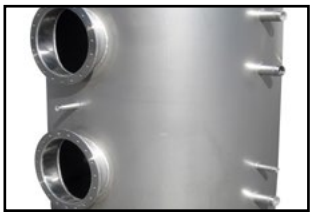
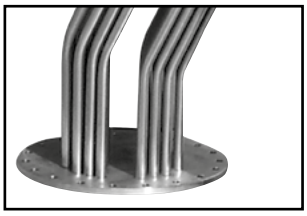
BV3X - Stainless steel AISI 316l boiler with triple removable exchanger

Stainless steel AISI 316L boiler for the production and storage of Sanitary Hot Water. The boiler is equipped with three heat removable exchangers by stainless steel AISI 316L tube bundle. The lower exchanger is bent downward to prevent bacterial growth in the coldest area in the boiler.





TECHNICAL CHARACTERISTICS

Sanitary	Material:	Stainless steel AISI 316L (1.4404)
	Internal protective processing:	Pickling and passivation
	External protective processing:	Pickling and passivation
	Operation (P max. / T max.):	6 bar / 95°C
	Cathodic protection:	Magnesium anode
Exchanger	Material:	Stainless steel AISI 316L on Inox plate
	Internal protective processing:	Pickling and passivation
	External protective processing:	Pickling and passivation
	Typology:	U tube bundle on removable plate
	Operation (P max. / T max.):	12 bar / 95°C
General characteristics	Capacity:	1500 - 5000 Lt
	Warranty:	5 years (*sanitary storage*), 2 years (*removable exchanger*)
	Insulation:	- Flexible Polyester + pvc: Fire *resistance class B2 (DIN4102)* - Rigid insulation: - up to 2000 Lt in polyurethane + pvc: *Fire resistance class B3 (DIN4102)* - from 2500 to 5000 Lt polyester (15) + polystyrene (85) + pvc: *Fire resistance class B2 (DIN4102)*
	Reference legislation:	- PED 14/68/UE Art. 4 Par. 3 (Pressure equipment) - M.D. of 6th April 2004 N.174 (suitability of materials in contact with SHW) - Directive 2009/125/CE (Energy related Products)

FITTINGS (pag. 152)

