

ECO-S/ECO-SN

Vertical energy saver



L'economizzatore della serie ECO-S viene integrato nella camera fumi dei generatori di vapore della serie SIXEN N. La scelta della sua installazione consente di ottenere un risparmio energetico ottenuto dal parziale recupero del calore sensibile dei fumi di scarico del generatore mediante preriscaldamento dell'acqua di alimentazione. Esecuzione completamente estraibile dalla parte posteriore per facilitare le operazioni di manutenzione straordinaria del generatore.

It consists of:

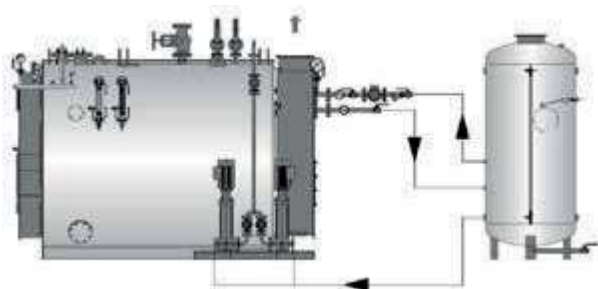
- flue gas / water exchanger non condensing element suitable for methane gas boiler operation, manufactured from finned tubes made from carbon steel P235GH or stainless steel, arranged in several rows with distribution manifolds; construction in accordance with the Directive PED 2014/68/EU
- instrument assembly and hydraulic connection headers and pipes

Gli economizzatori della serie ECO-S possono essere forniti in due versioni :

- ECO-S : with finned pipes in P235GH carbon steel
- ECO-SN : with finned pipes in AISI 304 stainless steel

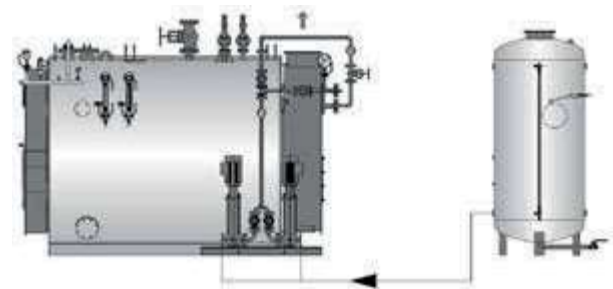
The tables below show the features and codes of the two versions.

A-type installation diagram



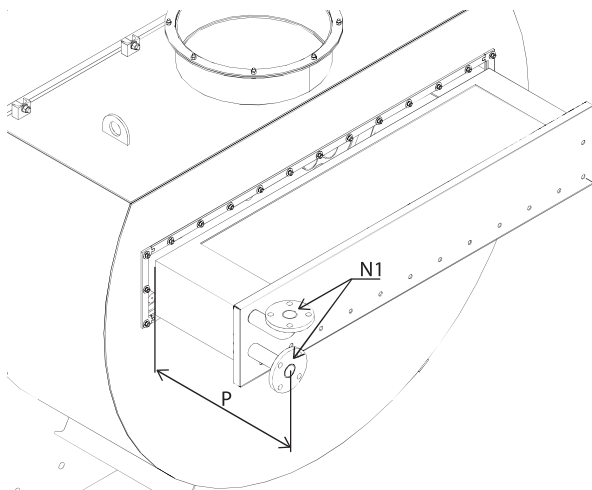
- Standard accessories for type A
- Safety valve (3 bar)
- Energy saver circulation pump
- 3 shut-off valves
- 2 water thermometers upstream and downstream of the economiser

B-type installation diagram



- Standard accessories for type B
- PED-certified safety valve (18 bar)
- 3 by-pass and shut-off valves
- Water thermometer downstream of the economiser
- Water pressure gauge downstream of the economiser
- Economiser - boiler connection pipes

TECHNICAL SPECIFICATIONS AND DIMENSIONS



MODEL	Dimensions	
	P	N1
	mm	DN - PN
ECO-S 0	424	DN 25 - PN 40
ECO-S 2	470	DN 25 - PN 40
ECO-S 3	572	DN 32 - PN 40
ECO-S 4	662	DN 32 - PN 40

