

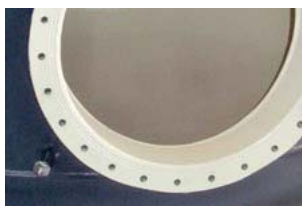


BV1KL - Keramtech lined calorifier with removable heat exchanger Low size

Calorifier for the production and storage of domestic hot water (DHW). The cylinder is made of carbon steel and is internally protected with Keramtech ceramic lining. The tank is equipped with a stainless steel U tube bundle removable

heat exchanger. The heat exchanger is bent down in order to avoid the growth of bacteria in the coldest part of the cylinder. Cylinders are also prepared to host a backup immersion heater (not supplied).

Version with reduced height to allow its shipment in upright position.



HEAT SOURCE



APPLICATION



TECHNICAL FEATURES

DHW cylinder

Heat exchanger

General features

Material	Keramtech lined S235 Jr Carbon steel
Internal protective treatment	Alimentary epoxy-ceramic lining
External protective treatment	Anti rust protection + epoxy painting
Rating (P max. / T max.)	8 bar / 100 °C
Cathodic protection	Magnesium anode
Material	Stainless steel
Type	U tube bundle expanded over a removable plate
Rating (P max. / T max.)	10 bar / 95°C
Capacity	2000 - 5000 L
Warranty	5 years (DHW cylinder) - 2 years (heat exchanger)
Insulation	- Soft insulation with polyester + PVC: Fire retardant class B2 (DIN 4102)
In compliance with	- Pressure Equipment Directive (PED) 2014/68/UE Art. 4 Para 3 - Italian MOH specifications (products suitable to contain potable water) - Energy related Products (Erp) Directive 2009/125/CE

ACCESSORIES (page 218)



Impressed current electronic anode



Electronic control unit



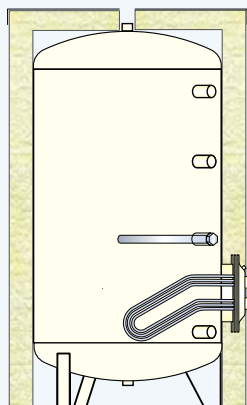
Thermostat



Thermometer



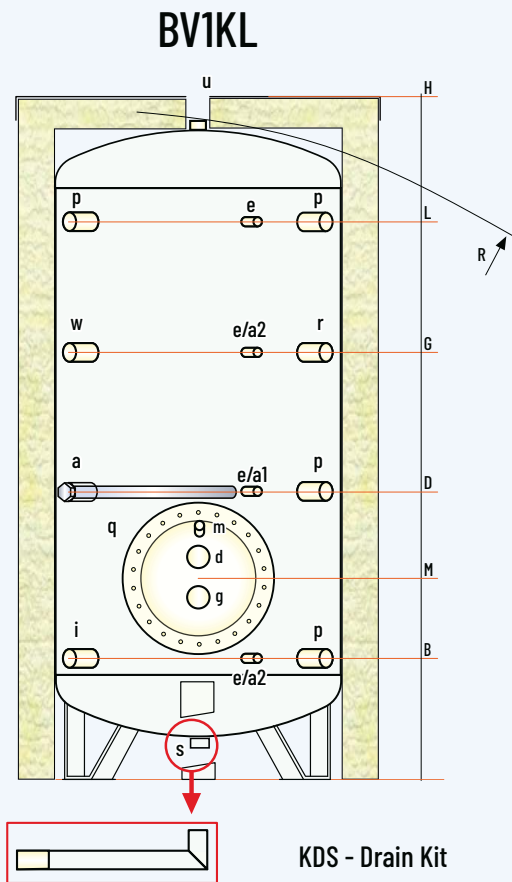
1 1/2 electric immersion heater



BV1KLI - Soft insulation with polyester and PVC jacket

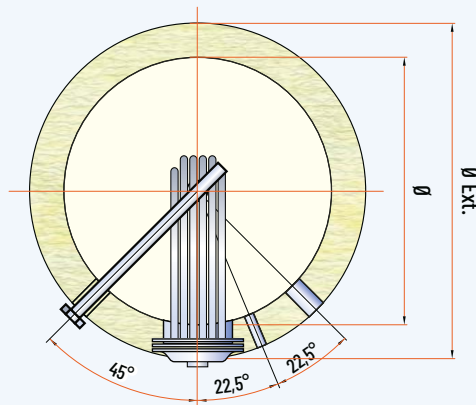
CODE	INSULATION THICK. (mm)	ErP CLASS	HEAT LOSS S (W)	REAL CAPACITY (L)	HEAT EXCHANGER (m ²) / (L) *
BV1KLI 02000 F	130	C	192,3	2160,4	4,00 / 21,7
BV1KLI 02500 F	100	-	-	2558,7	5,00 / 27,4
BV1KLI 03000 F	100	-	-	2930,6	6,00 / 27,4
BV1KLI 04000 F	100	-	-	3944,3	8,00 / 42,9
BV1KLI 05000 F	100	-	-	4905,4	10,00 / 51,5

