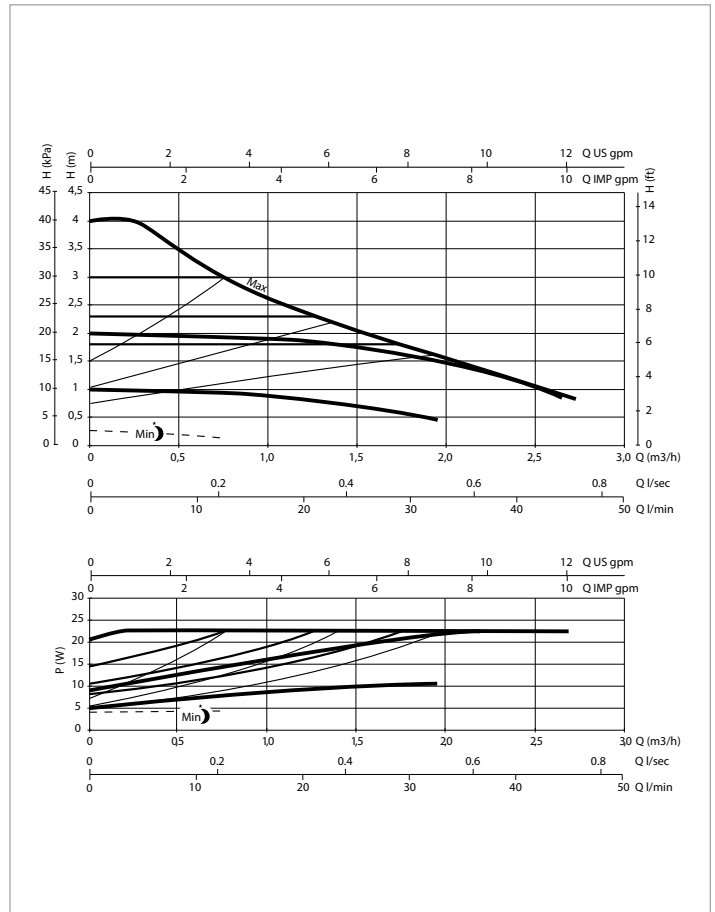
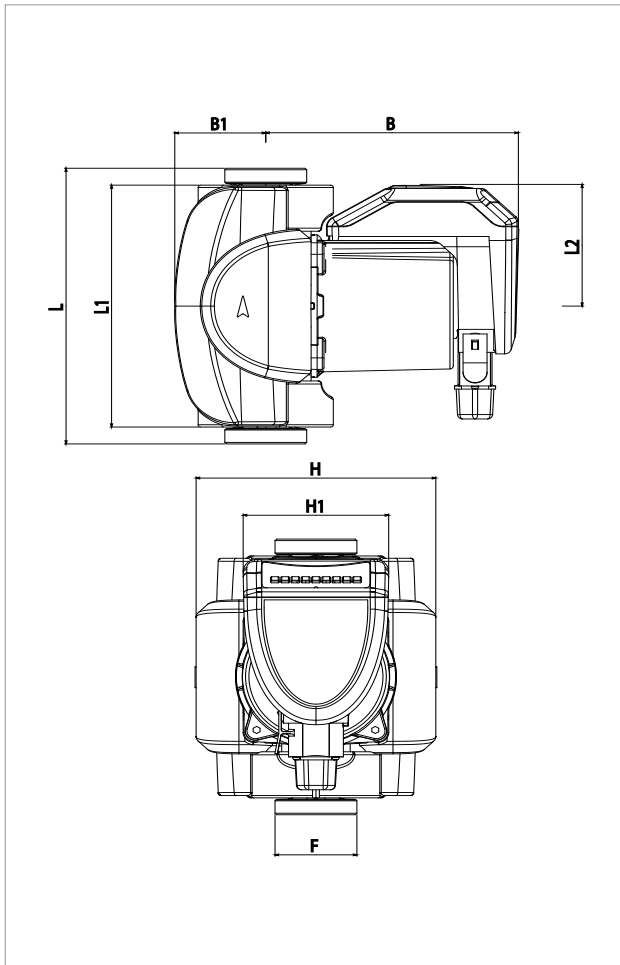


