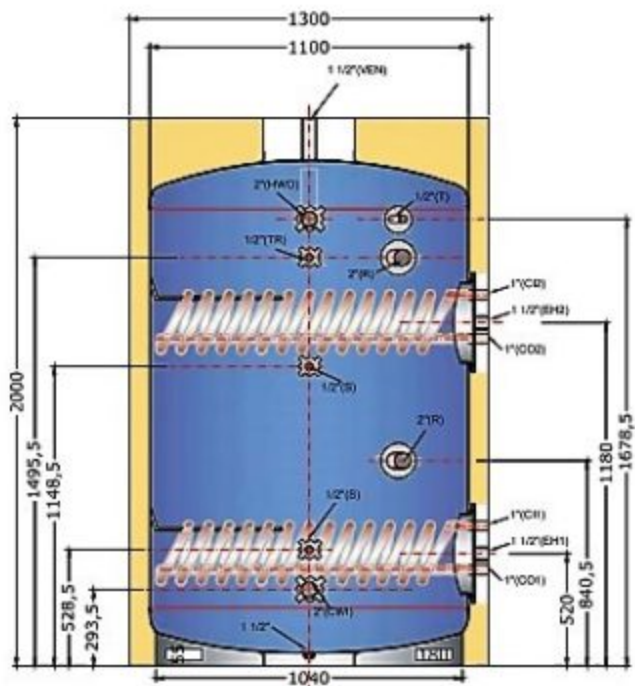


TECHNICAL SPECIFICATIONS BLE-15 FLOOR STANDING BOILER 1500L WITH 2 REMOVABLE COILS



Internal Tank Material: Steel

Protection: Epoxy resin

Magnesium anode placement

Coil Material: Steel

Tank Maximum Working Pressure: 10bar

Tank Maximum Operating Temperature: 85°C

Maximum Coil Pressure: 25bar

Insulation: Removable Soft polyurethane foam of 100 mm thickness

External Coating: Soft coloured PVC
(Steel coating upon request)

Electrical Heater: Upon request

SYMBOLS EXPLANATION

CWI	Cold water inlet
HWO	Hot water outlet
R	Recirculation
VEN	Ventilation
CI	Coil inlet
CO	Coil outlet
S	Sensor
T	Thermostat
TR	Thermometer
EH	Electrical heater

BOILER TYPE		BLE - 15		
Tank Nominal Capacity (L)		1500		
Tank Actual Capacity (L)		1480		
External Coating Surface (m ²)		8		
Number of Flanges / Hole Diameter (mm) / External Diameter (mm)		2 / Ø420 / Ø508		
Internal Tank Net Weight (Kg)		420		
Coil 3,2m ² Weight (Kg)		78		
Coil 5,4m ² Weight (Kg)		109		
Total Weight of External Coating and External Caps (Kg)		20		
Possible Combinations of Coils	Surface of Coil 1 (S1 σε m ²) + Surface of Coil 2 (S2 σε m ²) = Total Coil Surface (m ²)	a. S1 + S2 = 3,2 + 3,2 = 6,4		
		b. S1 + S2 = 5,4 + 3,2 = 8,6		
		c. S1 + S2 = 5,4 + 5,4 = 10,8		
Total Weight of the Ready Product (Relative to the Surface)		596 Kg (6,4m ²)	627 Kg (8,6m ²)	658 Kg (10,8m ²)
Tilt height (mm)		2385,3		

THERMAL PERFORMANCE OF STORAGE WATER HEATER BLE-15 1500L (2 COIL HEAT EXCHANGERS)

At the tables below the efficiencies of the floor standing Boiler BLE-15 1500L are presented, for several flow-rates. Table 1 concerns the upper heat exchanger, while Table 2 the lower.

Upper heat exchanger surface: 3,2m² or 5,4 m²

UPPER HEAT EXCHANGER FLOW-RATE	UPPER HEAT EXCHANGER EFFICIENCY (3,2m ²)	UPPER HEAT EXCHANGER EFFICIENCY (5,4m ²)
1.800 L/h	48,10 KW	64,60 KW
2.600 L/h	54,50 KW	79,20 KW
3.900 L/h	61,40 KW	90,90 KW

TABLE 1: Heat exchanger efficiency for DHW heating from 15°C to 60°C.
The temperature at the heat exchanger inlet is considered as 80°C.

