



- unitate compacta de aport aer proaspat cu automatizare inclusa
- reglaj turatie in 3 trepte
- reglaj temperatura in tubulatura sau in ambient
- comutator integrat
- cea mai simpla instalare

Confort ridicat datorita dotarilor

Carcasa are 30 mm izolatie termica si fonica. Pierderile de presiune sunt foarte reduse datorita suprafetelor active mari. Carcasa este atat la interior cat si la exterior foarte plata si etansa.

Intotdeauna ventilatorul optim

Unitatile sunt disponibile cu doua variante diferite de ventilator.

La unele, ventilatoare cu palete orientate inainte cu presiune foarte mare, la altele, ventilatoare ETALINE, ventilatorul cu un randament foarte ridicat.

Complet pregatita pentru montaj

Automatizarea este integrata in unitate si complet conectata. La unitatea de comanda externa pot fi setate 3 trepte de turatie si temperatura in tubulatura respectiv ambientala. Presostatul diferential este de asemenea inclus.

Un extras din functiile de baza ale automatizarii

- Alegerea tipului de functionare cu unitate de comanda
- Afisaj al modului de functionare curent si al temperaturii setate
- Introducerea temperaturii dorite de la unitatea de comanda
- Comanda unui motor de actionare (ventil pe circuitul de incalzire/racire)
- Pornire agregat de racire
- Afisaj erori cu LED si coduri de eroare
- Limitare minimala si maximala a temperaturii pe aport
- Comanda in trei trepte a unui ventilator pe aport si evacuare aer
- Protectie antiinghet a baterie de incalzire cu apa calda
- Comanda unei pompe de circulatie pe incalzire
- Presostat diferential prin masurarea diferentei de presiune
- Telecomanda cu senzor de ambient integrat
- Unitate de aport aer proaspat cu clapeta tip jaluzea si servomotor



Telecomanda

O unitate de comanda cu aspect estetic, cu afisajul temperaturii setate si trepte de turatie.



Automatizare integrata

Automatizarea este integrata in mod economic in carcasa si are un acces usor. Toate conexiunile sunt deja realizate.



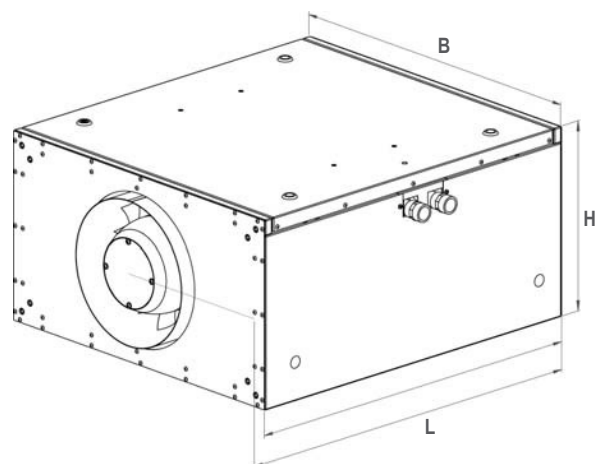
Constructie si prelucrare de inalta clasa

Carcasa complet din tabla este foarte bine izolata termic si fonica si construita cu multa atentie pentru detalii. Clapeta de inchidere este integrata si foarte etansa. Rotile dintate sunt protejate la murdarire.

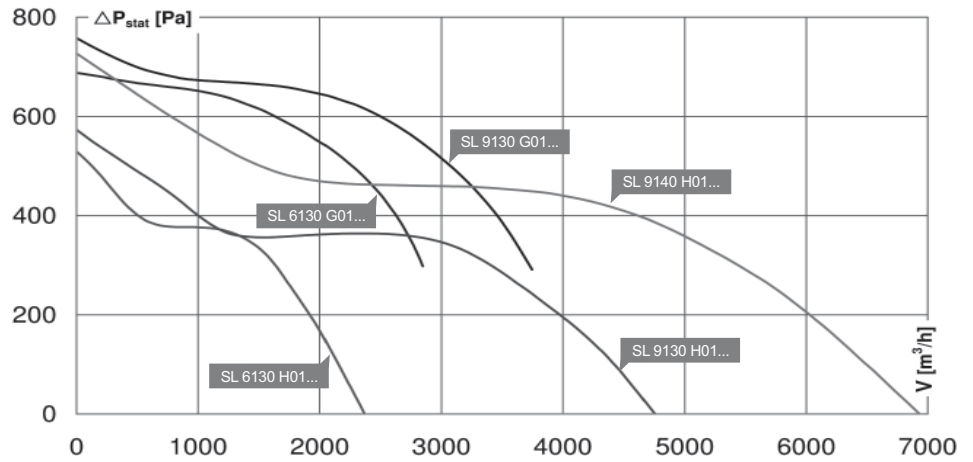


Parte de conectare variabila

Bateria de incalzire si racire pot fi simplu rotite la locul de montaj, astfel incat racordul este posibil in ambele parti.