MATCHING EQUIPMENT AND TECHNICAL SPECIFICATIONS

ECO-S

Model	Idoneo per SIXEN N	Installation type	Code	Heat Output		100% efficiency (ref. NCV)	Max. fluid flow rate	Fluid temp.		Flue gas temp.		Pressure drop	
				kW	kcal/h			%	kg/h	inlet °C	outlet °C	inlet °C	Air nom. pow. = 20°C °C
ECO-S 0	350	A	85500266	16	14000	6,7	900	75	90	240	115,8	0,25	160
	500			21	18000	6,2	1200	75	90	240	129,5	0,45	243
	650			24	21000	5,4	1400	75	90	240	140,4	0,69	321
	800			28	24000	5,1	1600	75	90	240	149,3	0,99	393
ECO-S 2	1000		85500267	42	36000	6,2	2400	75	90	240	129,5	0,41	228
	1300			49	42000	5,3	2800	75	90	240	140,4	0,64	302
	1700			65	56000	5,6	3700	75	90	240	137,9	1,3	205,4
	2000			72	62000	5,3	4100	75	90	240	145	1,71	240
ECO-S 3	2500		85500268	101	87000	5,9	5800	75	90	240	132,2	0,89	779
	3000			119	102000	5,8	6800	75	90	240	141,8	1,39	104
	3500			124	107000	5,2	7100	75	90	240	144,7	1,58	113,4
ECO-S 4	4000		85500269	150	129000	5,5	8600	75	90	240	139,5	1,38	201,1
	5000			146000	5,0	9700	75	90	240	149,3	2,01	248,5	
ECO-S 0	350	B	85500276	14	12000	5,9	350	80	115,2	240	127,1	0,25	29,1
	500			19	16000	5,6	500	80	111,4	240	138,9	0,45	54,8
	650			22	19000	5,0	650	80	108,5	240	148,3	0,7	87,5
	800			24	21000	4,4	800	80	106,1	240	155,9	0,99	126,6
ECO-S 2	1000		85500277	36	31000	5,3	1000	80	111,4	240	139	0,41	51,5
	1300			44	38000	4,8	1350	80	108,5	240	148,3	0,64	82,1
	1700			58	50000	5,0	1700	80	109,4	240	145,2	1,3	165,3
	2000			64	55000	4,7	2000	80	107,5	240	151,4	1,71	220,8
ECO-S 3	2500		85500278	90	77000	5,3	2500	80	110,8	240	140,7	0,89	57,3
	3000			106	91000	5,2	3000	80	110,3	240	149,7	1,39	79,2
	3500			112	96000	4,7	3500	80	107,5	240	151,4	1,58	104,2
ECO-S 4	4000		85500279	135	116000	5,0	4000	80	109	240	146,8	1,38	137,4
	5000			132000	4,5	5000	80	106,3	240	155,2	2,01	204,3	

ECO-SN

Model	Idoneo per SIXEN N	Installation type	Code	Potenza utile		100% efficiency (ref. NCV)	Max. fluid flow rate	Fluid temp.		Flue gas temp.		Pressure drop	
				kW	kcal/h			%	kg/h	inlet °C	outlet °C	inlet °C	Air nom. pow. = 20°C °C
ECO-SN 0	SIXEN N 350	A	85500270	16	14000	6,7	900	75	90	240	115,8	0,25	14,8
	SIXEN N 500			21	18000	6,2	1200	75	90	240	129,5	0,45	27,8
	SIXEN N 650			24	21000	5,4	1400	75	90	240	140,4	0,69	44,4
	SIXEN N 800			28	24000	5,1	1600	75	90	240	149,3	0,99	64,3
ECO-SN 2	SIXEN N 1000		85500271	42	36000	6,2	2400	75	90	240	129,5	0,41	165,3
	SIXEN N 1300			49	42000	5,3	2800	75	90	240	140,4	0,64	263,4
	SIXEN N 1700			65	56000	5,6	3700	75	90	240	137,9	1,3	519,9
	SIXEN N 2000			72	62000	5,3	4100	75	90	240	145	1,71	694
ECO-SN 3	SIXEN N 2500		85500272	101	87000	5,9	5800	75	90	240	132,2	0,89	26,7
	SIXEN N 3000			119	102000	5,8	6800	75	90	240	141,8	1,39	36,7
	SIXEN N 3500			124	107000	5,2	7100	75	90	240	144,7	1,58	48,6
ECO-SN 4	SIXEN N 4000		85500273	150	129000	5,5	8600	75	90	240	139,5	1,38	84
	SIXEN N 5000			146000	5,0	9700	75	90	240	149,3	2,01	125	
ECO-SN 0	SIXEN N 350	B	85500280	14	12000	5,9	350	80	115,2	240	127,1	0,25	78
	SIXEN N 500			19	16000	5,6	500	80	111,4	240	138,9	0,45	121,5
	SIXEN N 650			22	19000	5,0	650	80	108,5	240	148,3	0,7	164,3
	SIXEN N 800			24	21000	4,4	800	80	106,1	240	155,9	0,99	205,3
ECO-SN 2	SIXEN N 1000		85500281	36	31000	5,3	1000	80	111,4	240	139	0,41	121,3
	SIXEN N 1300			44	38000	4,8	1350	80	108,5	240	148,3	0,64	164,8
	SIXEN N 1700			58	50000	5,0	1700	80	109,4	240	145,2	1,3	187,2
	SIXEN N 2000			64	55000	4,7	2000	80	107,5	240	151,4	1,71	223,3
ECO-SN 3	SIXEN N 2500		85500282	90	77000	5,3	2500	80	110,8	240	140,7	0,89	118,3
	SIXEN N 3000			106	91000	5,2	3000	80	110,3	240	149,7	1,39	161
	SIXEN N 3500			112	96000	4,7	3500	80	107,5	240	151,4	1,58	176
ECO-SN 4	SIXEN N 4000		85500283	135	116000	5,0	4000	80	109	240	146,8	1,38	326
	SIXEN N 5000			132000	4,5	5000	80	106,3	240	155,2	2,01	408	

