

# MODELS: Eco 18 - 21 - 24 - 27



Welcome to Ecosmart! Maker of the most efficient electric tankless water heaters on the market. Below please find specifications & sizing considerations to meet your hot water demand needs. **For any questions or special applications please contact our technical / engineering dept. Toll free at: 877-474-6473.**

Consider the maximum flow rate you would like to use at a given time. The average shower temperatures are between 98°F and 105°F. The chart is based on 240V input voltage and maximum flow rates are listed for various incoming water temperatures.

### MAX OUTLET TEMP 140° F

INLET WATER TEMP	40°F	45°F	50°F	55°F	60°F	65°F	70°F	75°F	80°F
ECO 18	1.9 GPM	2.0 GPM	2.2 GPM	2.4 GPM	2.7 GPM	3.1 GPM	3.5 GPM	4.1 GPM	5.0 GPM
ECO 21	2.3 GPM	2.5 GPM	2.7 GPM	3.0 GPM	3.3 GPM	3.8 GPM	4.3 GPM	5.0 GPM	5.7 GPM
ECO 24	2.5 GPM	2.7 GPM	3.0 GPM	3.3 GPM	3.8 GPM	4.1 GPM	4.7 GPM	5.4 GPM	6.5 GPM
ECO 27	2.8 GPM	3.1 GPM	3.4 GPM	3.7 GPM	4.2 GPM	4.8 GPM	5.2 GPM	6.1 GPM	7.3 GPM

### APPLICATIONS

ECO 18	2.0 GPM		4.2 GPM	
ECO 21	2.5 GPM		4.9 GPM	
ECO 24	2.7 GPM		5.6 GPM	
ECO 27	3.1 GPM		6.3 GPM	

WINTER INLET WATER 45°F SUMMER INLET WATER 75°F

Illustration above is based on water saver showerheads rated at 1.5 GPM and water saver aerators rated at 1.0 GPM. The number of showerheads/sinks next to each model reflects the units capacity of providing hot water simultaneously with the temperature control set to 105°F.

If you typically use about 2.5 gallons per minute (1 shower with water saver showerhead and a sink) at the same time, find the 2.5 GPM on the chart or the number closes to it. If the number is highlighted in **GREEN**, that means it's the correct model for you. If it's highlighted in **YELLOW**. If it's highlighted in **RED**, you should consider a model with more capacity.

### SPECIFICATIONS

MODELS	ECO 18	ECO 21	ECO 24	ECO 27
VOLTS/SINGLE PHASE	240	240	240	240
KW	18	21	24	27
ELEMENTS	2 X 9KW	3 X 7KW	3 X 8KW	3 X 9KW
AMPERAGE DRAW	75.0	87.5	100	112.5
REQUIRED BREAKER	2 X 40 DP	3 X 40 DP	3 X 40 DP	3 X 40 DP
REQUIRED WIRE	2 SETS-8AWG	3 SETS-8AWG	3 SETS-8AWG	3 SETS-8AWG
HZ	50/60	50/60	50/60	50/60
PIPE FITTINGS	3/4" NPT	3/4" NPT	3/4" NPT	3/4" NPT
DIMENSIONS	14"x 17.75"x 4.25"	17"x 17.75" x 4.25"	17"x 17.75" x 4.25"	17"x 17.75" x 4.25"
WEIGHT LBS	9	11	11	11
EXCHANGER	COPPER	COPPER	COPPER	COPPER
PROTECTION	THERMAL AUTO	THERMAL AUTO	THERMAL AUTO	THERMAL AUTO
ACTIVATION FLOW	0.25	0.25	0.25	0.25
ENERGY EFFICIENCY	99.8	99.8	99.8	99.8
CERTIFICATIONS	UL/CSA	UL/CSA	UL/CSA	UL/CSA
WARRANTY	L/LIFETIME	L/LIFETIME	L/LIFETIME	L/LIFETIME

### TEMPERATURE RISE CHART

FLOW RATE GPM	ECO 18 TEMP RISE	ECO 21 TEMP RISE	ECO 24 TEMP RISE	ECO 27 TEMP RISE
1.0 GPM	122.4	142.8	163.2	183.6
1.5 GPM	81.6	95.2	108.8	122.4
2.0 GPM	61.2	71.4	81.6	91.8
2.5 GPM	48.9	57.1	65.2	73.4
3.0 GPM	47.6	47.6	54.4	61.2
3.5 GPM	34.9	40.8	46.6	52.4
4.0 GPM	30.6	35.7	40.8	45.9
4.5 GPM	27.2	31.7	36.2	40.8
5.0 GPM	24.4	28.5	32.6	36.7
5.5 GPM	22.2	25.9	29.6	33.3
6.0 GPM	20.4	23.8	27.2	30.6

TEMPERATURE RISE CHART: Reflects temperature rise at different flow rates for different models.

**SPECIFICATIONS:** Reflects variable voltage of 220-240V. Lower voltage reduces the units heating capacity.