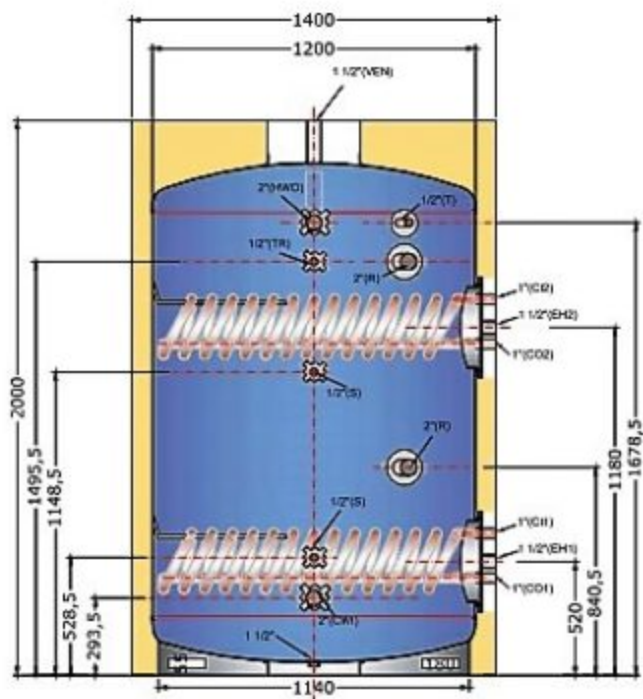
Lower heat exchanger surface: 3,2m² or 5,4 m²

UPPER HEAT EXCHANGER FLOW-RATE	UPPER HEAT EXCHANGER EFFICIENCY (3,2m ²)	UPPER HEAT EXCHANGER EFFICIENCY (5,4m ²)
1.800 L/h	49,10 KW	65,30 KW
2.600 L/h	55,20 KW	78,40 KW
3.900 L/h	62,20 KW	91,10 KW

TABLE 2: Heat exchanger efficiency for DHW heating from 15°C to 60°C.
The temperature at the heat exchanger inlet is considered as 80°C.

- ▶ The upper heat exchanger is heating 52% of the total DHW boiler capacity
- ▶ The lower heat exchanger is heating 88% of the total DHW boiler capacity.
- ▶ Heat exchangers combination:
 - 3,2 m² + 3,2 m² = 6,4 m²
 - 5,4 m² + 3,2 m² = 8,6 m²
 - 5,4 m² + 5,4 m² = 10,8 m²

TECHNICAL SPECIFICATIONS BLE-20 FLOOR STANDING BOILER 2000L WITH 2 REMOVABLE COILS



Internal Tank Material: Steel

Protection: Epoxy resin

Magnesium anode placement

Coil Material: Steel

Tank Maximum Working Pressure: 10 bar

Tank Maximum Operating Temperature: 85°C

Maximum Coil Pressure: 25 bar

Insulation: Removable Soft polyurethane foam of 100 mm thickness

External Coating: Soft coloured PVC
(Steel coating upon request)

Electrical Heater: Upon request

SYMBOLS EXPLANATION

CWI	Cold water inlet
HWO	Hot water outlet
R	Recirculation
VEN	Ventilation
CI	Coil inlet
CO	Coil outlet
S	Sensor
T	Thermostat
TR	Thermometer
EH	Electrical heater

BOILER TYPE

BLE - 20

Tank Nominal Capacity (L)		2000		
Tank Actual Capacity (L)		1940		
External Coating Surface (m ²)		9,3		
Number of Flanges / Hole Diameter (mm) / External Diameter (mm)		2 / Ø420 / Ø508		
Internal Tank Net Weight (Kg)		490		
Coil 3,2m ² Weight (Kg)		78		
Coil 5,4m ² Weight (Kg)		109		
Total Weight of External Coating and External Caps (Kg)		24		
Possible Combinations of Coils	Surface of Coil 1 (S1 σε m ²) +	a. S1 + S2 = 3,2 + 3,2 = 6,4		
	Surface of Coil 2 (S2 σε m ²) =	b. S1 + S2 = 5,4 + 3,2 = 8,6		
	Total Coil Surface (m ²)	c. S1 + S2 = 5,4 + 5,4 = 10,8		
Total Weight of the Ready Product (Relative to the Surface)		670 Kg (6,4m ²)	701 Kg (8,6m ²)	732 Kg (10,8m ²)
Tilt height (mm)		2441,3		

THERMAL PERFORMANCE OF STORAGE WATER HEATER BLE-20 2000L (2 COIL HEAT EXCHANGERS)

At the tables below the efficiencies of the floor standing Boiler BLE-20 2000L are presented, for several flow-rates. TABLE 1 concerns the upper heat exchanger, while TABLE 2 the lower.