ECO-T/ECO-TN

Economiser for steam boilers series TReVAPOR

The economiser for the ECO-T series is built into the rear smoke box of the TReVAPOR steam boilers. Opting THE economiser allows you to achieve energy savings thanks to partial sensible heat recovery of the boiler's flue gas by preheating the feed water. Fully removable construction from the rear to aid in boiler maintenance operations.

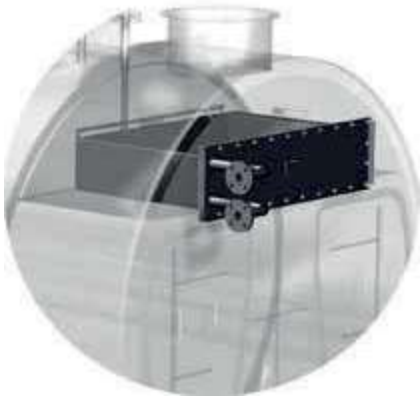
It consists of:

- flue gas / water exchanger non condensing element suitable for methane gas boiler operation, manufactured from finned tubes made from carbon steel P235GH or stainless steel, arranged in several rows with distribution manifolds; construction in accordance with the Directive PED 2014/68/EU
- instrument assembly and hydraulic connection headers and pipes

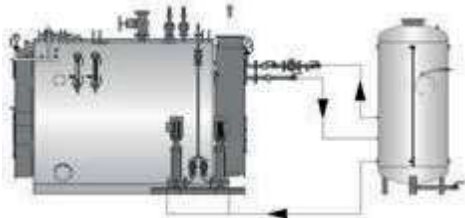
The economiser of the ECO-T series can be supplied in two versions:

- **ECO-T** : with finned pipes in P235GH carbon steel
- **ECO-TN** : with finned pipes in AISI 304 stainless steel

The tables below show the features and codes of the two versions.

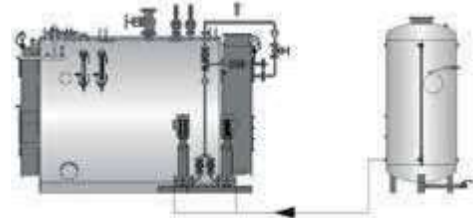


A-type installation diagram

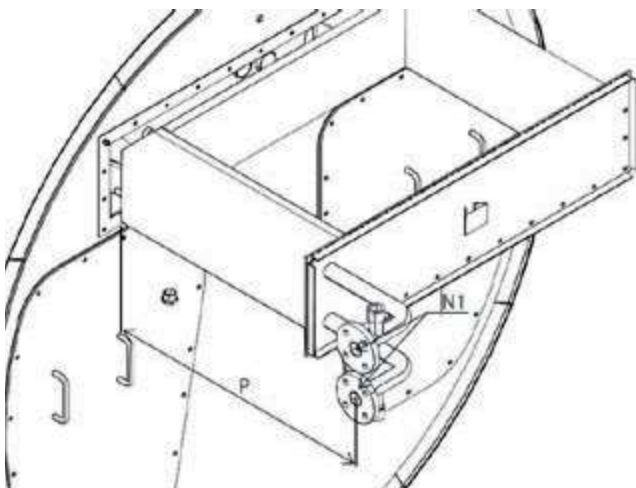


- Standard accessories for type A
- Safety valve (3 bar)
- Energy saver circulation pump
- 3 shut-off valves
- 2 water thermometers upstream and downstream of the economiser

B-type installation diagram



- Standard accessories for type B
- PED-certified safety valve (18 bar)
- Water thermometer downstream of the economiser
- Water pressure gauge downstream of the economiser
- Economiser - boiler connection pipes



MODEL	Dimensions	
	P	N1
	mm	DN - PN
ECO - T1	690	DN20 - PN40
ECO - T3	790	DN25 - PN40
ECO - T4	1010	DN32 - PN40
ECO - T5	1100	DN32 - PN40

