

Rectangular duct fans



RS

- Speed-controllable
- Integral thermal contacts
- Can be installed in any position
- Maintenance-free and reliable

The RS models have impellers with backward-curved blades and external rotor motors. The motor and impeller are mounted on the access cover to facilitate easy maintenance. To protect the motor from overheating RS 30-15 to 50-25 have an integral thermal contact with electrical reset, RS 60-35 M to 100-50 have integral thermal contacts with external leads for connection to a motor protection device. The fans can be installed in any position and are simple to couple using DS flexible-connections. The casing is manufactured from galvanised sheet steel.

ELECTRICAL ACCESSORIES



S-ET/STD T
p. 341-342



RTRE p. 320



RE p. 320



REU p. 320

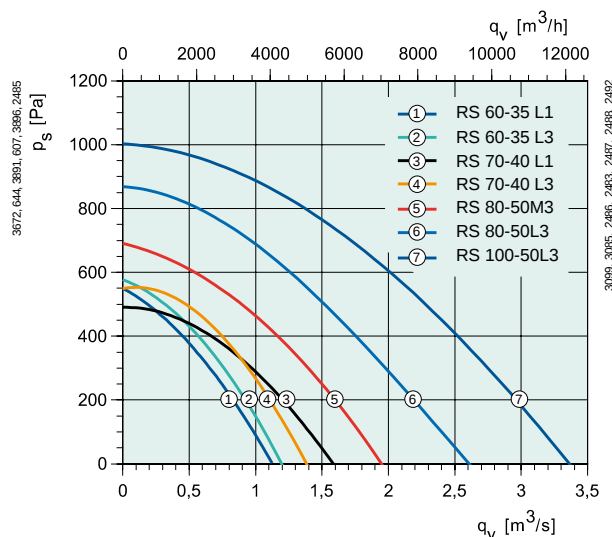
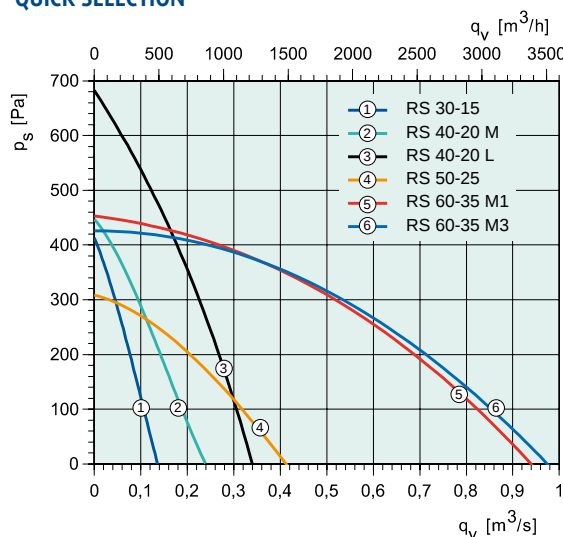


REE p. 321



RTRD/RTRDU
p. 321

QUICK SELECTION

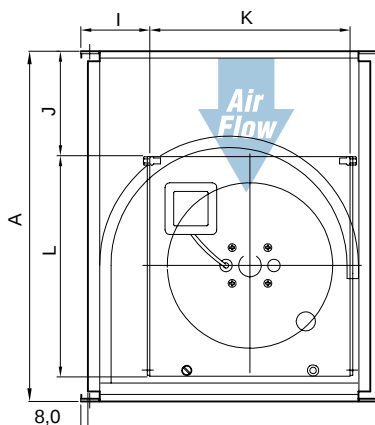
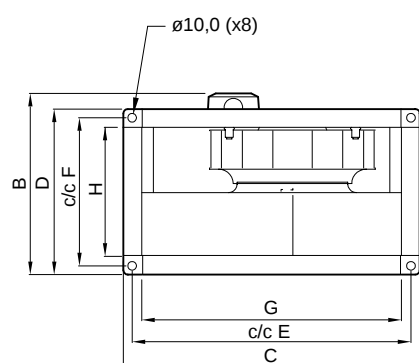


