



# Evolution and Superiority!

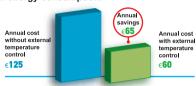
# **√Innovation & Reliability!**

JELCO DURO GLASS



#### Save up to 50% energy!

Adjust the desired water temperature according to the season and your needs and save up to 50% in energy consumption.



#### **ANNUAL SAVINGS**





#### **New SUPER BOILER models**

With double than standard heat exchanging surface, for continuous flow of hot water!

### Persons Water heater capacity selection chart

	M	<b>M</b> / N·水	Mich / Men	Mass / Miss	North / North
	45 L	60 L	80 L	100 L	120 L
C	APACITY				

- Tank made of high-spec steel sheet, pressure tested at 16 bar, chemically treated and internally coated in a vacuum procedure with TITAN® enamel. Steel fired together with enamel at 860°C, acquires a perfect thermo-chemical adhesion with the protective layer.
- Double magnesium anodes produced by ELCO guarantees full protection of the tank against electrolysis.
- Heating element made of 316L stainless steel with low charge load
- External temperature control
- Highly aesthetic design, siliver metalic color
- Safety thermostat with integrated thermo-electric fuse
- External thermometer (for VERTICAL wall-mounted & HORIZONTAL wall-mounted models)
- Safety valve with diaphragm and drainage
- Heating element indication lamp
- HCFC free, rigid polyurethane foam insulation
- Boiler models with enamel coated, large surface, steel tube G3/4" heat exchanger. Super Boiler models equipped with heat exchangers as powerful as an instant water heater.
- Models: VERTICAL wall-mounted, HORIZONTAL wall-mounted & FLOOR-mounted
- Capacities: 20, 45, 60, 80, 100 & 120L & Boilers 60, 80, 100 & 120L
  Vertical Super Boilers 80, 100 & 120L.

- Tank made of high-spec steel sheet, pressure tested at 16 bar, chemically treated and internally coated in a vacuum procedure with DUROGLASS® enamel. Steel fired together with enamel at 860°C, acquires a perfect thermo-chemical adhesion with the protective layer.
- Magnesium anode produced by ELCO guarantees full protection of the tank against electrolysis.
- Heating element made of 316L stainless steel with low charge load
- Safety thermostat with integrated thermo-electric fuse
- External thermometer (for VERTICAL wall-mounted & HORIZONTAL wall-mounted models)
- Safety valve with diaphragm and drainage
- Heating element indication lamp
- HCFC free, rigid polyurethane foam insulation
- Boiler models with enameled, large surface, steel tube G3/4" heat exchanger.
- Models: VERTICAL wall-mounted, HORIZONTAL wall-mounted & FLOOR-mounted
- Capacities: 10, 45, 60, 80, 100 & 120L & Boilers 60, 80, 100 & 120L

# Free Hot Water!



1 Storage Tank

Tank made of high-spec steel sheet, pressure tested at 16 bar, chemically treated and internally coated in a vacuum procedure with DUROGLASS® enamel. Steel fired together with enamel at 860°C, acquires a perfect thermo-chemical adhesion with the enamel layer. Special models equipped with a large, integrated, enamel coated steel tube (G3/4") heat exchanger for connection with the central heating system.

Closed Cirquit Design

Closed circuit thermal fluid circulation protects the system from freezing, as well as from salt depositions and rust. The included thermal fluid is non toxic (based on propylene-glycol). Large surface steel jacket, closed circuit heat exchanger, for maximum efficiency. The expansion tank is built-in the storage tank.

**3** Electric Heating Element, Magnesium Anodes

High quality stainless steel 316L alloy heating element of low surface load charge, that guarantees the longest life expectancy as well as immediate flow of large quantity of hot water. Storage tank protected against electrolysis by two extra large magnesium anodes, produced by ELCO, so the total magnesium quantity is double than the requirement of the European Norms.

4 Insulation

HCFC free, closed-cell, rigid polyurethane foam insulation, of at least 40mm thickness and 40kg/m³ density, uniformly covering every part of the tank, keeping the contained water hot for a longer period of time.

**5** New High-Efficiency Selective Solar Collectors

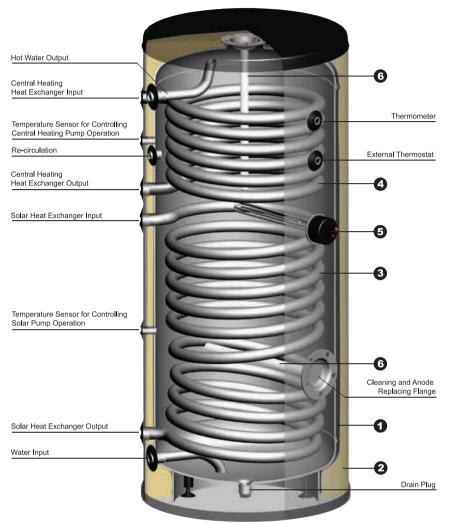
Collectors covered with Unbreakable "Mistlite" Safety Tempered Glass of high solar transparency (τ=92%) and low iron content. Selective solar collector "BLUE TITANIUM" (solar energy absorption: 95%), welded with copper pipes. The thick rock-wool insulation blanket, (40mm on the back plane and 20mm on the sides), minimizes the thermal losses of the collector due to its low thermal conductivity and stability at high temperatures.