### SELECTION TABLE - EVOTRON

MODEL	Q=m <sup>3</sup> /h	0	0,6	1,2	1,8	2,4	3	4,2
	Q=l/min	0	10	20	30	40	50	70
EVOTRON 40/130	H (m)	4	3,2	2,3	1,7	1,1		
EVOTRON 40/130(½)		4	3,2	2,3	1,7	1,1		
EVOTRON 40/180		4	3,2	2,3	1,7	1,1		
EVOTRON 40/180X		4	3,2	2,3	1,7	1,1		
EVOTRON 60/130		6	5,6	4,5	3,5	2,6	1,8	
EVOTRON 60/130(½)		6	5,6	4,5	3,5	2,6	1,8	
EVOTRON 60/180		6	5,6	4,5	3,5	2,6	1,8	
EVOTRON 60/180X		6	5,6	4,5	3,5	2,6	1,8	
EVOTRON 80/130		8	7,8	6	4,8	3,9	3,1	1,6
EVOTRON 80/130(½)		8	7,8	6	4,8	3,9	3,1	1,6
EVOTRON 80/180		8	7,8	6	4,8	3,9	3,1	1,6
EVOTRON 80/180X		8	7,8	6	4,8	3,9	3,1	1,6

# EVOTRON - ELECTRONIC CIRCULATORS FOR HEATING AND AIR CONDITIONING SYSTEMS - SINGLE, WITH UNIONS

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



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.