Upper heat exchanger surface: 3,2m² or 5,4 m²

UPPER HEAT EXCHANGER FLOW-RATE	UPPER HEAT EXCHANGER EFFICIENCY (3,2m ²)	UPPER HEAT EXCHANGER EFFICIENCY (5,4m ²)
1.800 L/h	47,80 KW	64,70 KW
2.600 L/h	54,95 KW	78,50 KW
3.900 L/h	61,10 KW	91,60 KW

TABLE 1: Heat exchanger efficiency for DHW heating from 15°C to 60°C.
The temperature at the heat exchanger inlet is considered as 80°C.

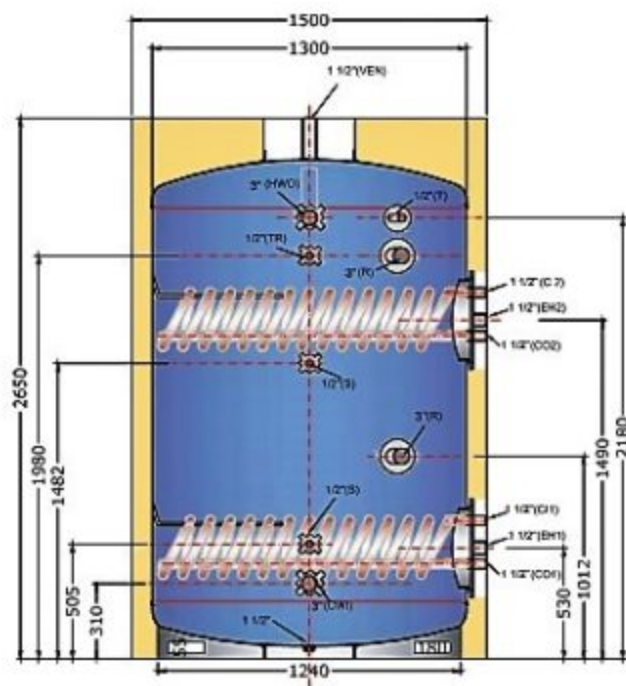
Lower heat exchanger surface: 3,2m² or 5,4 m²

UPPER HEAT EXCHANGER FLOW-RATE	UPPER HEAT EXCHANGER EFFICIENCY (3,2m ²)	UPPER HEAT EXCHANGER EFFICIENCY (5,4m ²)
1.800 L/h	47,80 KW	65,00 KW
2.600 L/h	55,10 KW	77,95 KW
3.900 L/h	61,10 KW	90,50 KW

TABLE 2: Heat exchanger efficiency for DHW heating from 15°C to 60°C.
The temperature at the heat exchanger inlet is considered as 80°C.

- ▶ The upper heat exchanger is heating 52% of the total DHW boiler capacity
- ▶ The lower heat exchanger is heating 88% of the total DHW boiler capacity.
- ▶ Heat exchangers combination:
 - 3,2 m² + 3,2 m² = 6,4 m²
 - 5,4 m² + 3,2 m² = 8,6 m²
 - 5,4 m² + 5,4 m² = 10,8 m²

TECHNICAL SPECIFICATIONS BLE-30 FLOOR STANDING BOILER 3000L WITH 2 REMOVABLE COILS



Internal Tank Material: Steel

Protection: Epoxy resin

Magnesium anode placement

Coil Material: Steel

Tank Maximum Working Pressure: 10bar

Tank Maximum Operating Temperature: 85°C

Maximum Coil Pressure: 25bar

Insulation: Removable Soft polyurethane foam of 100 mm thickness

External Coating: Soft coloured PVC
(Steel coating upon request)

Electrical Heater: Upon request

SYMBOLS EXPLANATION

CWI	Cold water inlet
HWO	Hot water outlet
R	Recirculation
VEN	Ventilation
CI	Coil inlet
CO	Coil outlet
S	Sensor
T	Thermostat
TR	Thermometer
EH	Electrical heater