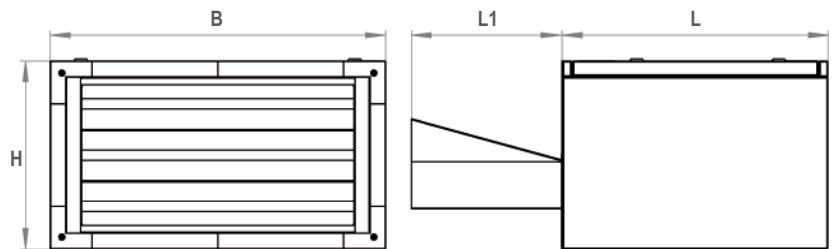


Servomotor standard			Servomotor cu resort de revenire			cu automatizare	Debit de aer la 200 Pa extern	Baterie de incalzire cu apa calda	Baterie de racire cu apa rece	Baterie de racire in detenta directa	ventilator		L [mm]	greutate [kg]
tip	ID	EUR	tip	ID	EUR						ventilator centrifugal	Etaline		
Clapeta tip jaluzea cu servomotor, ventilator														
SL 6130 G01 01	116547	1320,-					2950				x		530	51
SL 6130 H01 01	116546	890,-					1950					x	530	51
SL 9130 G01 01	116558	1460,-					3900				x		530	73
SL 9130 H01 01	116553	1280,-					3800					x	530	73
SL 9140 H01 01	116655	1840,-					6000					x	530	88
Clapeta tip jaluzea, filtru F5, baterie de incalzire cu apa, ventilator														
SL 6130 G02 01	116517	1870,-					2300	x			x		740	68
SL 6130 G02J 01	116493	3280,-	SL 6130 G02J 02	116957	3460,-	x	2300	x			x		740	71
SL 6130 H02 01	116519	1380,-					1650	x				x	740	68
SL 6130 H02J 01	115621	2640,-	SL 6130 H02J 02	116956	2900,-	x	1650	x				x	740	71
SL 9130 G02 01	116528	2100,-					3300	x			x		740	96
SL 9130 G02J 01	116496	3600,-	SL 9130 G02J 02	116962	3850,-	x	3300	x			x		740	99
SL 9130 H02 01	116529	1860,-					2700	x				x	740	96
SL 9130 H02J 01	115671	3180,-	SL 9130 H02J 02	116961	3440,-	x	2700	x				x	740	99
SL 9140 H02 01	115707	3240,-					4150	x				x	740	114
SL 9140 H02J 01	116669	4800,-	SL 9140 H02J 02	116966	4980,-	x	4150	x				x	740	116
Clapeta tip jaluzea, filtru F5, baterie de incalzire cu apa, baterie de racire cu apa sau detenta directa, ventilator														
SL 6130 G03 01	116522	2680,-					1800	x	x		x		1020	85
SL 6130 G03J 01	116499	4200,-	SL 6130 G03J 04	117212	4350,-	x	1800	x	x		x		1020	88
SL 6130 G03 02	116626	2650,-					1800	x		x	x		1020	85
SL 6130 G03J 02	116625	4120,-	SL 6130 G03J 03	116959	4270,-	x	1800	x		x	x		1020	88
SL 9130 G03 01	116535	3180,-					3100	x	x		x		1020	120
SL 9130 G03J 01	116502	4760,-	SL 9130 G03J 04	117215	5060,-	x	3100	x	x		x		1020	123
SL 9130 G03 02	116630	3180,-					3100	x		x	x		1020	120
SL 9130 G03J 02	116629	4700,-	SL 9130 G03J 03	116964	4970,-	x	3100	x		x	x		1020	123
SL 9130 H03 01	116537	2800,-					2100	x	x			x	1020	120
SL 9130 H03J 01	116486	4440,-	SL 9130 H03J 04	117214	4660,-	x	2100	x	x			x	1020	123
SL 9130 H03 02	116632	2880,-					2100	x		x		x	1020	120
SL 9130 H03J 02	116631	4320,-	SL 9130 H03J 03	116963	4580,-	x	2100	x		x		x	1020	123
SL 9140 H03 01	116886	5140,-					3800	x	x			x	1020	138
SL 9140 H03J 01	117195	6790,-	SL 9140 H03J 04	117217	6960,-	x	3800	x	x			x	1020	140
SL 9140 H03 02	116887	5060,-					3800	x		x		x	1020	138
SL 9140 H03J 02	116888	6690,-	SL 9140 H03J 03	116967	6880,-	x	3800	x		x		x	1020	140
Clapeta tip jaluzea, filtru F5, baterie de incalzire cu apa, baterie de racire cu apa sau detenta directa, al 2-lea filtru F7, ventilator														
SL 6130 G04 01	116784	2960,-					1700	x	x		x		1138	105
SL 6130 G04J 01	116783	4550,-	SL 6130 G04J 04	117213	4680,-	x	1700	x	x		x		1138	108
SL 6130 G04 02	116787	2960,-					1700	x		x	x		1138	105
SL 6130 G04J 02	116786	4480,-	SL 6130 G04J 03	116960	4600,-	x	1700	x		x	x		1138	108
SL 9130 G04 01	116920	3480,-					2600	x	x		x		1138	135
SL 9130 G04J 01	117196	5600,-	SL 9130 G04J 04	117216	5420,-	x	2600	x	x		x		1138	138
SL 9130 G04 02	116921	3480,-					2600	x		x	x		1138	135
SL 9130 G04J 02	116922	5100,-	SL 9130 G04J 03	116965	5340,-	x	2600	x		x	x		1138	138
SL 9140 H04 01	116930	5500,-					2800	x	x			x	1138	153
SL 9140 H04J 01	117197	7300,-	SL 9140 H04J 04	117218	7295,-	x	2800	x	x			x	1138	155
SL 9140 H04 02	116932	5500,-					2800	x		x		x	1138	153
SL 9140 H04J 02	116935	7200,-	SL 9140 H04J 03	116968	7180,-	x	2800	x		x		x	1138	155



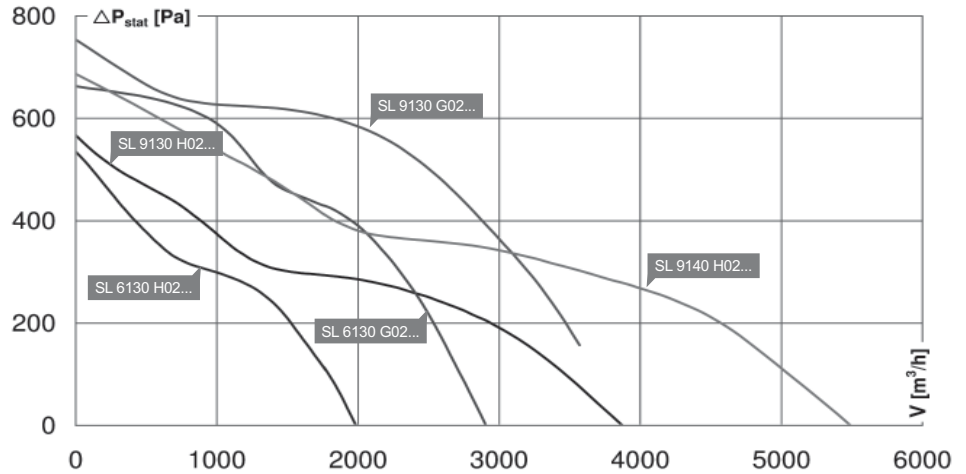
tip	ID	U	f	I _{max.}	P _i	B	H	L	L1	greutate [kg]	EUR
		[V]	[Hz]	[A]	[W]	[mm]	[mm]	[mm]	[mm]		
SL 6130 G01 01	116547	230V ~	50	6,6	1440	667	367	530	475	51	1320,-
SL 6130 H01 01	116546	230V ~	50	1,7	290	667	367	530	-	51	890,-
SL 9130 G01 01	116558	230V ~	50	9,6	2040	967	367	530	475	73	1460,-
SL 9130 H01 01	116553	230V ~	50	3,4	570	967	367	530	-	73	1280,-
SL 9140 H01 01	116655	230V ~	50	6,5	1090	967	467	530	-	88	1840,-

- Unitate compacta de evacuare
- ventilator, tensiune reglabila
- Clapeta tip jaluzea integrata



ID 116546									ID 116553									ID 116655											
	Σ	125	250	500	1k	2k	4k	8k		Σ	125	250	500	1k	2k	4k	8k		Σ	125	250	500	1k	2k	4k	8k			
absorbție L _{WA5}									absorbție L _{WA5}									absorbție L _{WA5}											
putere fonica [dB (A)]									putere fonica [dB (A)]									putere fonica [dB (A)]											
P _{st} [Pa]	150	78	61	74	70	71	70	69	60	P _{st} [Pa]	150	78	52	63	71	72	72	70	61	P _{st} [Pa]	150	82	53	68	75	77	76	73	66
	300	83	70	79	76	76	73	73	66		300	77	52	63	72	72	70	67	59		300	80	53	66	75	75	74	71	63
refulare L _{WA6}									refulare L _{WA6}									refulare L _{WA6}											
putere fonica [dB (A)]									putere fonica [dB (A)]									putere fonica [dB (A)]											
P _{st} [Pa]	150	83	49	74	77	78	76	71	62	P _{st} [Pa]	150	85	54	75	78	81	79	74	64	P _{st} [Pa]	150	86	56	76	79	82	80	76	67
	300	81	55	71	75	77	74	68	60		300	83	56	73	76	80	77	71	63		300	85	54	73	77	81	79	74	66
Radiatie L _{WA2}									Radiatie L _{WA2}									Radiatie L _{WA2}											
putere fonica [dB (A)]									putere fonica [dB (A)]									putere fonica [dB (A)]											
P _{st} [Pa]	150	59	42	57	50	50	46	48	42	P _{st} [Pa]	150	60	46	55	51	48	49	54	48	P _{st} [Pa]	150	62	47	55	52	54	54	57	51
	300	57	45	53	48	50	45	44	40		300	58	47	53	51	48	48	49	45		300	61	49	53	52	53	52	54	49