* Volume occupied by the heat exchanger and its support structure



LEGEND

- a . Magnesium anode
- a1-a2. Opening for electronic anode
- d . Boiler flow
- e . Thermometer - Sensor
- g . Boiler return
- i . Domestic cold water inlet
- m . Heat exchanger vent
- p . Free connection
- q . Heat exchanger flange
- r . Recirculation
- s . Drain
- u . Domestic hot water outlet
- w . Opening for immersion heater



MODEL	DIMENSIONS (mm)		$\varnothing$ EXT * (Hard/Soft ins.)		HEAT EXCHANGER (m ²)	Electronic anode (optional)	WEIGHT (kg)
BV1KLI 02000 F	1200	2345	1400/1460	2390	4,00	a2 (EPS 375/125)	349
BV1KLI 02500 F	1300	2340	1500	2460	5,00	a2 (EPS 700/200)	432
BV1KLI 03000 F	1400	2370	1600	2520	6,00	a2 (EPS 700/200)	476
BV1KLI 04000 F	1600	2370	1800	2610	8,00	a2 (EPS 700/200)	648
BV1KLI 05000 F	1800	2370	2000	2700	10,00	a2 (EPS 700/200)	721

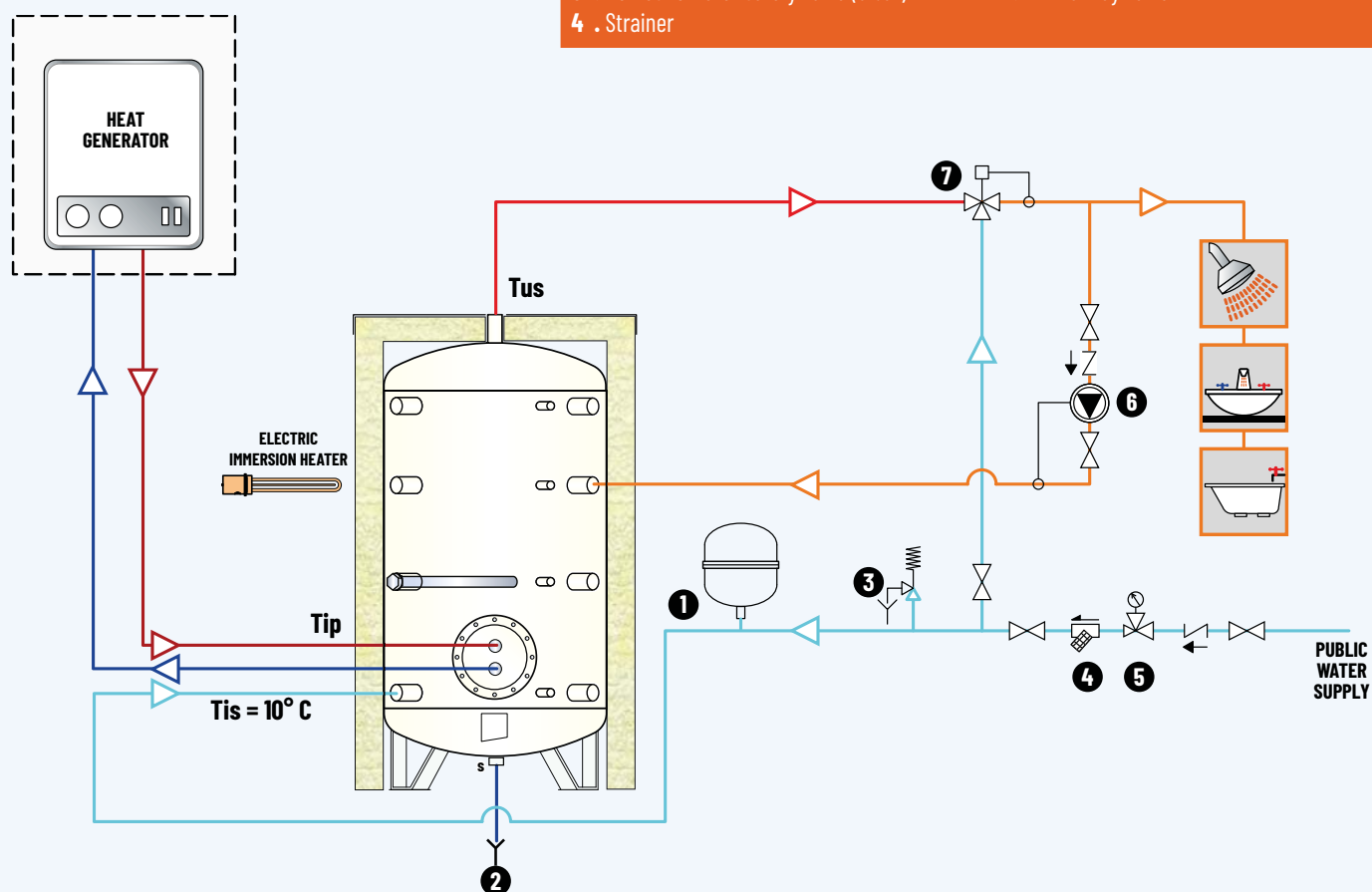
* The insulation is removable

MODEL	HEIGHTS (mm)					CONNECTIONS (GAS)					
	B	D	G	L	M	a p r s	d g	e	i u	w	q
BV1KLI 02000 F	505	950	1410	1825	715	1"¼	2"	½"	2"	1"½	400/480
BV1KLI 02500 F	510	955	1415	1830	700	1"¼	2"	½"	2"	1"½	400/480
BV1KLI 03000 F	595	1005	1430	1825	780	1"¼	2"	½"	3"	1"½	400/480
BV1KLI 04000 F	600	1005	1425	1800	785	1"¼	2"	½"	3"	1"½	400/480
BV1KLI 05000 F	615	1010	1410	1770	800	1"¼	2"	½"	3"	1"½	400/480