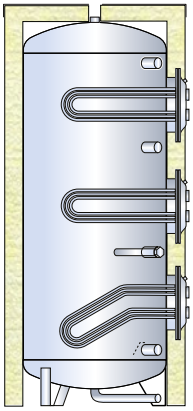
Electronic anode with impressed current

Electronic control unit

Electrical resistance 1"1/2 connection

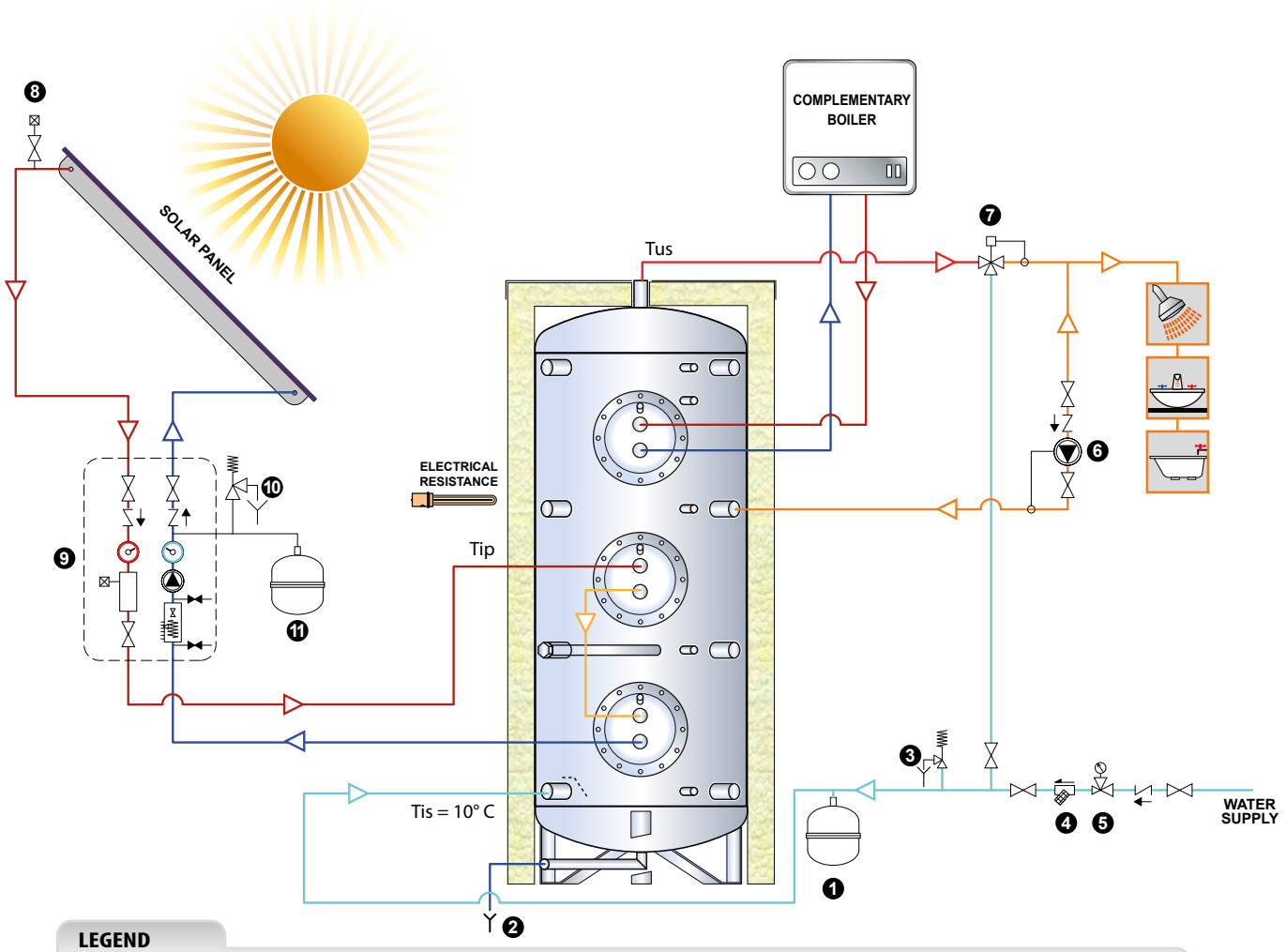
Thermostat

Thermometer



BV3X - Stainless steel AISI 316l boiler with triple removable exchanger						
Flexible polyester insul. 100 mm thick + pvc			Rigid insulation + pvc			
Code	ErP	€	Code	Thickness (mm)	ErP	€
BV3X 01500 F	E	-	BV3X 01500 R	100	C	-
BV3X 02000 F	E	-	BV3X 02000 R	100	C	-
BV3X 02500 F	-	-	BV3X 02500 R	100	-	-
BV3X 03000 F	-	-	BV3X 03000 R	100	-	-
BV3X 04000 F	-	-	BV3X 04000 R	100	-	-
BV3X 05000 F	-	-	BV3X 05000 R	100	-	-