ID 116547									ID 116558										
	Σ	125	250	500	1k	2k	4k	8k		Σ	125	250	500	1k	2k	4k	8k		
absorbție L _{WA5}									absorbție L _{WA5}										
putere fonica [dB (A)]									putere fonica [dB (A)]										
P _{st} [Pa]	150	80	62	69	71	72	75	73	71	P _{st} [Pa]	150	83	61	72	75	74	78	77	75
	300	79	61	67	69	71	74	72	69		300	82	61	70	74	73	77	76	74
refulare L _{WA6} atenuator scurt									refulare L _{WA6} atenuator scurt										
putere fonica [dB (A)]									putere fonica [dB (A)]										
P _{st} [Pa]	150	84	62	70	74	76	79	78	76	P _{st} [Pa]	150	88	62	72	77	80	82	82	80
	300	84	60	67	72	75	79	77	76		300	87	61	71	75	78	81	81	79
refulare L _{WA6} atenuator zgomot									refulare L _{WA6} atenuator zgomot										
putere fonica [dB (A)]									putere fonica [dB (A)]										
P _{st} [Pa]	150	74	66	70	67	59	57	61	64	P _{st} [Pa]	150	76	63	72	70	62	58	64	67
	300	73	65	68	65	57	56	60	63		300	75	63	71	69	61	57	63	67
Radiatie L _{WA2}									Radiatie L _{WA2}										
putere fonica [dB (A)]									putere fonica [dB (A)]										
P _{st} [Pa]	150	64	61	58	51	46	52	55	54	P _{st} [Pa]	150	64	58	58	50	48	49	54	57
	300	63	60	57	49	45	51	54	53		300	62	55	57	48	47	48	53	56

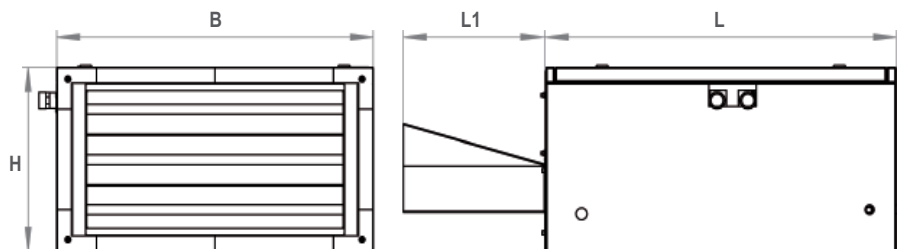


tip	ID	U	f	I _{max.}	P ₁	Numarul de randuri de levi	B	H	L	L1	greutate	EUR
		[V]	[Hz]	[A]	[W]	Baterie de incalzire	[mm]	[mm]	[mm]	[mm]	[kg]	
SL 6130 G02 01	116517	230V ~	50	5,9	1270	3	667	367	740	475	68	1870,-
SL 6130 G02J 01	116493	230V ~	50	5,9	1270	3	667	367	740	475	71	3280,-
SL 6130 H02 01	116519	230V ~	50	1,6	280	2	667	367	740	-	68	1380,-
SL 6130 H02J 01	115621	230V ~	50	1,6	280	2	667	367	740	-	71	2640,-
SL 9130 G02 01	116528	230V ~	50	8,5	1790	3	967	367	740	475	96	2100,-
SL 9130 G02J 01	116496	230V ~	50	8,5	1790	3	967	367	740	475	99	3600,-
SL 9130 H02 01	116529	230V ~	50	3,4	580	2	967	367	740	-	96	1860,-
SL 9130 H02J 01	115671	230V ~	50	3,4	580	2	967	367	740	-	99	3180,-
SL 9140 H02 01	115707	230V ~	50	6,5	1090	3	967	467	740	-	114	3240,-
SL 9140 H02J 01	116669	230V ~	50	6,5	1090	3	967	467	740	-	116	4800,-

J-Varianta cu automatizare

Optional (versiunea J)

- unitate compacta de aport aer proaspat cu automatizare inclusa
- reglaj turatie in 3 trepte
- reglaj temperatura in tubulatura sau in ambient
- comutator integrat
- cea mai simpla instalare



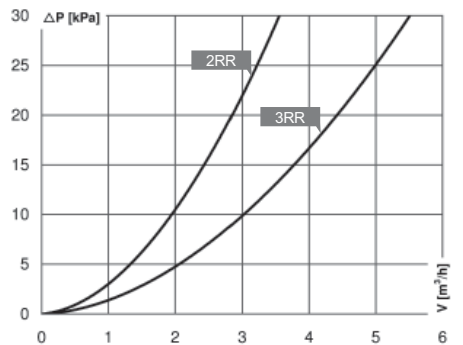
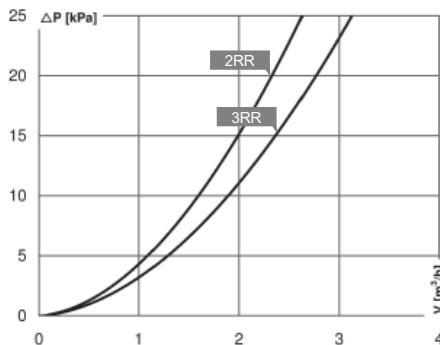
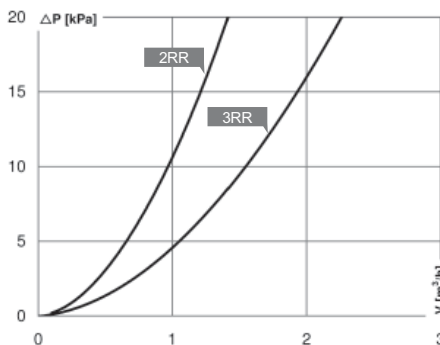
ID 116519 - 115621									ID 116529 - 115671									ID 115707 - 116669											
	Σ	125	250	500	1k	2k	4k	8k		Σ	125	250	500	1k	2k	4k	8k		Σ	125	250	500	1k	2k	4k	8k			
absorbție L _{WA5}									absorbție L _{WA5}									absorbție L _{WA5}											
putere fonica [dB (A)]									putere fonica [dB (A)]									putere fonica [dB (A)]											
P _{st} [Pa]	150	71	48	58	66	67	64	59	47	P _{st} [Pa]	150	74	52	62	69	69	66	60	49	P _{st} [Pa]	150	77	52	66	72	72	69	64	52
	300	72	59	61	68	67	63	59	47		300	75	59	63	72	70	66	60	49		300	78	60	66	73	73	70	64	52
refulare L _{WA6}									refulare L _{WA6}									refulare L _{WA6}											
putere fonica [dB (A)]									putere fonica [dB (A)]									putere fonica [dB (A)]											
P _{st} [Pa]	150	80	52	64	73	77	75	68	60	P _{st} [Pa]	150	83	56	71	76	79	77	71	63	P _{st} [Pa]	150	85	56	75	78	81	79	74	65
	300	81	58	70	75	78	74	68	60		300	84	65	72	78	80	77	71	64		300	86	65	76	80	83	80	74	66
Radiatie L _{WA2}									Radiatie L _{WA2}									Radiatie L _{WA2}											
putere fonica [dB (A)]									putere fonica [dB (A)]									putere fonica [dB (A)]											
P _{st} [Pa]	150	53	42	46	47	46	44	41	34	P _{st} [Pa]	150	56	46	51	49	46	46	45	38	P _{st} [Pa]	150	60	47	56	52	53	51	51	40
	300	56	49	50	49	47	44	41	34		300	58	51	53	51	47	46	45	38		300	63	56	58	54	56	53	51	41

