# ASKOII ENERGY SAVING







Display alternates pump power consumption and flow data information



Simple to set with Press&Turn dial. The operating mode symbol lights up when in use



All the necessary inputs for the remote monitoring and control of the pump are included

## DESIGN

Askoll ENERGY SAVING is a wet rotor high efficiency circulator, driven by a permanent magnets synchronous motor (PM motor) controlled by an on board inverter. The motor is protected against overload thanks to a thermal protection and an automatic electronic release function of the rotor. No external protection is required. Operated by selector technology. Integrated display and symbols user interface.

### **APPLICATION**

Hot-water heating systems of all kinds, closed cooling circuits, circulation in solar thermal and geothermal systems, for domestic and industrial circulation systems.

## PRODUCT FEATURES AND BENEFITS

- Maximum savings on operating costs thanks to high-efficiency technology combined with speed control
- Your investments on the future thanks to its maximum energy efficiency, exceeding future energy efficiency regulations such as ErP
- "All-in" concept saves investment and commissioning costs
- Multiple pump operation
- Easy performance regulation in Δp-c (constant differential pressure) and Δp-v (proportional differential pressure)
- Min-Max mode with manual setting up to 10 fixed speed curves
- ECO-Mode with dynamic differential pressure set point adjustment
- Quick, easy and secure installation
- Thermal insulation shell included

## MOTOR TECHNICAL DATA

Power supply	1x230 V ( ±10%), PE; Frequency: 50/60 Hz
Energy Efficiency Index (EEI)*	≤ 0,23 - Part 2
Input power (P <sub>1</sub> )	Min 8W, Max 100W
Input current (I <sub>1</sub> )	Min 0.10A, Max 0.80A
Insulation class	F
Protection class	IP44
Temperature class	TF 110

#### PUMP TECHNICAL DATA

Ambient temperature		from +0°C to +40°C					
Allowed liquid te	emperature	from -10°C to +110°C					
Temperature ran at max. ambient	•	of 30°C = +30°C to +90°C of 40°C = +40°C to +110°C					
Maximum operating pressure		Max 1.0 MPa - 10 bar					
Minimum pressure on the intake opening		0.05 MPa (0.5 bar) at 80°C 0.15 MPa (1.5 bar) at 95°C					
Maximum relative humidity		≤ 80%					
Sound pressure level		< 45 dB(A)					
Low Voltage directive (2006/95/CE)		Standard used: EN 60335-1, EN 60335-2-51					
EMC Directive (2004/108/CE)		Standard used: EN 61000-6-2, EN 61000-6-3					
Ecodesign directive (2009/125/CE)		Standard used: EN 16297-1 e EN 16297-2					
Approved fluids Heating water to VDI 2035. Highly viscous fluids (e.g. 30 % glycol content and above) on request. Pure, thin-bodied, non-aggress and non-explosive fluids not containing any mineral oil, solids or							

and non-explosive fluids not containing any mineral oil, solids or long fibres. Fluids with a viscosity of 10 mm²/s max.

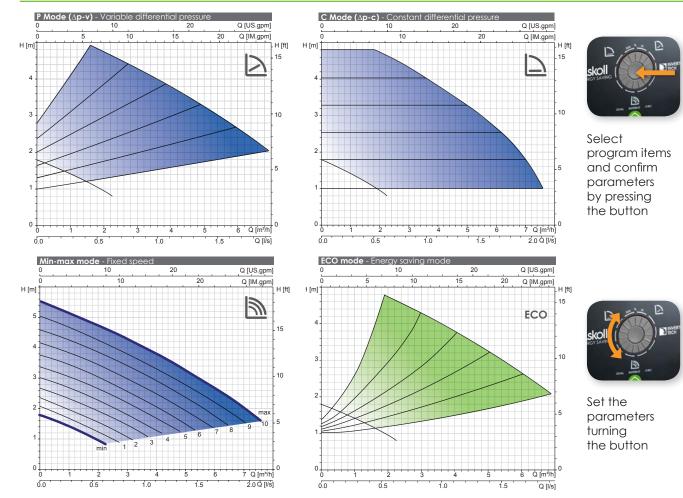
Inputs Modbus RTU, 0-10VDC, Start/Stop signal, alarm signal, dual function

## TYPE KEY

Example	ES MAXI	25 - 60 / 180
Electronic circulator		T T T
Version		
Nominal diameter (DN) of suction a	nd discharge	
ports (15 = G1, 25 = G1 $\frac{1}{2}$ , 32 = G2)		
Maximum head [dm]		
Port-to-port length [mm]		



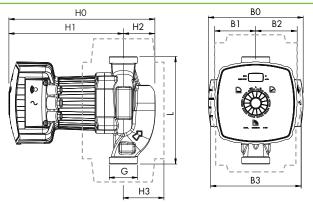
# PERFORMANCE CURVES AND PUMP SETTINGS



# MATERIALS

Model	Pump housing	Impeller	Shaft	Bearing	Rotor can	Thermal insulation shell
ES MAXI 60	Cast iron EN-GJL-200 Stainless steel/ with cataphoretic composite coating (KTL)		Stainless steel 1.4304	Ceramics/ carbon (metal impregnated)	Stainless steel 1.4301	EPP

## DIMENSIONS, WEIGHTS



MODEL	THREAD	DIMENSIONS [mm]								WEIGHTS [kg]		
	G	L L	BO	B1	B2	B3	HO	H1	H2	H3	Net	Gross
ES MAXI 25 - 60/180	G 1 1/2	180	160	70	70	165	245	204	41	81	3,85	5,80
ES MAXI 32 - 60/180	G 2	180	160	70	70	165	245	204	41	81	3,85	5,80

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