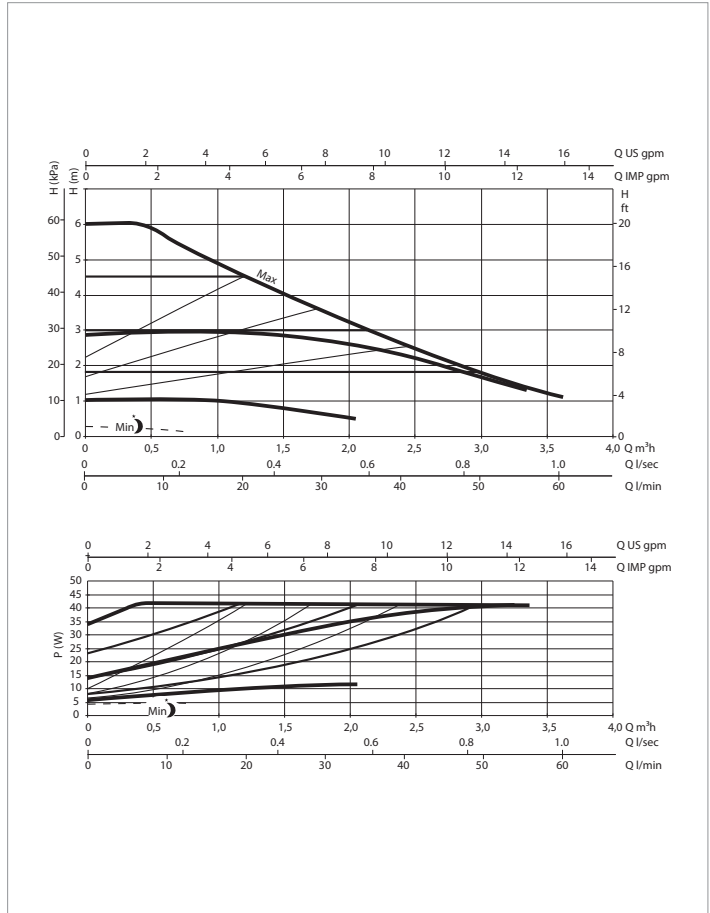
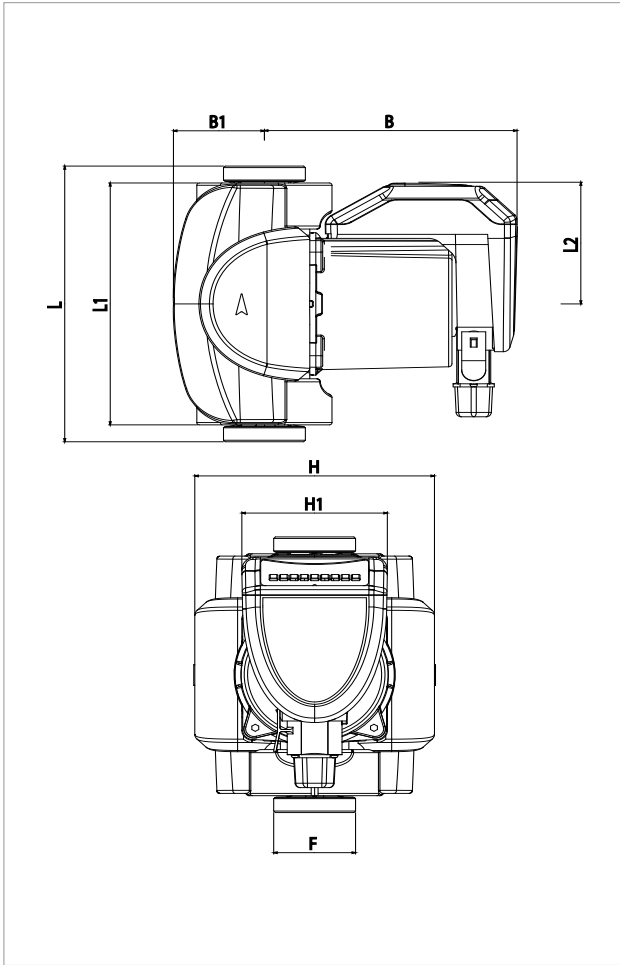
MODEL	CENTRE DISTANCE (mm)	PUMP CONNECTIONS	UNIONS ON REQUEST		POWER INPUT 50 Hz	P1 MAX W	In A	EEI* PART 2	MINIMUM SUCTION PRESSURE	
			STANDARDISED	SPECIAL					t°	90 °
EVOTRON 40/130 1/2"	130	1"	½" F	-	1 x 230 V ~	4 - 23	0,05 - 0,19	EEI ≤ 0,20	m.c.w.	10
EVOTRON 40/130	130	1" ½	1" F	¾" F - 1¼" M	1 x 230 V ~	4 - 23	0,05 - 0,19	EEI ≤ 0,19	m.c.w.	10
EVOTRON 40/180	180	1" ½	1" F	¾" F - 1¼" M	1 x 230 V ~	4 - 23	0,05 - 0,19	EEI ≤ 0,19	m.c.w.	10
EVOTRON 40/180 X	180	2"	1¼" F	-	1 x 230 V ~	4 - 23	0,05 - 0,19	EEI ≤ 0,19	m.c.w.	10

\* The parameter of reference for the more efficient circulators is EEI ≤ 0,20.

MODEL	L	L1	L2	B	B1	H	H1	F	PACKING DIMENSIONS			WEIGHT kg
									L	B	H	
EVOTRON 40/130 1/2"	130	158	79.5	147.5	53	140	85	1/2"	148	193	217	3,0
EVOTRON 40/130	130	158	79.5	147.5	53	140	85	1" 1/2	148	193	217	3,2
EVOTRON 40/180	180	158	79.5	147.5	53	140	85	1" 1/2	148	193	217	3,3
EVOTRON 40/180 X	180	158	79.5	147.5	53	140	85	2"	148	193	217	3,4

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Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



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.