BOILER TYPE

BLE - 30

Tank Nominal Capacity (L)		3000		
Tank Actual Capacity (L)		2940		
External Coating Surface (m ²)		13,9		
Number of Flanges / Hole Diameter (mm) / External Diameter (mm)		2 / Φ 508 / Φ 620		
Internal Tank Net Weight (Kg)		645		
Coil 3,2m ² Weight (Kg)		78		
Coil 5,4m ² Weight (Kg)		109		
Total Weight of External Coating and External Caps (Kg)		34		
Possible Combinations of Coils	Surface of Coil 1 (S1 α m ²) +	a. S1 + S2 = 3,2 + 3,2 = 6,4		
	Surface of Coil 2 (S2 α m ²) =	b. S1 + S2 = 5,4 + 3,2 = 8,6		
	Total Coil Surface (m ²)	c. S1 + S2 = 5,4 + 5,4 = 10,8		
Total Weight of the Ready Product (Relative to the Surface)		835 Kg (6,4m ²)	866 Kg (8,6m ²)	897 Kg (10,8m ²)
Tilt height (mm)		2915.4		

THERMAL PERFORMANCE OF STORAGE WATER HEATER BLE-30 3000L (2 COIL HEAT EXCHANGERS)

At the tables below the efficiencies of the floor standing Boiler BLE-30 3000L are presented, for several flow-rates. TABLE 1 concerns the upper heat exchanger, while TABLE 2 the lower.

Upper heat exchanger surface: 3,2m² or 5,4 m²

UPPER HEAT EXCHANGER FLOW-RATE	UPPER HEAT EXCHANGER EFFICIENCY (3,2m ²)	UPPER HEAT EXCHANGER EFFICIENCY (5,4m ²)
3.000 L/h	57,20 KW	82,00 KW
4.000 L/h	62,15 KW	90,60 KW
5.000 L/h	64,90 KW	98,80 KW

TABLE 1: Heat exchanger efficiency for DHW heating from 15°C to 60°C.
The temperature at the heat exchanger inlet is considered as 80°C.

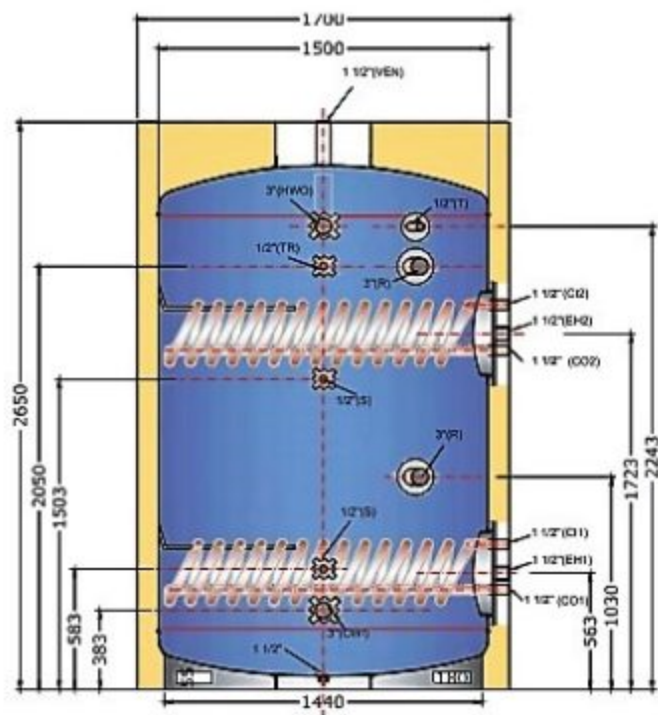
Lower heat exchanger surface: 3,2m² or 5,4 m²

UPPER HEAT EXCHANGER FLOW-RATE	UPPER HEAT EXCHANGER EFFICIENCY (3,2m ²)	UPPER HEAT EXCHANGER EFFICIENCY (5,4m ²)
3.000 L/h	57,30 KW	82,10 KW
4.000 L/h	62,20 KW	91,50 KW
5.000 L/h	64,70 KW	98,30 KW

TABLE 2: Heat exchanger efficiency for DHW heating from 15°C to 60°C.
The temperature at the heat exchanger inlet is considered as 80°C.

- ▶ The upper heat exchanger is heating 47% of the total DHW boiler capacity
- ▶ The lower heat exchanger is heating 86% of the total DHW boiler capacity.
- ▶ Heat exchangers combination:
 - 3,2 m² + 3,2 m² = 6,4 m²
 - 5,4 m² + 3,2 m² = 8,6 m²
 - 5,4 m² + 5,4 m² = 10,8 m²

TECHNICAL SPECIFICATIONS BLE-40 FLOOR STANDING BOILER 4000L WITH 2 REMOVABLE COILS



Internal Tank Material: Steel

Protection: Epoxy resin

Magnesium anode placement

Coil Material: Steel

Tank Maximum Working Pressure: 10bar

Tank Maximum Operating Temperature: 85°C

Maximum Coil Pressure: 25bar

Insulation: Removable Soft polyurethane foam of 100 mm thickness

External Coating: Soft coloured PVC
(Steel coating upon request)