**6** Supports

Hot-dip galvanized supports, specially designed for safe and easy installation, as well as high endurance to even the worst weather conditions. Special supports for installation on inclined roof (22° to 47° inclination), can be mounted either on woodwork or concrete roof, without drilling holes or cutting, on any type of roof-tiles.

# THERMOSTORE 150L-1500L

# **√** Hot Water, Without Limits!





Solar Electronic Controller



**Solar Pump Station** 

Full Product Range for Assembling Forced Circulation Systems

 High Capacity Tanks, Storage Tanks and Tank in Tank Solutions upon request

Vertical Boilers THERMOSTORE 200L-1500L

#### 1 Storage Tank

Tank made of high-spec steel sheet, pressure tested at 16 bar, chemically treated and internally coated in a vacuum procedure with DUROGLASS® enamel. Steel fired together with enamel at 860°C, acquires a perfect thermo-chemical adhesion with the enamellayer. Large side flange (D=170mm or D=278mm depending on the model) which allows for easier cleaning of the tank.

#### 2 Insulation

HCFC free, closed-cell, rigid polyurethane foam insulation, of at least 50mm (150L-175L), 60mm (200L-500L) and 100mm (750L-1500L) thickness, and 40kg/m3 density, uniformly covering every part of the tank, keeping the water hot for a longer period of time.

#### 3 Heat exchanger for connection to solar collectors

Located at the lower part of the tank, a large, steel jacket (150L & 175L) or spiral-shaped (200L-1500L) enamel coated heat exchanger, guarantees the maximum utilization of solar radiation.

#### 4 Heat exchanger for connection to the central heating system

A large, spiral-shaped enamel coated steel heat exchanger that guarantees the burner's maximum efficiency.

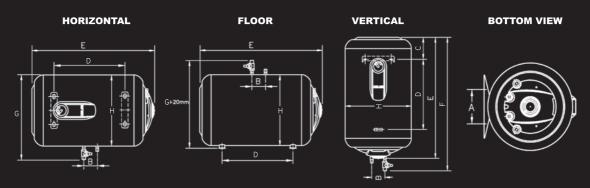
#### **5** Heating element with thermostat

Stainless steel (316L) alloy heating element of low surface load charge and 3,7kW, 6kW or 9kW power, depending on the capacity of the tank. The heating element which is optional in tanks over 300L, includes a safety thermostat with an integrated thermo-electric fuse.

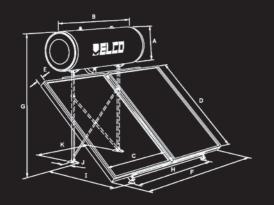
#### 6 Magnesium Anodes

Cathodic protection of the tank against electrolysis by two extra large magnesium anodes produced by ELCO, so the total magnesium quantity is double than the requirement of the European Norms.

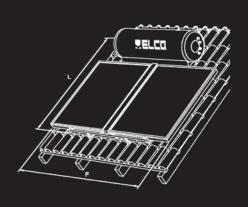
# PRODUCT DIMENSIONS



WATER HEATERS ELCO DURO GLASS AND ELCO TITAN												
		PACKAGING DIMENSIONS (mm)										
L	L A B C D E F G H									WIDTH	HEIGHT	
10	168	100	95	156	415	445	•	260	440	290	290	
20	160	100	134	220	528	553	•	307	551	325	346	
45	280	100	195	169	594	611	495	450	675	500	500	
60	280	100	226	186	650	667	495	450	731	500	500	
80	280	100	226	336	800	817	495	450	881	500	500	
100	280	100	226	486	950	967	495	450	1031	500	500	
120	280	100	226	665	1130	1147	495	450	1211	500	500	







SOLAR WATER HEATERS ELCO SOL-TECH (mm)											
MODEL	EL-130 SOL-TECH 1,8	EL-160 SOL-TECH 2,4	EL-160 SOL-TECH 3,0	EL-200 SOL-TECH 3,6	EL-250 SOL-TECH 4	EL-300 SOL-TECH 4,8					
Α	500	500	500	500	580	580					
В	1165	1335	1335	1585	1670	1870					
С	1183	1183	1007	1183	1007	1183					
D	1420	1893	1501	1420	2006	1893					
E	85	85	85	85	85	85					
F	1230	1230	2130	2570	2130	2570					
G	1708	2110	1708	1708	2150	2150					
Н	868	1038	1782	1782	1782	1782					
I	1107	1420	1133	1133	1500	1500					
J	130	130	130	130	130	130					
K	850	1020	1020	1270	1270	1270					
L	1860	2310	2000	2000	2650	2650					

VERTICAL FLOOR STANDING BOILERS ELCO THERMOSTORE (mm)										
MODEL	150	175	200	250	300	500	750	1000	1500	
M	500	500	600	600	640	760	950	1050	1050	
N	1430	1610	1400	1650	1650	1650	1990	2110	2310	