TECHNICAL DATA

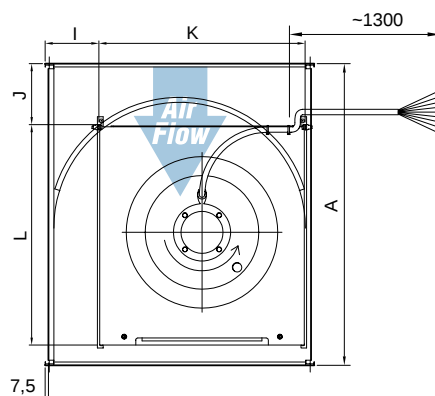
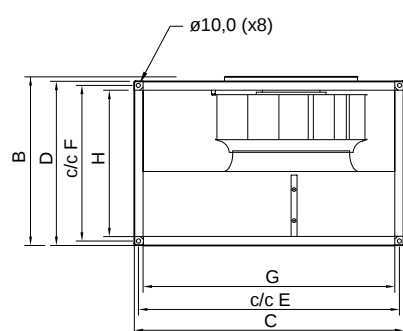
RS		30-15	40-20 M	40-20 L	50-25	60-35 M1	60-35 M3	60-35 L1
Art no.		1435	1439	1443	1447	1795	1796	2046
Voltage/Frequency	V/50 Hz	230 1~	230 1~	230 1~	230 1~	230 1~	400 3~	230 1~
Power	W	59.9	106	208	138	401	399	626
Current	A	0.264	0.461	0.926	0.604	1.91	0.795	2.80
Max air flow	m³/s	0.135	0.238	0.342	0.411	0.941	0.974	1.12
R.p.m.	min ⁻¹	2431	2597	2556	1362	1365	1371	1308
Max temp. of transported air	°C	70	70	65	53	70	70	70
" when speed controlled	°C	70	70	65	53	70	70	70
Sound pressure level at 3 m	dB(A)	48	52	53	46	58	58	58
Weight	kg	6.8	11.8	12.8	17	33.4	32.2	37.2
Insulation class, motor		B	B	F	B	F	F	F
Enclosure class, motor		IP 44	IP 44	IP 44	IP 44	IP 54	IP 54	IP 54
Capacitor	µF	2	3	5	5	8	-	14
Motor protection		Integral	Integral	Integral	Integral	S-ET 10	STD T 16	S-ET 10
Speed control, five-step	Transformer	RE 1.5	RE 1.5	RE 1.5	RE 1.5	RTRE 3*	RTRD 2	RTRE 3*
Speed control, five step high/low	Transformer	REU 1.5	REU 1.5	REU 1.5	REU 1.5	REU 3	RTRDU 2	REU 3
Speed control, stepless	Thyristor	REE 1	REE 1	REE 1	REE 1	REE 2*	-	REE 4*
Wiring diagram p. 391-400		2	2	2	2	6	8	6

* + S-ET 10

DIMENSIONS



RS	A	B	C	D	E	F	G	H	I	J	K	L
30-15	402	217	340	190	320	170	298	148	79	120	230	254
40-20 M	502	267	440	240	420	220	398	198	99	125	310	352
40-20 L	502	267	440	240	420	220	398	198	99	125	310.5	352.5
50-25	532	317	540	290	520	270	498	248	125	85.5	366	423



RS	A	B	C	D	E	F	G	H	I	J	K	L
60-35 M/L	717	402	640	390	620	370	598	348	128	145	490	524
70-40 L	787	452	740	440	720	420	698	398	189.5	215	490	524
80-50 L	882	573	840	541	820	520	798	498	182.5	190	614	644
100-50 L	982	583	1040	541	1020	520	998	498	298.5	290	614	644

RS		60-35 L3	70-40 L1	70-40 L3	80-50 M3	80-50 L3	100-50 L3
Art no.		2047	1797	1798	1799	1800	1801
Voltage/Frequency	V/50 Hz	400 3~	230 1~	400 3~	400 3~	400 3~	400 3~
Power	W	667	623	704	1089	1893	2962
Current	A	1.59	2.84	1.70	1.97	3.60	5.09
Max air flow	m ³ /s	1.21	1.59	1.39	1.96	2.60	3.36
R.p.m.	min ⁻¹	1408	1308	1410	1335	1385	1361
Max temp. of transported air	°C	70	67	70	70	70	70
" when speed controlled	°C	70	67	70	55	64	51
Sound pressure level at 3 m	dB(A)	61	60	61	60	63	65
Weight	kg	37	41.8	41.4	59.5	71.5	96.5
Insulation class, motor		F	F	F	F	F	F
Enclosure class, motor		IP 54	IP 54	IP 54	IP 54	IP 54	IP 54
Motor protection		STD 16	S-ET 10	STD 16	STD 16	STD 16	STD 16
Speed control, five-step	Transformer	RTRD 2	RTRE 5	RTRD 2	RTRD 4	RTRD 7	RTDR 7
Speed control, five step high/low	Transformer	RTRDU 2	REU 5*	RTRDU 2	RTRDU 4	RTRDU 7	RTRDU 7
Speed control, stepless	Thyristor	-	REE 4*	-	-	-	-
Wiring diagram p. 391-400		8	6	8	8	8	8