ID 116517 - 116493									ID 116528 - 116496																										
		Σ	125	250	500	1k	2k	4k	8k			Σ	125	250	500	1k	2k	4k	8k																
absorbție L _{WA5}									putere fonica [dB (A)]																										
P _{st} [Pa]	150	73	59	65	65	66	68	64	57	P _{st} [Pa]	150	77	59	69	71	68	71	67	61																
	300	73	59	62	65	67	68	64	56		300	75	58	66	69	67	70	66	59																
refulare L _{WA6}									atenuator scurt									putere fonica [dB (A)]																	
P _{st} [Pa]	150	83	58	66	71	74	79	77	75	P _{st} [Pa]	150	86	60	70	75	78	81	81	79																
	300	82	58	65	71	73	77	76	74		300	85	58	69	73	76	80	79	77																
refulare L _{WA6}									atenuator zgomot									putere fonica [dB (A)]																	
P _{st} [Pa]	150	72	62	67	64	56	55	60	64	P _{st} [Pa]	150	76	63	72	70	62	58	64	67																
	300	70	62	65	64	55	54	60	63		300	73	62	70	67	59	57	62	65																
Radiatie L _{WA2}									putere fonica [dB (A)]									Radiatie L _{WA2}									putere fonica [dB (A)]								
P _{st} [Pa]	150	60	56	54	47	43	48	50	47	P _{st} [Pa]	150	59	54	56	46	47	47	49	47																
	300	59	55	52	46	44	48	50	46		300	58	52	54	45	46	46	47	45																

baterie de incalzire cu apa calda

twapa	t _{Le} intrare aer	dimensiune 61/30												dimensiune 91/30												dimensiune 91/40																																							
		1000 m³/h				1500 m³/h				2000 m³/h				2000 m³/h				2500 m³/h				3000 m³/h				3000 m³/h				3500 m³/h				4000 m³/h																															
		2RR		3RR		2RR		3RR		2RR		3RR		2RR		3RR		2RR		3RR		2RR		3RR		2RR		3RR		2RR		3RR																																	
		t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q																																
																																		°C	kW	°C	kW	°C	kW	°C	kW	°C	kW	°C	kW	°C	kW	°C	kW	°C	kW	°C	kW	°C	kW	°C	kW	°C	kW	°C	kW	°C	kW	°C	kW
60 - 40	-15	29	16	29	17	13	16	24	22	10	19	20	27	15	23	27	32	12	26	24	37	10	29	21	42	13	33	24	45	11	36	22	50	10	39	20	55																												
	-10	33	15	30	15	15	14	25	20	13	17	22	24	17	21	28	29	15	24	26	34	13	27	23	38	16	29	26	41	14	32	24	45	13	35	22	49																												
	-5	35	14	32	14	18	13	27	18	16	15	24	22	20	19	30	26	17	21	28	30	16	24	26	34	18	26	28	37	17	29	26	41	16	31	25	44																												
	0	37	13	33	12	21	11	29	16	18	14	26	19	22	16	32	23	20	19	29	27	19	21	28	30	21	23	29	33	20	26	28	36	19	28	27	39																												
70 - 50	-20	23	15	35	22	15	21	29	29	11	25	24	35	18	30	32	41	14	34	29	48	12	38	26	54	15	42	29	58	13	46	27	64	12	50	25	70																												
	-15	25	14	37	20	18	19	31	27	14	23	26	32	20	27	34	38	17	31	31	44	15	35	28	50	18	39	31	54	16	43	29	59	15	46	27	65																												
	-10	27	13	38	18	21	18	33	24	17	21	29	29	23	25	36	35	20	29	33	41	18	32	30	46	21	36	33	49	19	39	31	55	18	42	29	60																												
	-5	29	12	40	17	24	16	35	22	20	19	31	27	26	23	38	32	23	26	35	37	21	29	32	42	24	32	35	45	22	36	33	50	21	39	31	54																												
80 - 60	-25	24	20	41	27	17	26	34	35	13	30	28	43	20	36	38	50	17	42	33	58	14	47	30	66	18	52	34	71	15	57	31	79	13	61	29	86																												
	-20	27	18	43	25	20	24	36	33	16	28	31	40	23	34	40	47	20	39	35	55	17	44	32	61	21	48	36	67	18	53	34	74	16	57	31	80																												
	-15	29	17	45	23	23	22	38	31	18	26	33	37	26	32	42	44	23	36	38	51	20	41	34	57	24	45	38	62	21	49	36	69	20	54	33	75																												
	-10	32	16	47	21	26	21	40	28	22	25	36	34	29	29	43	40	25	34	40	47	23	37	37	53	27	42	41	57	24	46	38	64	23	50	36	69																												
82 - 71	-10	38	18	53	24	31	23	46	32	27	28	41	39	34	33	49	45	30	38	45	52	28	43	42	59	32	47	47	64	29	52	44	71	27	57	42	78																												
	-5	40	17	55	22	34	22	48	30	30	26	43	36	37	31	51	42	33	36	48	49	31	40	45	55	34	44	49	60	32	49	46	66	30	53	44	73																												
	0	43	16	56	21	37	20	50	27	33	24	46	33	39	28	53	39	36	33	50	45	34	37	47	51	37	41	51	55	35	48	48	62	33	49	46	67																												
110 - 70	-25	33	23	54	32	24	30	44	42	19	35	38	50	28	43	50	60	24	49	44	69	20	54	40	78	25	60	45	84	22	66	42	93	20	72	38	101																												
	-20	35	21	56	30	27	28	47	39	22	33	40	47	31	40	52	56	27	46	47	65	23	51	42	74	28	57	47	80	25	62	44	88	23	67	41	96																												
	-15	38	20	58	28	30	26	49	37	25	31	43	44	34	38	54	53	30	43	49	62	27	48	45	69	31	53	50	75	28	59	46	83	26	63	43	90																												
	-10	40	19	60	26	33	25	51	35	29	29	45	42	36	35	56	50	33	40	51	58	30	45	47	65	34	50	52	70	31	55	49	78	29	59	46	84																												

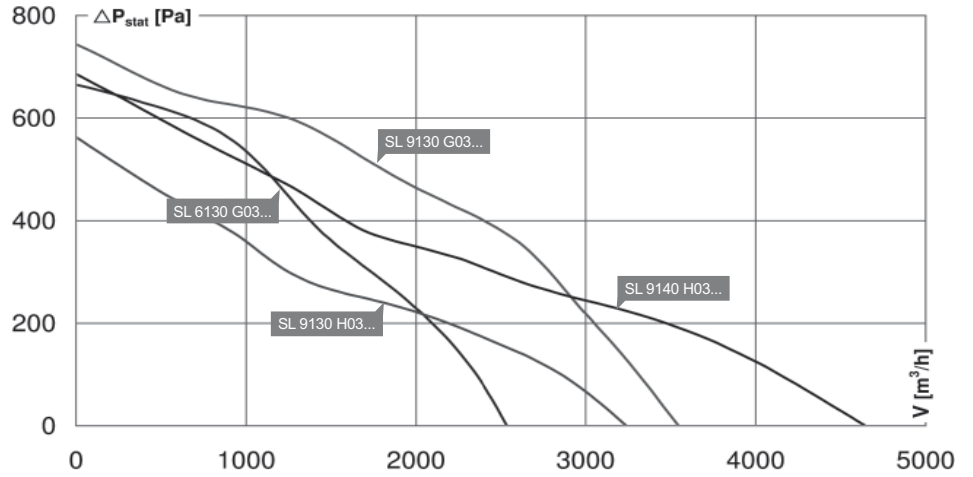
Pierdere de presiune mediu de lucru in bateria de incalzire



caldura $Q = \dot{V}_L * (t_{ia} - t_{ie}) * 1,22 / 3600$ [kW]
 debit apa $\dot{V}_W = Q * 0,86 / (t_{we} - t_{wa})$ [m³/h]

exemplu:
 $\dot{V}_L = 3.000$ m³/h; $t_{ie} / t_{ia} = -15/25$ °C; $t_{we} / t_{wa} = 70/50$ °C