## **TECHNICAL SPECIFICATIONS**

WATER HEATERS ELCO DURO GLASS AND ELCO TITAN											
CAPACITY	L	10	20	45	60	80	100	120			
ELECTRIC POWER	kW	1,5	1,5	3	3/	3,7	3,7	3,7			
CURRENT (230 V, 50/60Hz)	Α	6,5	6,5	13	13/16 16			16			
CABLE CROSS-SECTIONAL AREA	mm²	2,5	2,5	4		4					
WATER CONNECTIONS	G 1/2"										
OPERATING PRESSURE	bar			Maxi	mum permissib	le 10					
THERMOSTAT		Control	range from 30 to	o 80°C, integrat	ed safety bipo <b>l</b> a	r thermo-electri	ic fuse				
INSULATION		R	igid polyurethaı	ne foam without	HCFC minimur	n thickness 25n	nm				
INGRESS PROTECTION				IP2	3						
WEIGHT EMPTY (WITH HEAT EXCHANGER)	kg 7 11 20 22 (25,5) 26 (31) 30 (35) 36										
ESTIMATION OF HEATING TIME ΔT 45°C	Hours : Minutes	es 0:24 0:48 0:50 1:13/0:55 1:37/1:13 1:30					1:50				
HEATING TIME (BOILER INPUT 75°C)	In 20 minutes produces enough hot water										

SOLAR WATER HEATERS ELCO SOL-TECH											
MODEL		130 SOL-TECH/1,8 130 SOL-TECH 3/1,8	160 SOL-TECH/2,4 160 SOL-TECH/3,0 160 SOL-TECH 3/2,4 160 SOL-TECH 3/3,0		200 SOL-TECH/3,6 200 SOL-TECH 3/3,6	250 SOL-TECH/4,0 250 SOL-TECH 3/4,0	300 SOL-TECH/4,8 300 SOL-TECH 3/4,8				
ELECTRIC POWER	kW		3,7								
STORAGE TANK INSULATION		HCFC FREE, CLOSED-CELL, RIGID POLYURETHANE FOAM, 40kg/m ³, λ=0,021W/mK, WITH AT LEAST 40mm THICKNESS									
CLOSED CIRCUIT		$\checkmark$	<b>√</b>	$\checkmark$	<b>√</b>	$\checkmark$	$\checkmark$				
EXPANSION TANK		BUILT-IN THE STORAGE TANK									
AUXILIARY HEATING HEAT EXCHANGER CONNECTIONS		— / G 3/4"	— / G 3/4"	— / G 3/4"	— / G 3/4"	— / G 3/4"	— / G 3/4"				
COLLECTOR SURFACE	m²	1x1,75	1x2,3	2x1,5	2x1,75	2x2,0	2x2,3				
SOLAR COLLECTOR COVER		SPECIAL LOW IRON CONTENT SAFETY GLASS 4mm THICK									
SOLAR COLLECTOR INSULATION	NC		ROCK-WOOL 40mm & SIDE INSULATION 20mm								
ABSORBER MATERIAL		COPPER TUBES COVERED WITH HIGHLY SELECTIVE "BLUE TITANIUM" COATED STRIPS									
SYSTEM WEIGHT (EMPTY)	kg	98,1/103,1	119,2/121,9	130,4/136,0	155,6/161,2	197,6/208,6	232,4/243,4				

VERTICAL FLOOR STANDING BOILERS ELCO THERMOSTORE												
CAPACITY	L	150	175	200	250	300	500	750	1000	1500		
ELECTRIC POWER	kW		3,7					6 ή 9				
INSULATION: HCFC FREE, CLOSED-CELL, RIGID POLYURETHANE FOAM, 40 kg/m³, λ=0,021W/mK THICKNESS AT LEAST:	mm	50	50	60	60	60	60	100	100	100		
SOLAR CIRCUIT HEAT EXCHANGER SURFACE AREA	m²	0,6	0,93	0,99	0,99	1,55	1,55	2	2,7	3,2		
AUXILIARY HEATING HEAT EXCHANGER SURFACE AREA	m²	0,5	0,5	0,78	0,78	0,99	0,99	1,4	1,9	3,2		
SOLAR CIRCUIT HEAT EXCHANGER THERMAL POWER RATING*	kW	12,5	19,4	36	36	42,5	42,5	53	84	94		
AUXILIARY HEATING HEAT EXCHANGER THERMAL POWER RATING*	kW	18	18	28,8	28,8	36	36	40,2	62	94		
STORAGE TANK WEIGHT EMPTY (1 HEAT EXCH./2 HEAT EXCH.)	kg	64/69	73/78	86/104	93/107	128/152	162/175	190/215	230/300	540/590		

\*Table values correspond to the following data: Domestic hot water temperature increase ΔT 35°C, circulation flow 2m³/h at 80°C. All product names are registered & legally protected trademarks of "ELCO VAYONIS S.A."