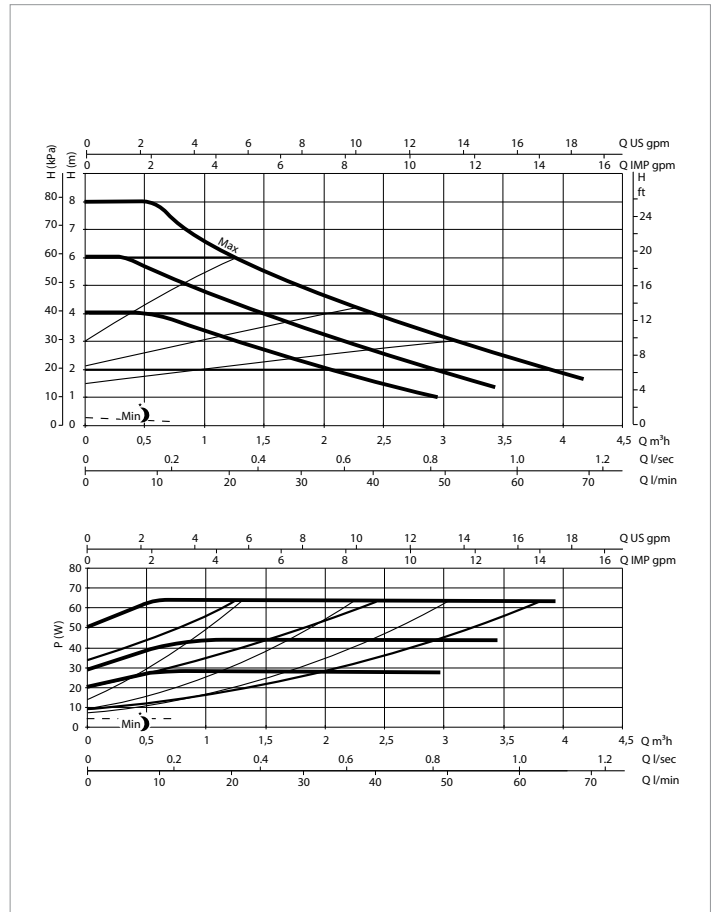
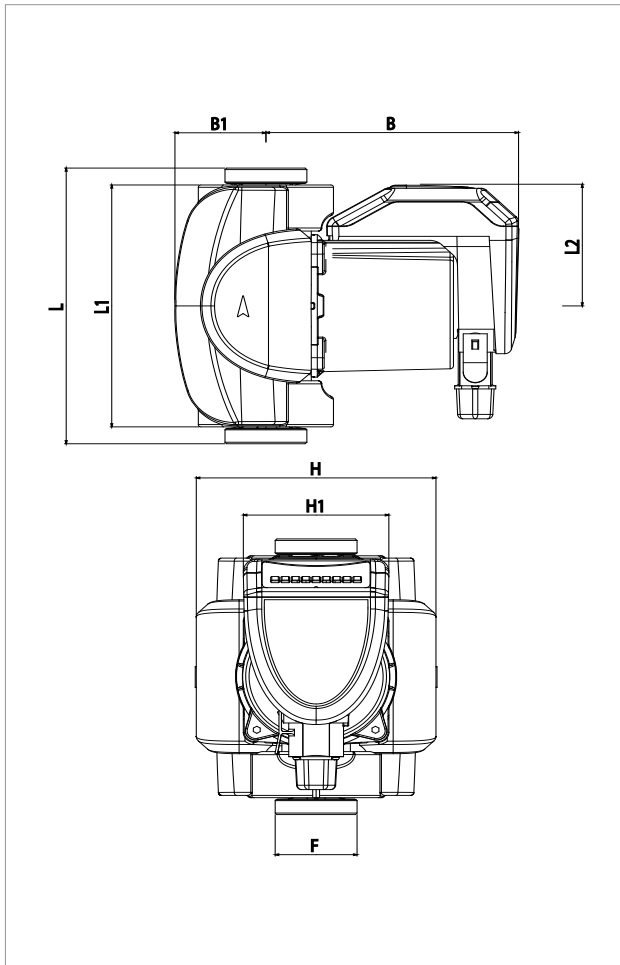
MODEL	CENTRE DISTANCE mm	PUMP CONNECTIONS	UNIONS ON REQUEST		POWER INPUT 50 Hz	P1 MAX W	In A	EEI* PART 2	MINIMUM SUCTION PRESSURE	
			STANDARDISED	SPECIAL					t°	90 °
EVOTRON 60/130 1/2"	130	1"	½" F	-	1 x 230 V ~	4 - 43	0,05 - 0,37	EEI ≤ 0,21	m.c.w.	10
EVOTRON 60/130	130	1 ½"	1" F	¾" F - 1 ¼" M	1 x 230 V ~	4 - 43	0,05 - 0,32	EEI ≤ 0,20	m.c.w.	10
EVOTRON 60/180	180	1 ½"	1" F	¾" F - 1 ¼" M	1 x 230 V ~	4 - 43	0,05 - 0,37	EEI ≤ 0,21	m.c.w.	10
EVOTRON 60/180 X	180	2"	1 ¼" F	-	1 x 230 V ~	4 - 43	0,05 - 0,37	EEI ≤ 0,22	m.c.w.	10