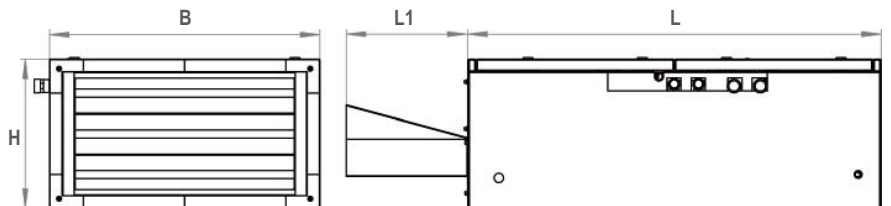
$Q = 3.000 * 40 * 1,22 / 3.600 = 41$ kW
 $\dot{V}_W = 41 * 0,86 / 20 = 1,76$ m³/h



tip	ID	U	f	I _{max.}	P ₁	Numarul de randuri de tevi		B	H	L	L1	greutate	EUR
		[V]	[Hz]			[A]	[W]						
SL 6130 G03 01	116522	230V ~	50	5,2	1100	3	4	667	367	1020	475	85	2680,-
SL 6130 G03J 01	116499	230V ~	50	5,2	1100	3	4	667	367	1020	475	88	4200,-
SL 6130 G03 02	116626	230V ~	50	5,2	1100	3	4	667	367	1020	475	85	2650,-
SL 6130 G03J 02	116625	230V ~	50	5,2	1100	3	4	667	367	1020	475	88	4120,-
SL 9130 G03 01	116535	230V ~	50	8,3	1620	3	4	967	367	1020	475	120	3180,-
SL 9130 G03J 01	116502	230V ~	50	8,3	1620	3	4	967	367	1020	475	123	4760,-
SL 9130 G03 02	116630	230V ~	50	8,3	1620	3	4	967	367	1020	475	120	3180,-
SL 9130 G03J 02	116629	230V ~	50	8,3	1620	3	4	967	367	1020	475	123	4700,-
SL 9130 H03 01	116537	230V ~	50	3,3	540	2	3	967	367	1020	-	120	2800,-
SL 9130 H03J 01	116486	230V ~	50	3,3	540	2	3	967	367	1020	-	123	4440,-
SL 9130 H03 02	116632	230V ~	50	3,3	540	2	4	967	367	1020	-	120	2880,-
SL 9130 H03J 02	116631	230V ~	50	3,3	540	2	4	967	367	1020	-	123	4320,-
SL 9140 H03 01	116886	230V ~	50	6,3	1040	3	4	967	467	1020	-	138	5140,-
SL 9140 H03J 01	117195	230V ~	50	6,3	1040	3	4	967	467	1020	-	140	6790,-
SL 9140 H03 02	116887	230V ~	50	6,3	1040	3	4	967	467	1020	-	138	5060,-
SL 9140 H03J 02	116888	230V ~	50	6,3	1040	3	4	967	467	1020	-	140	6690,-

J-Varianta cu automatizare

- unitate compacta de aport aer proaspat cu automatizare inclusa
- reglaj turatie in 3 trepte
- reglaj temperatura in tubulatura sau in ambient
- comutator integrat
- cea mai simpla instalare



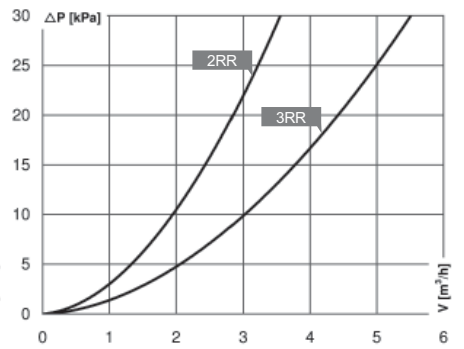
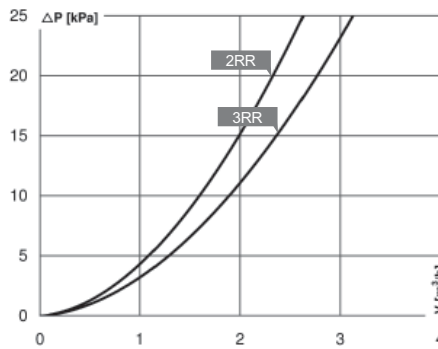
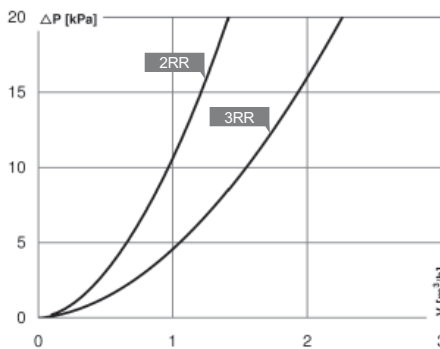
ID 116537 - 116486 - 116632 - 116631									ID 116886 - 117195 - 116887 - 116888										
	Σ	125	250	500	1k	2k	4k	8k		Σ	125	250	500	1k	2k	4k	8k		
absorbție L_{WA5}									absorbție L_{WA5}										
putere fonica [dB (A)]									putere fonica [dB (A)]										
P _{st} [Pa]	150	74	55	65	71	69	65	58	44	P _{st} [Pa]	150	77	55	63	72	73	69	62	47
	300	74	62	61	71	68	64	58	45		300	78	65	65	73	73	69	62	47
refulare L_{WA6}									refulare L_{WA6}										
atenuator scurt									atenuator scurt										
P _{st} [Pa]	150	85	59	75	78	81	78	71	63	P _{st} [Pa]	150	86	59	71	78	83	80	74	66
	300	84	64	71	78	80	77	72	65		300	88	69	75	81	84	81	75	67
Radiatie L_{WA2}									Radiatie L_{WA2}										
atenuator zgomot									atenuator zgomot										
P _{st} [Pa]	150	58	51	55	51	47	44	42	33	P _{st} [Pa]	150	60	51	53	52	54	51	49	37
	300	60	57	53	52	47	45	44	35		300	65	62	57	56	56	54	50	38

ID 116522 - 116499 - 116626 - 116625								ID 116535 - 116502 - 116630 - 116629											
Σ		125	250	500	1k	2k	4k	8k	Σ		125	250	500	1k	2k	4k	8k		
absorbție LW _{A5}				putere fonica [dB (A)]				absorbție LW _{A5}				putere fonica [dB (A)]							
P _{st} [Pa]	150	71	57	61	62	65	66	60	49	P _{st} [Pa]	150	74	58	66	69	66	68	63	53
	300	72	58	63	65	66	65	59	49		300	74	58	64	68	67	68	62	51
refulare LW _{A6}				atenuator scurt				refulare LW _{A6}				atenuator scurt							
P _{st} [Pa]	150	82	56	64	71	73	77	75	73	P _{st} [Pa]	150	86	61	69	74	77	81	80	77
	300	81	60	66	72	74	76	75	73		300	84	59	67	73	75	80	78	76
refulare LW _{A6}				atenuator zgomot				refulare LW _{A6}				atenuator zgomot							
P _{st} [Pa]	150	69	59	64	63	54	53	58	62	P _{st} [Pa]	150	73	62	69	67	59	56	63	66
	300	71	62	66	65	56	53	58	61		300	72	61	67	66	57	55	62	64
Radiatie LW _{A2}				putere fonica [dB (A)]				Radiatie LW _{A2}				putere fonica [dB (A)]							
P _{st} [Pa]	150	57	55	51	45	42	46	45	38	P _{st} [Pa]	150	58	52	54	44	45	45	46	42
	300	59	55	53	48	44	45	44	38		300	57	51	53	44	45	45	45	41