Electrical Heater: Upon request

SYMBOLS EXPLANATION

Symbol	Explanation
CWI	Cold water inlet
HWO	Hot water outlet
R	Recirculation
VEN	Ventilation
CI	Coil inlet
CO	Coil outlet
S	Sensor
T	Thermostat
TR	Thermometer
EH	Electrical heater

BOILER TYPE

BLE - 40

Tank Nominal Capacity (L)	4000
Tank Actual Capacity (L)	3960
External Coating Surface (m²)	15,5
Number of Flanges / Hole Diameter (mm) / External Diameter (mm)	2 / Φ 508 / Φ 620
Internal Tank Net Weight (Kg)	850
Coil 5,4m² Weight (Kg)	109
Total Weight of External Coating and External Caps (Kg)	39
Surface of Coil 1 (S1 α m²) + Surface of Coil 2 (S2 α m²) = Total Coil Surface (m²)	$S1 + S2 = 5,4 + 5,4 = 10,8$
Total Weight of the Ready Product (Kg)	1107
Tilt height (mm)	3148.4

THERMAL PERFORMANCE OF STORAGE WATER HEATER BLE-40 4000L (2 COIL HEAT EXCHANGERS)

At the tables below the efficiencies of the floor standing Boiler BLE-40 4000L are presented, for several flow-rates. TABLE 1 concerns the upper heat exchanger, while TABLE 2 the lower.

Upper heat exchanger surface: 5,4 m²

UPPER HEAT EXCHANGER FLOW-RATE	UPPER HEAT EXCHANGER EFFICIENCY (5,4m ²)
3.000 L/h	82,50 KW
4.000 L/h	91,55 KW
5.000 L/h	96,80 KW

TABLE 1: Heat exchanger efficiency for DHW heating from 15°C to 60°C.
The temperature at the heat exchanger inlet is considered as 80°C.

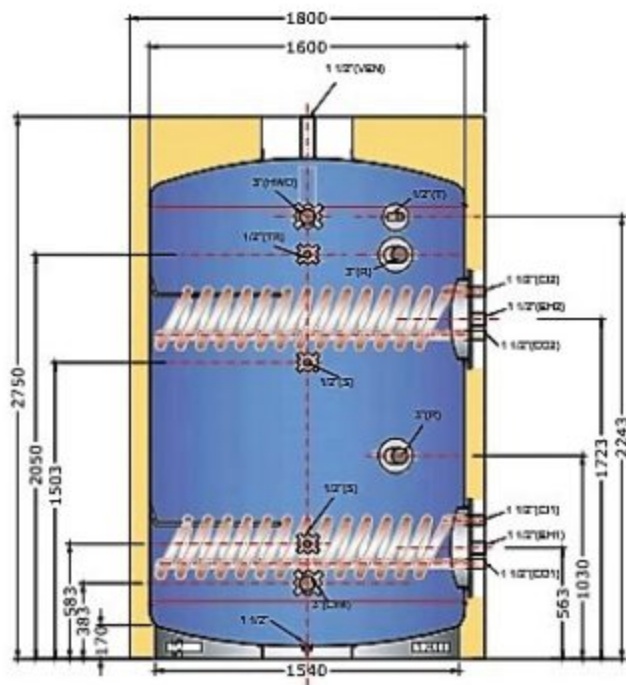
Lower heat exchanger surface: 5,4 m²

LOWER HEAT EXCHANGER FLOW-RATE	LOWER HEAT EXCHANGER EFFICIENCY (5,4m ²)
3.000 L/h	82,30 KW
4.000 L/h	91,45 KW
5.000 L/h	97,30 KW

TABLE 2: Heat exchanger efficiency for DHW heating from 15°C to 60°C.
The temperature at the heat exchanger inlet is considered as 80°C.