Caution: *Indicative Schematic diagram, not substitutive for project work.*



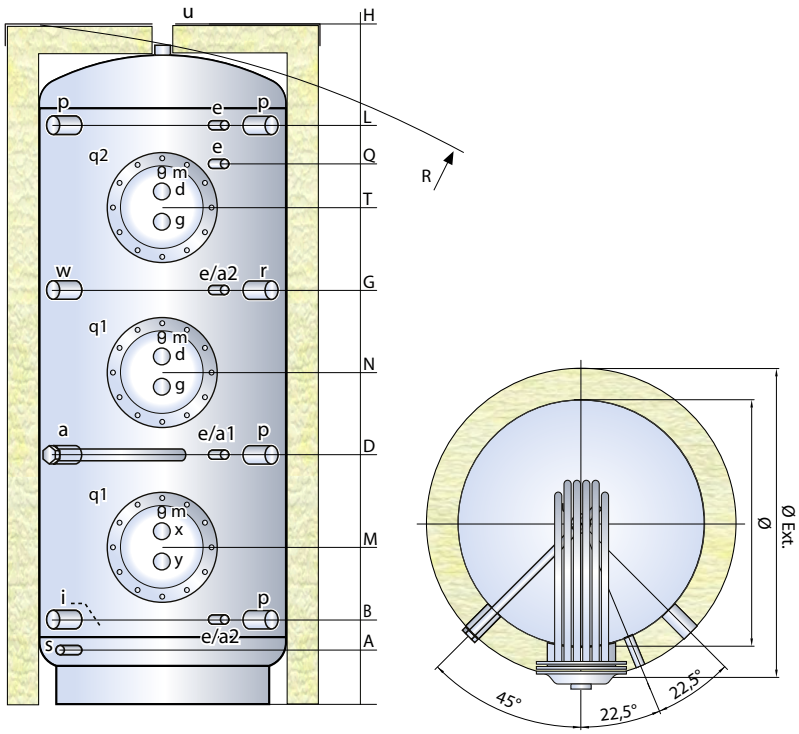
LEGEND

1. Sanitary expansion vessel
2. Sanitary drain
3. Sanitary safety valve (6 bar)
4. Dirt filter
5. Pressure reducer
6. Sanitary recirculation pump
7. Sanitary mixing valve
8. Vent with shut-off
9. Solar power managing module
10. Solar power safety unit (6 bar)
11. Solar expansion vessel

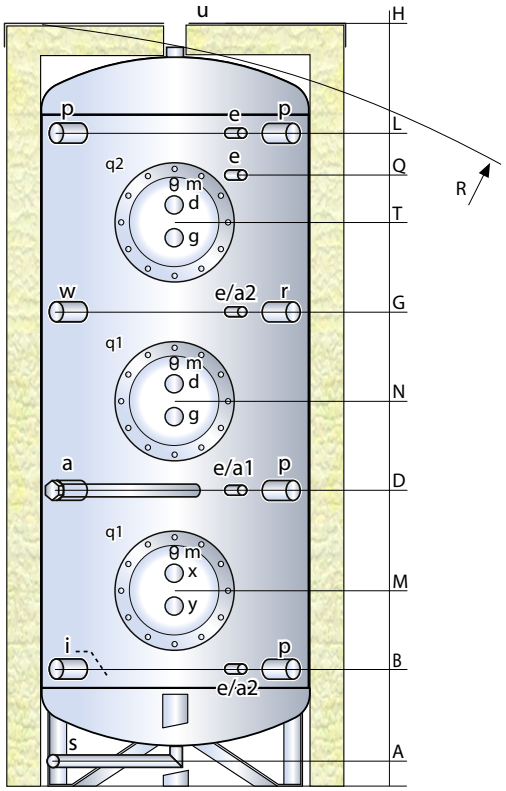
Model	lower exchangers							upper exchanger							Amount of water in the first 10 min (Lt/10 ')
	Sq.m. (Lt)	Lt/h (mca)	Tip (°C)	production of Sanitary Hot Water Tus=45°C Power (kW)	Tus=45°C Flow (Lt/h)	Tus=60°C Power (kW)	Tus=60°C Flow (Lt/h)	Sq.m. (Lt)	Lt/h (mca)	Tip (°C)	production of Sanitary Hot Water Tus=45°C Power (kW)	Tus=45°C Flow (Lt/h)	Tus=60°C Power (kW)	Tus=60°C Flow (Lt/h)	
BV3X 01500_	3+3 (26,0)	10000 (1,4)	80	139,7	3432	112,2	1930	1,5 (7,7)	4000 (1,2)	80	36,3	893	28,9	497	2094
			70	110,8	2724	79,5	1368			70	28,8	708	20,4	352	2082
BV3X 02000_	4+4 (34,4)	12000 (1,3)	80	184,3	4528	148,4	2553	2 (9,5)	5000 (1,0)	80	48,0	1179	38,6	663	2773
			70	146,3	3595	104,5	1798			70	38,4	944	27,1	466	2761
BV3X 02500_	5+4 (38,0)	15000 (1,3)	80	209,5	5147	168,3	2895	2 (9,5)	5000 (1,0)	80	48,0	1179	38,6	663	3440
			70	166,3	4085	119,3	2052			70	38,4	944	27,1	466	3431
BV3X 03000_	5+5 (41,6)	18000 (1,7)	80	235,1	5778	188,5	3242	3 (13,0)	6000 (1,4)	80	71,3	1751	57,0	980	4115
			70	186,6	4585	132,5	2280			70	56,5	1389	40,0	689	4106
BV3X 04000_	8+8 (62,8)	20000 (1,7)	80	360,8	8866	289,8	4984	4 (17,2)	7000 (1,3)	80	94,1	2311	74,8	1287	5463
			70	286,6	7043	206,0	3543			70	74,6	1834	53,0	912	5456
BV3X 05000_	10+10 (68,6)	25000 (1,7)	80	451,0	11082	362,2	6231	5 (20,8)	8000 (1,3)	80	116,4	2860	92,8	1596	6786
			70	358,3	8803	257,5	4429			70	92,4	2270	65,8	1132	6786