MATCHING EQUIPMENT AND TECHNICAL SPECIFICATIONS

ECO-T

Model	Idoneo per TREVAPOR		Installation type	Code	Heat Output		100% efficiency (ref. NCV)	Max. fluid flow rate	Fluid temp.		Flue gas temp.		Pressure drop		
									inlet	outlet	inlet	Air nom. pow. = 20°C	flue gas side	fluid side	
									°C	°C	°C	°C	mbar	mbar	
		kW	kcal/h	%	kg/h										
ECO-T 1	800	1200 P	A	85700010	30	25848	95,5	1723	75	90	230	115	0,5	281	
	1200	1500 P			45	38771	95,5	2585	75	90	230	115	0,9	517	
ECO-T 3	1500	2000 P		85700012	56	48464	95,5	3231	75	90	230	115	0,6	351	
	2000	2500 P			75	64618	95,5	4308	75	90	230	115	0,9	584	
ECO-T 4	2500	3000 P		85700014	93	80821	95,5	5388	75	90	230	115	0,5	1491	
	3000	3500 P			112	96976	95,5	6465	75	90	230	115	0,7	2043	
ECO-T 5	3500	4000 P		85700016	131	113130	95,5	7542	75	90	230	115	0,6	1578	
	4000	5000 P			150	129285	95,5	8619	75	90	230	115	0,7	1996	
ECO-T 6	5000	6000 P		85700018	188	161594	95,5	10773	75	90	230	115	1	1299	
	6000	6500 P			225	193903	95,5	12927	75	90	230	115	1,4	1810	
ECO-T 1	800	1200 P		B	85700020	30	25848	95,5	800	80	112	230	115	0,5	281
	1200	1500 P				45	38771	95,5	1200	80	112	230	115	0,9	517
ECO-T 3	1500	2000 P	85700022		56	48464	95,5	1500	80	112	230	115	0,6	351	
	2000	2500 P			75	64618	95,5	2000	80	112	230	115	0,9	584	
ECO-T 4	2500	3000 P	85700024		93	80821	95,5	2500	80	112	230	115	0,5	1491	
	3000	3500 P			112	96976	95,5	3000	80	112	230	115	0,7	2043	
ECO-T 5	3500	4000 P	85700026		131	113130	95,5	3500	80	112	230	115	0,6	1578	
	4000	5000 P			150	129285	95,5	4000	80	112	230	115	0,7	1996	
ECO-T 6	5000	6000 P	85700028		188	161594	95,5	5000	80	112	230	115	1	1299	
	6000	6500 P			225	193903	95,5	6000	80	112	230	115	1,4	1810	

ECO-TN

Model	Idoneo per TREVAPOR		Installation type	Code	Heat Output		100% efficiency (ref. NCV)	Max. fluid flow rate	Fluid temp.		Flue gas temp.		Pressure drop		
									inlet	outlet	inlet	Air nom. pow. = 20°C	flue gas side	fluid side	
									°C	°C	°C	°C	mbar	mbar	
		kW	kcal/h	%	kg/h										
ECO-TN 1	800	1200 P	A	85700030	30	25848	95,5	1723	75	90	230	115	0,5	281	
	1200	1500 P			45	38771	95,5	2585	75	90	230	115	0,9	517	
ECO-TN 3	1500	2000 P		85700032	56	48464	95,5	3231	75	90	230	115	0,6	351	
	2000	2500 P			75	64618	95,5	4308	75	90	230	115	0,9	584	
ECO-TN 4	2500	3000 P		85700034	93	80821	95,5	5388	75	90	230	115	0,5	1491	
	3000	3500 P			112	96976	95,5	6465	75	90	230	115	0,7	2043	
ECO-TN 5	3500	4000 P		85700036	131	113130	95,5	7542	75	90	230	115	0,6	1578	
	4000	5000 P			150	129285	95,5	8619	75	90	230	115	0,7	1996	
ECO-TN 6	5000	6000 P		85700038	188	161594	95,5	10773	75	90	230	115	1	1299	
	6000	6500 P			225	193903	95,5	12927	75	90	230	115	1,4	1810	
ECO-TN 1	800	1200 P		B	85700040	30	25848	95,5	800	80	112	230	115	0,5	281
	1200	1500 P				45	38771	95,5	1200	80	112	230	115	0,9	517
ECO-TN 3	1500	2000 P	85700042		56	48464	95,5	1500	80	112	230	115	0,6	351	
	2000	2500 P			75	64618	95,5	2000	80	112	230	115	0,9	584	
ECO-TN 4	2500	3000 P	85700044		93	80821	95,5	2500	80	112	230	115	0,5	1491	
	3000	3500 P			112	96976	95,5	3000	80	112	230	115	0,7	2043	
ECO-TN 5	3500	4000 P	85700046		131	113130	95,5	3500	80	112	230	115	0,6	1578	
	4000	5000 P			150	129285	95,5	4000	80	112	230	115	0,7	1996	
ECO-TN 6	5000	6000 P	85700048		188	161594	95,5	5000	80	112	230	115	1	1299	
	6000	6500 P			225	193903	95,5	6000	80	112	230	115	1,4	1810	