baterie de incalzire cu apa calda

twapa	t _{Le} intrare aer	dimensiune 61/30												dimensiune 91/30												dimensiune 91/40											
		1000 m³/h				1500 m³/h				2000 m³/h				2000 m³/h				2500 m³/h				3000 m³/h				3000 m³/h				3500 m³/h				4000 m³/h			
		2RR		3RR		2RR		3RR		2RR		3RR		2RR		3RR		2RR		3RR		2RR		3RR		2RR		3RR		2RR		3RR					
		t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q						
°C		kW		°C		kW		°C		kW		°C		kW		°C		kW		°C		kW		°C		kW		°C		kW							
60 - 40	-15	29	16	29	17	13	16	24	22	10	19	20	27	15	23	27	32	12	26	24	37	10	29	21	42	13	33	24	45	11	36	22	50	10	39	20	55
	-10	33	15	30	15	15	14	25	20	13	17	22	24	17	21	28	29	15	24	26	34	13	27	23	38	16	29	26	41	14	32	24	45	13	35	22	49
	-5	35	14	32	14	18	13	27	18	16	15	24	22	20	19	30	26	17	21	28	30	16	24	26	34	18	26	28	37	17	29	26	41	16	31	25	44
	0	37	13	33	12	21	11	29	16	18	14	26	19	22	16	32	23	20	19	29	27	19	21	28	30	21	23	29	33	20	26	28	36	19	28	27	39
70 - 50	-20	23	15	35	22	15	21	29	29	11	25	24	35	18	30	32	41	14	34	29	48	12	38	26	54	15	42	29	58	13	46	27	64	12	50	25	70
	-15	25	14	37	20	18	19	31	27	14	23	26	32	20	27	34	38	17	31	31	44	15	35	28	50	18	39	31	54	16	43	29	59	15	46	27	65
	-10	27	13	38	18	21	18	33	24	17	21	29	29	23	25	36	35	20	29	33	41	18	32	30	46	21	36	33	49	19	39	31	55	18	42	29	60
	-5	29	12	40	17	24	16	35	22	20	19	31	27	26	23	38	32	23	26	35	37	21	29	32	42	24	32	35	45	22	36	33	50	21	39	31	54
80 - 60	-25	24	20	41	27	17	26	34	35	13	30	28	43	20	36	38	50	17	42	33	58	14	47	30	66	18	52	34	71	15	57	31	79	13	61	29	86
	-20	27	18	43	25	20	24	36	33	16	28	31	40	23	34	40	47	20	39	35	55	17	44	32	61	21	48	36	67	18	53	34	74	16	57	31	80
	-15	29	17	45	23	23	22	38	31	18	26	33	37	26	32	42	44	23	36	38	51	20	41	34	57	24	45	38	62	21	49	36	69	20	54	33	75
	-10	32	16	47	21	26	21	40	28	22	25	36	34	29	29	43	40	25	34	40	47	23	37	37	53	27	42	41	57	24	46	38	64	23	50	36	69
82 - 71	-10	38	18	53	24	31	23	46	32	27	28	41	39	34	33	49	45	30	38	45	52	28	43	42	59	32	47	47	64	29	52	44	71	27	57	42	78
	-5	40	17	55	22	34	22	48	30	30	26	43	36	37	31	51	42	33	36	48	49	31	40	45	55	34	44	49	60	32	49	46	66	30	53	44	73
	0	43	16	56	21	37	20	50	27	33	24	46	33	39	28	53	39	36	33	50	45	34	37	47	51	37	41	51	55	35	48	62	33	49	46	67	
110 - 70	-25	33	23	54	32	24	30	44	42	19	35	38	50	28	43	50	60	24	49	44	69	20	54	40	78	25	60	45	84	22	66	42	93	20	72	38	101
	-20	35	21	56	30	27	28	47	39	22	33	40	47	31	40	52	56	27	46	47	65	23	51	42	74	28	57	47	80	25	62	44	88	23	67	41	96
	-15	38	20	58	28	30	26	49	37	25	31	43	44	34	38	54	53	30	43	49	62	27	48	45	69	31	53	50	75	28	59	46	83	26	63	43	90
	-10	40	19	60	26	33	25	51	35	29	29	45	42	36	35	56	50	33	40	51	58	30	45	47	65	34	50	52	70	31	55	49	78	29	59	46	84

Pierdere de presiune mediu de lucru in bateria de incalzire



caldura $Q = \dot{V}_L * (t_{ia} - t_{ie}) * 1,22 / 3600$ [kW]
 debit apa $\dot{V}_W = Q * 0,86 / (t_{we} - t_{wa})$ [m³/h]

exemplu:
 $\dot{V}_L = 3.000 \text{ m}^3/\text{h}; t_{ie} / t_{ia} = -15/25^\circ\text{C}; t_{we} / t_{wa} = 70/50^\circ\text{C}$

$Q = 3.000 * 40 * 1,22 / 3.600 = 41 \text{ kW}$
 $\dot{V}_W = 41 * 0,86 / 20 = 1,76 \text{ m}^3/\text{h}$

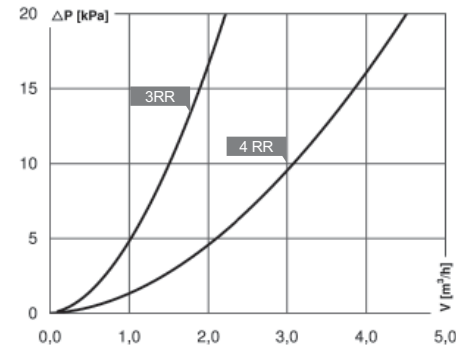
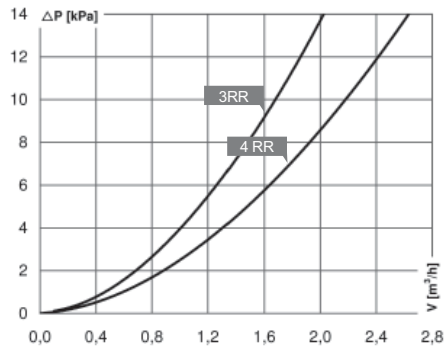
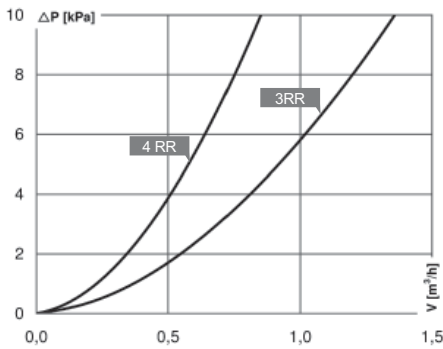
Baterie de racire cu apa

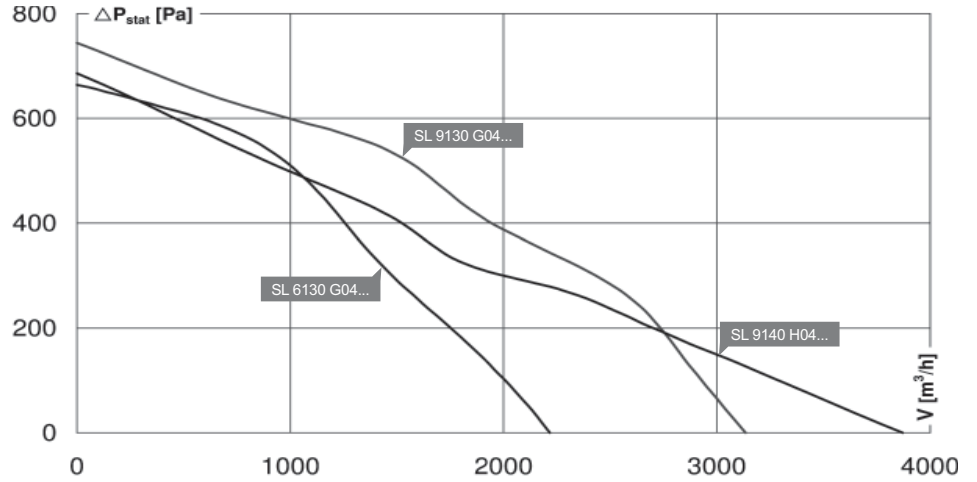
t _{we} apa	intrare aer	dimensiune 61/30						dimensiune 91/30						dimensiune 91/40					
		debit aer \dot{V}_L						debit aer \dot{V}_L						debit aer \dot{V}_L					
		1000 m ³ /h		1500 m ³ /h		2000 m ³ /h		2000 m ³ /h		2500 m ³ /h		3000 m ³ /h		3000 m ³ /h		3500 m ³ /h		4000 m ³ /h	
		3RR		3RR		3RR		3RR		3RR		3RR		3RR		3RR		3RR	
		t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q
°C		kW		°C		kW		°C		kW		°C		kW		°C		kW	
6 - 12	32 °C 40 % r.F.	19	5,5	21	7,4	22	9	20	11	21	13	21	14	20	15	21	17	21	18
		4RR		4RR		4RR		4RR		4RR		4RR		4RR		4RR		4RR	
		t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q
		°C <td colspan="2">kW <td colspan="2">°C <td colspan="2">kW <td colspan="2">°C <td colspan="2">kW <td colspan="2">°C <td colspan="2">kW <td colspan="2">°C <td colspan="2">kW</td> </td></td></td></td></td></td></td></td>		kW <td colspan="2">°C <td colspan="2">kW <td colspan="2">°C <td colspan="2">kW <td colspan="2">°C <td colspan="2">kW <td colspan="2">°C <td colspan="2">kW</td> </td></td></td></td></td></td></td>		°C <td colspan="2">kW <td colspan="2">°C <td colspan="2">kW <td colspan="2">°C <td colspan="2">kW <td colspan="2">°C <td colspan="2">kW</td> </td></td></td></td></td></td>		kW <td colspan="2">°C <td colspan="2">kW <td colspan="2">°C <td colspan="2">kW <td colspan="2">°C <td colspan="2">kW</td> </td></td></td></td></td>		°C <td colspan="2">kW <td colspan="2">°C <td colspan="2">kW <td colspan="2">°C <td colspan="2">kW</td> </td></td></td></td>		kW <td colspan="2">°C <td colspan="2">kW <td colspan="2">°C <td colspan="2">kW</td> </td></td></td>		°C <td colspan="2">kW <td colspan="2">°C <td colspan="2">kW</td> </td></td>		kW <td colspan="2">°C <td colspan="2">kW</td> </td>		°C <td colspan="2">kW</td>	
		16	7	17	10	19	12	16	14	18	16	19	18	18	19	19	21	20	23