For the purposes of the Directive (ErP) 2009/125/EC Regulation N° 812/2013 and N° 814/2013 the results of the energy measurements are given on page 218

1500 Lt



2000-5000 Lt



a	magnesium anode	i	sanitary cold water inlet	q	exchanger flange
a1 - a2	provision for the electronic anode	m	exchanger vent	r	recirculation
d	boiler flow	x	solar flow	s	discharge
e	thermometer - probe	y	solar return	u	sanitary hot water output
g	boiler return	p	service connection	w	electrical resistance provision

Model	Dimensions (mm)				Exchanger (Sq.m.)			Weight
	Ø	H	Ø Ext **	R	Lower	Middle	Upper	(Kg)
BV3X 01500_	1000	2115	1200	2145	3,00	3,00	1,50	305
BV3X 02000_	1100	2435	1300	2465	4,00	4,00	2,00	387
BV3X 02500_	1200	2595	1400	2640	5,00	4,00	2,00	443
BV3X 03000_	1250	2795	1450	2835	5,00	5,00	3,00	487
BV3X 04000_	1400	2925	1600	2995	8,00	8,00	4,00	701
BV3X 05000_	1600	2955	1800	3090	10,00	10,00	5,00	811

** All insulations are removable.

Model	Quotes (mm)										Connections (gas)							
	A	B	D	G	L	M	N	Q	S	T	a p r	d g x y	e	i u	m	w	q1	q2
BV3X 01500_	235	340	765	1400	1725	520	1080	1250	915	1560	1"1/4	2"	1/2"	2"	3/8"	1"1/2	300/380	300/380
BV3X 02000_	100	475	1010	1515	1975	655	1260	1645	1140	1830	1"1/4	2"	1/2"	2"	3/8"	1"1/2	350/430	300/380
BV3X 02500_	100	505	1040	1600	2105	690	1290	1750	1190	1875	1"1/4	2"	1/2"	2"	3/8"	1"1/2	350/430	300/380
BV3X 03000_	90	515	1100	1730	2300	675	1415	1880	1250	2045	1"1/4	2"	1/2"	3"	3/8"	1"1/2	350/430	300/380
BV3X 04000_	120	595	1190	1185	2380	755	1505	1965	1340	2115	1"1/4	2"	1/2"	3"	3/8"	1"1/2	350/430	350/430
BV3X 05000_	100	600	1185	1185	2385	825	1505	1965	1335	2115	1"1/4	2"	1/2"	3"	3/8"	1"1/2	350/430	350/430