Disclaimer: this layout is purely indicative. It does not replace consultant's design

LEGEND

- | | |
|---|-----------------------------|
| 1 . Domestic water expansion vessel | 5 . Pressure reducing valve |
| 2 . Domestic water drain | 6 . DWH Recirculation pump |
| 3 . Domestic water safety valve (6 bar) | 7 . DWH 3-way valve |
| 4 . Strainer | |



CALORIFIERS WITH
REMOVABLE HEAT
EXCHANGERS

MODEL		BV1KLI 02000F				BV1KLI 02500F				BV1KLI 03000F			
DHW FROM 10 TO 45 °C	HEAT EXCHANGER (m ²) [L] ¹	4,0 [17,2]				5,0 [20,8]				6,0 [24,8]			
	PRIMARY FLOW (m ³ /h)	7				8				10			
	PRIMARY TEMP. (°C)	50	60	70	80	50	60	70	80	50	60	70	80
	LITRES 10' (L/10') ²	2180	2269	3227	3303	2589	2699	3838	3932	2975	3108	4418	4531
	LITRES FIRST HOUR ²	2819	3352	4704	5157	3382	4043	5668	6228	3929	4726	6622	7298
	CONTINUOUS DRAW (L) ³	807	1368	1865	2342	1002	1697	2311	2900	1206	2044	2784	3495
	POWER (kW)	32,8	55,7	75,9	95,3	40,8	69,1	94,1	118,0	49,1	83,2	113,3	142,3
	PREHEATING ³ (min)	169	98	71	57	162	94	68	54	154	89	65	52
	LITRES 10' (L/10') ²	-	-	2200	2261	-	-	2614	2689	-	-	3004	3095
	LITRES FIRST HOUR ²	-	-	2937	3302	-	-	3528	3980	-	-	4105	4651
DHW FROM 10 TO 60 °C	CONTINUOUS DRAW (L) ³	-	-	931	1315	-	-	1155	1631	-	-	1391	1965
	POWER (kW)	-	-	54	76	-	-	67	95	-	-	81	114
	PREHEATING ³ (min)	-	-	145	102	-	-	139	98	-	-	132	93
	NL ⁴	38				44				48			