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MODEL	L	L1	L2	B	B1	H	H1	F	PACKING DIMENSIONS			WEIGHT kg
									L	B	H	
EVOTRON 60/130 1/2"	130	158	79.5	147.5	53	140	85	1/2"	148	193	217	3,0
EVOTRON 60/130	130	158	79.5	147.5	53	140	85	1 1/2"	148	193	217	3,2
EVOTRON 60/180	180	158	79.5	147.5	53	140	85	1 1/2"	148	193	217	3,3
EVOTRON 60/180 X	180	158	79.5	147.5	53	140	85	2"	148	193	217	3,4

# EVOTRON - ELECTRONIC CIRCULATORS FOR HEATING AND AIR CONDITIONING SYSTEMS - SINGLE, WITH UNIONS

Pumped liquid temperature range: from -10 °C to +110 °C - Maximum operating pressure: 10 bar (1000 kPa)



The performance curves are based on kinematic viscosity values = 1 mm²/s and density equal to 1000 kg/m³. Curve tolerance according to ISO 9906.

MODEL	CENTRE DISTANCE mm	PUMP CONNECTIONS	UNIONS ON REQUEST		POWER INPUT 50 Hz	P1 MAX W	In A	EEI* PART 2	MINIMUM SUCTION PRESSURE	
			STANDARDISED	SPECIAL					t°	90 °
EVOTRON 80/130 1/2"	130	1"	½" F	-	1 x 230 V ~	4 - 64	0,05 - 0,56	EEI ≤ 0,23	m.c.w.	10
EVOTRON 80/130	130	1" ½	1" F	¾" F - 1¼" M	1 x 230 V ~	4 - 64	0,05 - 0,56	EEI ≤ 0,22	m.c.w.	10
EVOTRON 80/180	180	1" ½	1" F	¾" F - 1¼" M	1 x 230 V ~	4 - 64	0,05 - 0,56	EEI ≤ 0,23	m.c.w.	10
EVOTRON 80/180 X	180	2"	1¼" F	-	1 x 230 V ~	4 - 64	0,05 - 0,56	EEI ≤ 0,23	m.c.w.	10

\* The parameter of reference for the more efficient circulators is EEI ≤ 0,20.

MODEL	L	L1	L2	B	B1	H	H1	F	PACKING DIMENSIONS			WEIGHT kg
									L	B	H	
EVOTRON 80/130 1/2"	130	158	79.5	147.5	53	140	85	1/2"	148	193	217	3,0
EVOTRON 80/130	130	158	79.5	147.5	53	140	85	1" 1/2	148	193	217	3,2
EVOTRON 80/180	180	158	79.5	147.5	53	140	85	1" 1/2	148	193	217	3,3
EVOTRON 80/180 X	180	158	79.5	147.5	53	140	85	2"	148	193	217	3,4