Baterie de racire detenta directa

Detenta directa	intrare aer	dimensiune 61/30						dimensiune 91/30						dimensiune 91/40					
		debit aer \dot{V}_L						debit aer \dot{V}_L						debit aer \dot{V}_L					
		1000 m ³ /h		1500 m ³ /h		2000 m ³ /h		2000 m ³ /h		2500 m ³ /h		3000 m ³ /h		3000 m ³ /h		3500 m ³ /h		4000 m ³ /h	
		4RR		4RR		4RR		4RR		4RR		4RR		4RR		4RR		4RR	
		t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q
°C		kW		°C		kW		°C		kW		°C		kW		°C		kW	
6 °C (R407)	32 °C 40 % r.F.	14	9	16	12	17	14	15	17	16	20	17	22	15	25	16	28	17	30

Pierdere de presiune mediu de lucru in bateria de racire

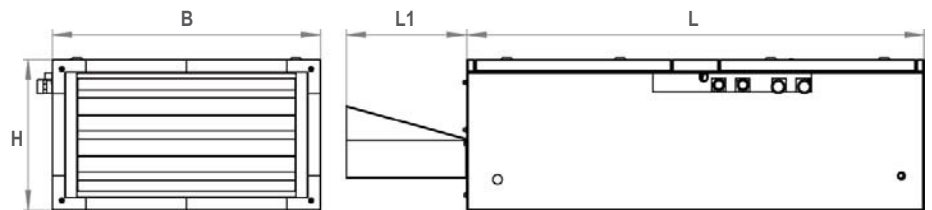




tip	ID	U	f	I _{max.}	P ₁	Numarul de randuri de tevi		B	H	L	L1	greutate	EUR
		[V]	[Hz]			Baterie de incalzire	baterie racire						
SL 6130 G04 01	116784	230V ~	50	4,8	1000	3	4	667	367	1138	475	105	2960,-
SL 6130 G04J 01	116783	230V ~	50	4,8	1000	3	4	667	367	1138	475	108	4550,-
SL 6130 G04 02	116787	230V ~	50	4,8	1000	3	4	667	367	1138	475	105	2960,-
SL 6130 G04J 02	116786	230V ~	50	4,8	1000	3	4	667	367	1138	475	108	4480,-
SL 9130 G04 01	116920	230V ~	50	7,8	1440	3	4	967	367	1138	475	135	3480,-
SL 9130 G04J 01	117196	230V ~	50	7,8	1440	3	4	967	367	1138	475	138	5600,-
SL 9130 G04 02	116921	230V ~	50	7,8	1440	3	4	967	367	1138	475	135	3480,-
SL 9130 G04J 02	116922	230V ~	50	7,8	1440	3	4	967	367	1138	475	138	5100,-
SL 9140 H04 01	116930	230V ~	50	5,9	990	3	4	967	467	1138	-	153	5500,-
SL 9140 H04J 01	117197	230V ~	50	5,9	990	3	4	967	467	1138	-	155	7300,-
SL 9140 H04 02	116932	230V ~	50	5,9	990	3	4	967	467	1138	-	153	5500,-
SL 9140 H04J 02	116935	230V ~	50	5,9	990	3	4	967	467	1138	-	155	7200,-

J-Varianta cu automatizare

- unitate compacta de aport aer proaspat cu automatizare inclusa
- reglaj turatie in 3 trepte
- reglaj temperatura in tubulatura sau in ambient
- comutator integrat
- cea mai simpla instalare



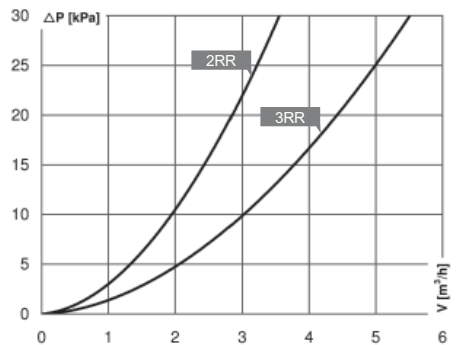
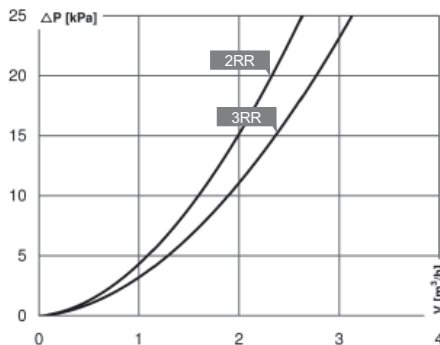
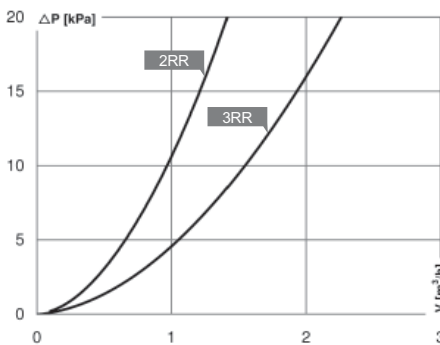
ID 116930 - 117197 - 116932 - 116935									
	Σ	125	250	500	1k	2k	4k	8k	
absorbție L _{WA5}		putere fonica [dB (A)]							
P _{st} [Pa]	150	77	55	63	72	73	69	62	47
	300	78	65	65	73	73	69	62	47
refulare L _{WA6}		atenuator scurt		putere fonica [dB (A)]					
P _{st} [Pa]	150	86	59	71	78	83	80	74	66
	300	88	69	75	81	84	81	75	67
Radiatie L _{WA2}		atenuator zgomot		putere fonica [dB (A)]					
P _{st} [Pa]	150	60	51	53	52	54	51	49	37
	300	65	62	57	56	56	54	50	38