MODEL		BV1KLI 04000F				BV1KLI 05000F			
DHW FROM 10 TO 45 °C	HEAT EXCHANGER (m ²) [L] ¹	8,0 [31,4]				10,0 [34,3]			
	PRIMARY FLOW (m ³ /h)	12				15			
	PRIMARY TEMP. (°C)	50	60	70	80	50	60	70	80
	LITRES 10' (L/10') ²	4000	4174	5934	6082	4976	5194	7384	7569
	LITRES FIRST HOUR ²	5262	6310	8841	9729	6554	7864	11018	12127
	CONTINUOUS DRAW (L) ³	1595	2698	3672	4606	1993	3372	4590	5758
	POWER (kW)	64,9	109,8	149,5	187,5	81,1	137,3	186,8	234,4
	PREHEATING ³ (min)	158	91	67	53	157	91	66	53
	LITRES 10' (L/10') ²	-	-	4038	4158	-	-	5024	5173
	LITRES FIRST HOUR ²	-	-	5494	6211	-	-	6843	7740
DHW FROM 10 TO 60 °C	CONTINUOUS DRAW (L) ³	-	-	1838	2594	-	-	2289	3242
	POWER (kW)	-	-	107	151	-	-	134	189
	PREHEATING ³ (min)	-	-	136	95	-	-	135	94
	NL ⁴	48				60			

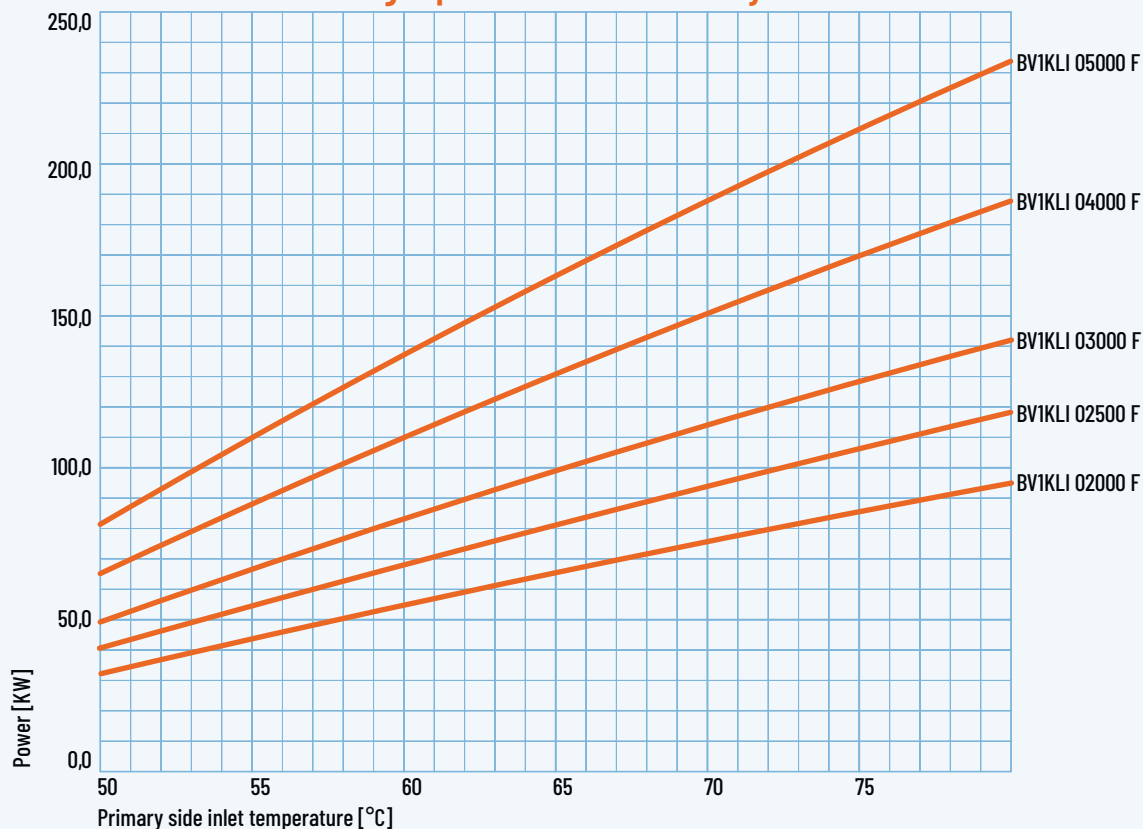
(1) Volume of fluid contained in the heat exchanger

(2) Obtainable with pre-heated cylinder (at 45 °C with primary side set at 50 or 60 °C and pre-heated at 60 °C in the other cases) and a running heat source

(3) With a proper power heat source generator

(4) Primary side 80 °C - Secondary side 10-45 °C

BV1KL - Heat exchanger powers with secondary side at 10/45 °C



CALORIFIERS WITH
REMOVABLE HEAT
EXCHANGERS

BV1KL - Heat exchanger pressure drops