- ▶ The upper heat exchanger is heating 43% of the total DHW boiler capacity
- ▶ The lower heat exchanger is heating 86% of the total DHW boiler capacity.
- ▶ Heat exchangers combination:
 - 5,4 m² + 5,4 m² =10,8 m²

TECHNICAL SPECIFICATIONS BLE-50 FLOOR STANDING BOILER 5000L WITH 2 REMOVABLE COILS



Internal Tank Material: Steel

Protection: Epoxy resin

Magnesium anode placement

Coil Material: Steel

Tank Maximum Working Pressure: 10bar

Tank Maximum Operating Temperature: 85°C

Maximum Coil Pressure: 25bar

Insulation: Removable Soft polyurethane foam of 100 mm thickness

External Coating: Soft coloured PVC
(Steel coating upon request)

Electrical Heater: Upon request

SYMBOLS EXPLANATION

CWI	Cold water inlet
HWO	Hot water outlet
R	Recirculation
VEN	Ventilation
CI	Coil inlet
CO	Coil outlet
S	Sensor
T	Thermostat
TR	Thermometer
EH	Electrical heater

BOILER TYPE

BLE - 50

Tank Nominal Capacity (L)	5000
Tank Actual Capacity (L)	4700
External Coating Surface (m ²)	17,4
Number of Flanges / Hole Diameter (mm) / External Diameter (mm)	2 / Ø508 / Ø620
Internal Tank Net Weight (Kg)	930
Coil 5,4m ² Weight (Kg)	109
Total Weight of External Coating and External Caps (Kg)	45
Surface of Coil 1 (S1 σε m ²) + Surface of Coil 2 (S2 σε m ²) = Total Coil Surface (m ²)	S1 + S2 = 5,4 + 5,4 = 10,8
Total Weight of the Ready Product (Kg)	1193
Tilt height (mm)	3286,7

THERMAL PERFORMANCE OF STORAGE WATER HEATER BLE-50 5000L (2 COIL HEAT EXCHANGERS)

At the tables below the efficiencies of the floor standing Boiler BLE-50 5000L are presented, for several flow-rates. TABLE 1 concerns the upper heat exchanger, while TABLE 2 the lower.

Upper heat exchanger surface: 5,4 m²

UPPER HEAT EXCHANGER FLOW-RATE	UPPER HEAT EXCHANGER EFFICIENCY (5,4m ²)
3.000 L/h	82,15 KW
4.000 L/h	91,20 KW
5.000 L/h	97,90 KW

TABLE 1: Heat exchanger efficiency for DHW heating from 15°C to 60°C.
The temperature at the heat exchanger inlet is considered as 80°C.

Lower heat exchanger surface: 5,4 m²

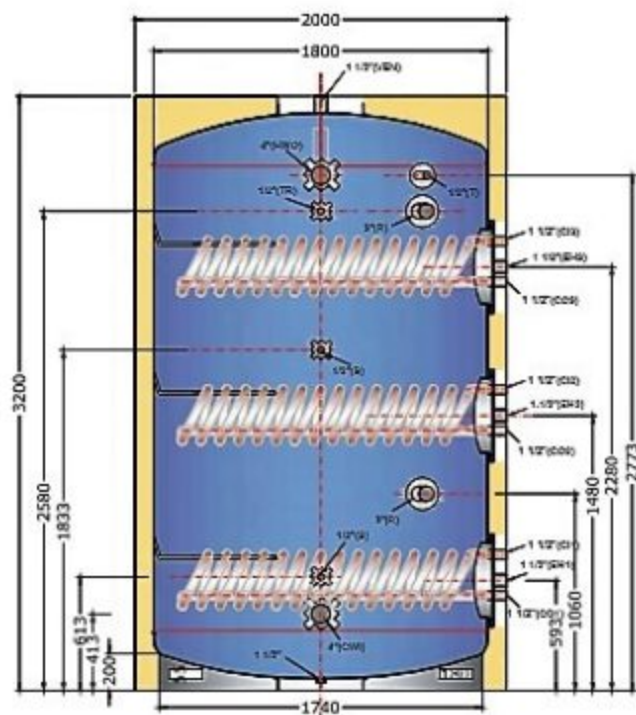
LOWER HEAT EXCHANGER FLOW-RATE	LOWER HEAT EXCHANGER EFFICIENCY (5,4m ²)
3.000 L/h	81,95 KW
4.000 L/h	91,30 KW
5.000 L/h	97,50 KW

TABLE 2: Heat exchanger efficiency for DHW heating from 15°C to 60°C.
The temperature at the heat exchanger inlet is considered as 80°C.