ID 116784 - 116783 - 116787 - 116786									ID 116920 - 117196 - 116921 - 116922										
	Σ	125	250	500	1k	2k	4k	8k		Σ	125	250	500	1k	2k	4k	8k		
absorbție L _{WA5}									absorbție L _{WA5}										
putere fonica [dB (A)]									putere fonica [dB (A)]										
P _{st} [Pa]	150	71	57	61	62	65	66	60	49	P _{st} [Pa]	150	74	58	66	69	66	68	63	53
	300	72	58	63	65	66	65	59	49		300	74	58	64	68	67	68	62	51
refulare L _{WA6}									refulare L _{WA6}										
atenuator scurt									atenuator scurt										
P _{st} [Pa]	150	82	56	64	71	73	77	75	73	P _{st} [Pa]	150	86	61	69	74	77	81	80	77
	300	81	60	66	72	74	76	75	73		300	84	59	67	73	75	80	78	76
refulare L _{WA6}									refulare L _{WA6}										
atenuator zgomot									atenuator zgomot										
P _{st} [Pa]	150	69	59	64	63	54	53	58	62	P _{st} [Pa]	150	73	62	69	67	59	56	63	66
	300	71	62	66	65	56	53	58	61		300	72	61	67	66	57	55	62	64
Radiatie L _{WA2}									Radiatie L _{WA2}										
putere fonica [dB (A)]									putere fonica [dB (A)]										
P _{st} [Pa]	150	57	55	51	45	42	46	45	38	P _{st} [Pa]	150	58	52	54	44	45	45	46	42
	300	59	55	53	48	44	45	44	38		300	57	51	53	44	45	45	45	41

baterie de incalzire cu apa calda

twapa	t _{Le} intrare aer	dimensiune 61/30												dimensiune 91/30												dimensiune 91/40											
		1000 m³/h				1500 m³/h				2000 m³/h				2000 m³/h				2500 m³/h				3000 m³/h				3000 m³/h				3500 m³/h				4000 m³/h			
		2RR		3RR		2RR		3RR		2RR		3RR		2RR		3RR		2RR		3RR		2RR		3RR		2RR		3RR		2RR		3RR					
		t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q	t _{ia}	Q				
	°C	kW	°C	kW	°C	kW	°C	kW	°C	kW	°C	kW	°C	kW	°C	kW	°C	kW	°C	kW	°C	kW	°C	kW	°C	kW	°C	kW	°C	kW	°C	kW					
60 - 40	-15	29	16	29	17	13	16	24	22	10	19	20	27	15	23	27	32	12	26	24	37	10	29	21	42	13	33	24	45	11	36	22	50	10	39	20	55
	-10	33	15	30	15	15	14	25	20	13	17	22	24	17	21	28	29	15	24	26	34	13	27	23	38	16	29	26	41	14	32	24	45	13	35	22	49
	-5	35	14	32	14	18	13	27	18	16	15	24	22	20	19	30	26	17	21	28	30	16	24	26	34	18	26	28	37	17	29	26	41	16	31	25	44
	0	37	13	33	12	21	11	29	16	18	14	26	19	22	16	32	23	20	19	29	27	19	21	28	30	21	23	29	33	20	26	28	36	19	28	27	39
70 - 50	-20	23	15	35	22	15	21	29	29	11	25	24	35	18	30	32	41	14	34	29	48	12	38	26	54	15	42	29	58	13	46	27	64	12	50	25	70
	-15	25	14	37	20	18	19	31	27	14	23	26	32	20	27	34	38	17	31	31	44	15	35	28	50	18	39	31	54	16	43	29	59	15	46	27	65
	-10	27	13	38	18	21	18	33	24	17	21	29	29	23	25	36	35	20	29	33	41	18	32	30	46	21	36	33	49	19	39	31	55	18	42	29	60
	-5	29	12	40	17	24	16	35	22	20	19	31	27	26	23	38	32	23	26	35	37	21	29	32	42	24	32	35	45	22	36	33	50	21	39	31	54
80 - 60	-25	24	20	41	27	17	26	34	35	13	30	28	43	20	36	38	50	17	42	33	58	14	47	30	66	18	52	34	71	15	57	31	79	13	61	29	86
	-20	27	18	43	25	20	24	36	33	16	28	31	40	23	34	40	47	20	39	35	55	17	44	32	61	21	48	36	67	18	53	34	74	16	57	31	80
	-15	29	17	45	23	23	22	38	31	18	26	33	37	26	32	42	44	23	36	38	51	20	41	34	57	24	45	38	62	21	49	36	69	20	54	33	75
	-10	32	16	47	21	26	21	40	28	22	25	36	34	29	29	43	40	25	34	40	47	23	37	37	53	27	42	41	57	24	46	38	64	23	50	36	69
82 - 71	-10	38	18	53	24	31	23	46	32	27	28	41	39	34	33	49	45	30	38	45	52	28	43	42	59	32	47	47	64	29	52	44	71	27	57	42	78
	-5	40	17	55	22	34	22	48	30	30	26	43	36	37	31	51	42	33	36	48	49	31	40	45	55	34	44	49	60	32	49	46	66	30	53	44	73
	0	43	16	56	21	37	20	50	27	33	24	46	33	39	28	53	39	36	33	50	45	34	37	47	51	37	41	51	55	35	45	48	62	33	49	46	67
110 - 70	-25	33	23	54	32	24	30	44	42	19	35	38	50	28	43	50	60	24	49	44	69	20	54	40	78	25	60	45	84	22	66	42	93	20	72	38	101
	-20	35	21	56	30	27	28	47	39	22	33	40	47	31	40	52	56	27	46	47	65	23	51	42	74	28	57	47	80	25	62	44	88	23	67	41	96
	-15	38	20	58	28	30	26	49	37	25	31	43	44	34	38	54	53	30	43	49	62	27	48	45	69	31	53	50	75	28	59	46	83	26	63	43	90
	-10	40	19	60	26	33	25	51	35	29	29	45	42	36	35	56	50	33	40	51	58	30	45	47	65	34	50	52	70	31	55	49	78	29	59	46	84

Pierdere de presiune mediu de lucru in bateria de incalzire



caldura $Q = \dot{V}_L * (t_{ia} - t_{ie}) * 1,22 / 3600$ [kW]
 debit apa $\dot{V}_W = Q * 0,86 / (t_{we} - t_{wa})$ [m³/h]

exemplu:
 $\dot{V}_L = 3.000$ m³/h; $t_{ie} / t_{ia} = -15/25$ °C; $t_{we} / t_{wa} = 70/50$ °C

$Q = 3.000 * 40 * 1,22 / 3.600 = 41$ kW
 $\dot{V}_W = 41 * 0,86 / 20 = 1,76$ m³/h

Baterie de racire cu apa

t _{we} apa	intrare aer	dimensiune 61/30						dimensiune 91/30						dimensiune 91/40					
		debit aer \dot{V}_L						debit aer \dot{V}_L						debit aer \dot{V}_L					
		1000 m ³ /h		1500 m ³ /h		2000 m ³ /h		2000 m ³ /h		2500 m ³ /h		3000 m ³ /h		3000 m ³ /h		3500 m ³ /h		4000 m ³ /h	
		3RR		3RR		3RR		3RR		3RR		3RR		3RR		3RR		3RR	
		t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q
°C		kW		°C		kW		°C		kW		°C		kW		°C		kW	
6 - 12	32 °C 40 % r.F.	19	5,5	21	7,4	22	9	20	11	21	13	21	14	20	15	21	17	21	18
		4RR		4RR		4RR		4RR		4RR		4RR		4RR		4RR		4RR	
		t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q
		°C		kW		°C		kW		°C		kW		°C		kW		°C	
		16	7	17	10	19	12	16	14	18	16	19	18	18	19	19	21	20	23

Baterie de racire detenta directa

Detenta directa	intrare aer	dimensiune 61/30						dimensiune 91/30						dimensiune 91/40					
		debit aer \dot{V}_L						debit aer \dot{V}_L						debit aer \dot{V}_L					
		1000 m ³ /h		1500 m ³ /h		2000 m ³ /h		2000 m ³ /h		2500 m ³ /h		3000 m ³ /h		3000 m ³ /h		3500 m ³ /h		4000 m ³ /h	
		4RR		4RR		4RR		4RR		4RR		4RR		4RR		4RR		4RR	
		t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q	t _{La}	Q
°C		kW		°C		kW		°C		kW		°C		kW		°C		kW	
6 °C (R407)	32 °C 40 % r.F.	14	9	16	12	17	14	15	17	16	20	17	22	15	25	16	28	17	30

Pierdere de presiune mediu de lucru in bateria de racire