- ▶ The upper heat exchanger is heating 45% of the total DHW boiler capacity
- ▶ The lower heat exchanger is heating 87% of the total DHW boiler capacity.
- ▶ Heat exchangers combination:
 - 5,4 m² + 5,4 m² = 10,8 m²

TECHNICAL SPECIFICATIONS BLE-70

FLOOR STANDING BOILER 7000L WITH 3 REMOVABLE COILS



Internal Tank Material: Steel

Protection: Epoxy resin

Magnesium anode placement

Coil Material: Steel

Tank Maximum Working Pressure: 10bar

Tank Maximum Operating Temperature: 85°C

Maximum Coil Pressure: 25bar

Insulation: Removable Soft polyurethane foam of 100 mm thickness

External Coating: Soft coloured PVC
(Steel coating upon request)

Electrical Heater: Upon request

SYMBOLS EXPLANATION

CWI	Cold water inlet
HWO	Hot water outlet
R	Recirculation
VEN	Ventilation
CI	Coil inlet
CO	Coil outlet
S	Sensor
T	Thermostat
TR	Thermometer
EH	Electrical heater

BOILER TYPE	BLE - 70
Tank Nominal Capacity (L)	7000
Tank Actual Capacity (L)	6950
External Coating Surface (m ²)	23
Number of Flanges / Hole Diameter (mm) / External Diameter (mm)	3 / Φ508 / Φ620
Internal Tank Net Weight (Kg)	1400
Coil 7,8m ² Weight (Kg)	154
Total Weight of External Coating and External Caps (Kg)	58
Surface of Coil 1 (S1 σε m ²) + Surface of Coil 2 (S2 σε m ²) + Surface of Coil 3 (S3 σε m ²) = Total Coil Surface (m ²)	S1 + S2 + S3 = 7,8 + 7,8 + 7,8 = 23,4
Total Weight of the Ready Product (Kg)	1920
Tilt height (mm)	3773,6

THERMAL PERFORMANCE OF STORAGE WATER HEATER BLE-70 7000L (3 COIL HEAT EXCHANGERS)

At the tables below the efficiencies of the floor standing Boiler BLE-70 7000L are presented, for several flow-rates. Table 1 concerns the upper heat exchanger, Table 2 the middle, while Table 3 the lower.

Upper heat exchanger surface: 7,8 m²

UPPER HEAT EXCHANGER FLOW-RATE	UPPER HEAT EXCHANGER EFFIC (7,8m ²)
3.000 L/h	104,80 KW
4.000 L/h	119,50 KW
5.000 L/h	129,60 KW

TABLE 1: Heat exchanger efficiency for DHW heating from 15°C to 60°C.
The temperature at the heat exchanger inlet is considered as 80°C.

Middle heat exchanger surface: 7,8 m²

MIDDLE HEAT EXCHANGER FLOW-RATE	MIDDLE HEAT EXCHANGER EFFICIENCY (7,8m ²)
3.000 L/h	104,15 KW
4.000 L/h	119,30 KW
5.000 L/h	129,90 KW

TABLE 2: Heat exchanger efficiency for DHW heating from 15°C to 60°C.
The temperature at the heat exchanger inlet is considered as 80°C.

Lower heat exchanger surface: 7,8 m²

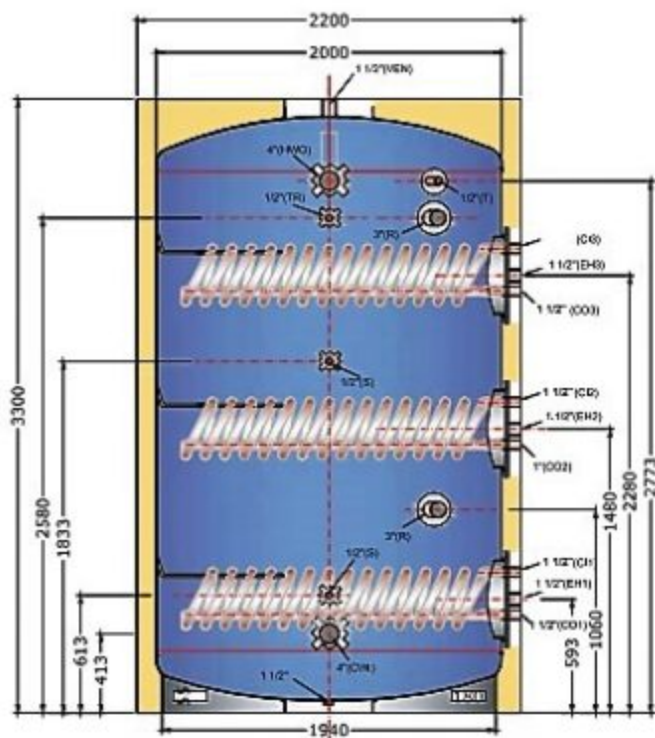
LOWER HEAT EXCHANGER FLOW-RATE	LOWER HEAT EXCHANGER EFFICIENCY (7,8m ²)
3.000 L/h	104,60 KW
4.000 L/h	119,40 KW
5.000 L/h	130,00 KW

TABLE 3: Heat exchanger efficiency for DHW heating from 15°C to 60°C.
The temperature at the heat exchanger inlet is considered as 80°C.

- ▶ The upper heat exchanger is heating 35% of the total DHW boiler capacity.
- ▶ The middle heat exchanger is heating 60% of the total DHW boiler capacity.
- ▶ The lower heat exchanger is heating 88% of the total DHW boiler capacity.
- ▶ Heat exchangers combination:
 - 7,8 m² + 7,8 m² + 7,8 m² = 23,4 m²

TECHNICAL SPECIFICATIONS BLE-90

FLOOR STANDING BOILER 9000L WITH 3 REMOVABLE COILS



Internal Tank Material: Steel

Protection: Epoxy resin

Magnesium anode placement

Coil Material: Steel

Tank Maximum Working Pressure: 10bar

Tank Maximum Operating Temperature: 85°C

Maximum Coil Pressure: 25bar

Insulation: Removable Soft polyurethane foam of 100 mm thickness

External Coating: Soft coloured PVC
(Steel coating upon request)

Electrical Heater: Upon request

SYMBOLS EXPLANATION

CWI	Cold water inlet
HWO	Hot water outlet
R	Recirculation
VEN	Ventilation
CI	Coil inlet
CO	Coil outlet
S	Sensor
T	Thermostat
TR	Thermometer
EH	Electrical heater

BOILER TYPE

BLE - 90

Tank Nominal Capacity (L)	9000
Tank Actual Capacity (L)	8960
External Coating Surface (m ²)	26,5
Number of Flanges / Hole Diameter (mm) / External Diameter (mm)	3 / Ø508 / Ø620
Internal Tank Net Weight (Kg)	1800
Coil 7,8m ² Weight (Kg)	154
Total Weight of External Coating and External Caps (Kg)	67
Surface of Coil 1 (S1 σε m ²) + Surface of Coil 2 (S2 σε m ²) + Surface of Coil 3 (S3 σε m ²) = Total Coil Surface (m ²)	S1 + S2 + S3 = 7,8 + 7,8 + 7,8 = 23,4
Total Weight of the Ready Product (Kg)	2319
Tilt height (mm)	3966.1

THERMAL PERFORMANCE OF STORAGE WATER HEATER BLE-90 9000L (3 COIL HEAT EXCHANGERS)

At the tables below the efficiencies of the floor standing Boiler BLE-90 9000L are presented, for several flow-rates. TABLE 1 concerns the upper heat exchanger, TABLE 2 the middle, while TABLE 3 the lower.

Upper heat exchanger surface: 7,8 m²

UPPER HEAT EXCHANGER FLOW-RATE	UPPER HEAT EXCHANGER EFFICIENCY (7,8m ²)
3.000 L/h	105,40 KW
4.500 L/h	124,20 KW
6.000 L/h	137,30 KW

TABLE 1: Heat exchanger efficiency for DHW heating from 15°C to 60°C.
The temperature at the heat exchanger inlet is considered as 80°C.

Middle heat exchanger surface: 7,8 m²

MIDDLE HEAT EXCHANGER FLOW-RATE	MIDDLE HEAT EXCHANGER EFFICIENCY (7,8m ²)
3.000 L/h	104,30 KW
4.500 L/h	124,60 KW
6.000 L/h	137,60 KW

TABLE 2: Heat exchanger efficiency for DHW heating from 15°C to 60°C.
The temperature at the heat exchanger inlet is considered as 80°C.

Lower heat exchanger surface: 7,8 m²

LOWER HEAT EXCHANGER FLOW-RATE	LOWER HEAT EXCHANGER EFFICIENCY (7,8m ²)
3.000 L/h	104,70 KW
4.500 L/h	125,30 KW
6.000 L/h	138,60 KW

TABLE 3: Heat exchanger efficiency for DHW heating from 15°C to 60°C.
The temperature at the heat exchanger inlet is considered as 80°C.

- ▶ The upper heat exchanger is heating 37% of the total DHW boiler capacity.
- ▶ The middle heat exchanger is heating 61% of the total DHW boiler capacity.
- ▶ The lower heat exchanger is heating 88% of the total DHW boiler capacity.
- ▶ Heat exchangers combination:
 - 7,8 m² + 7,8 m² + 7,8 m² = 23,4 m²