VENTILATION ACCESSORIES



DS p. 363



VK p. 368



LDR p. 358



FFK p. 355



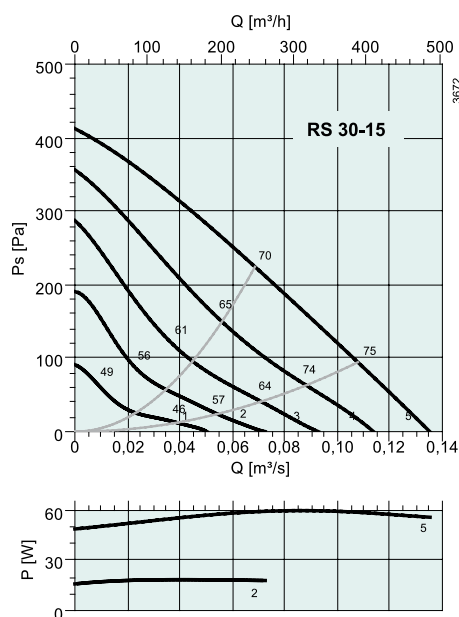
RB p. 359



VBR p. 365

Rectangular duct fans

PERFORMANCE

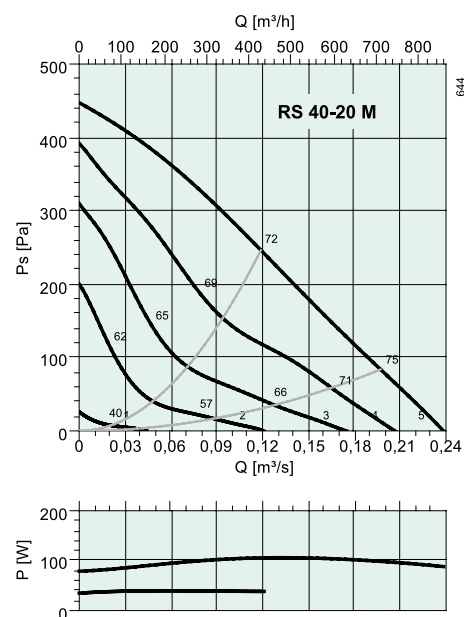


dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	69	47	59	67	59	58	56	50	41
L _{WA} Outlet	72	51	56	69	66	64	61	54	46
L _{WA} Surrounding	55	29	36	53	48	47	44	38	30

With LDR 30-15

L _{WA} Inlet	56	47	52	52	41	33	31	31	22
L _{WA} Outlet	57	51	49	54	48	39	36	35	27

Measurement point: 0,0686 m³/s; 224 Pa

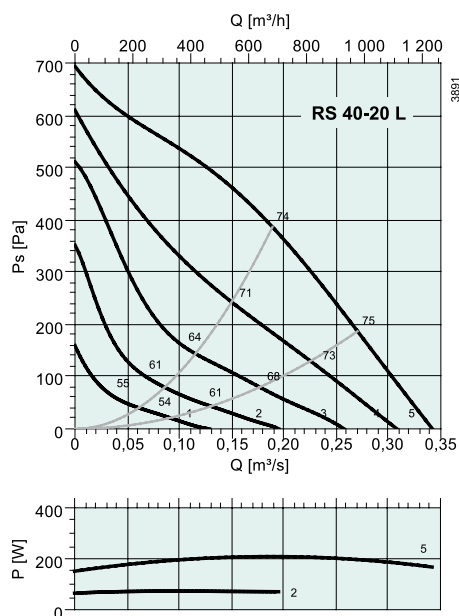


dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	71	52	64	66	63	64	59	54	46
L _{WA} Outlet	74	51	62	67	70	67	65	60	48
L _{WA} Surrounding	59	37	49	56	54	49	46	41	34

With LDR 40-20

L _{WA} Inlet	62	52	59	57	48	41	43	42	36
L _{WA} Outlet	62	51	57	58	55	44	49	48	38

Measurement point: 0,119 m³/s; 246 Pa

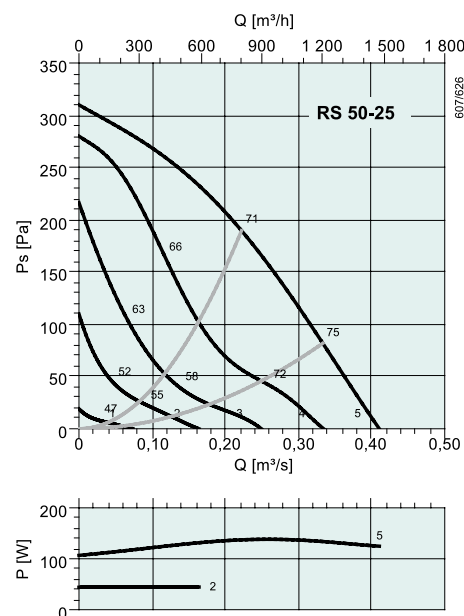


dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	73	53	58	65	66	68	64	61	57
L _{WA} Outlet	77	51	57	66	72	71	71	64	59
L _{WA} Surrounding	60	34	42	51	57	53	52	47	45

With LDR 40-20

L _{WA} Inlet	61	53	53	56	51	45	48	49	47
L _{WA} Outlet	63	51	52	57	57	48	55	52	49

Measurement point: 0,189 m³/s; 386 Pa

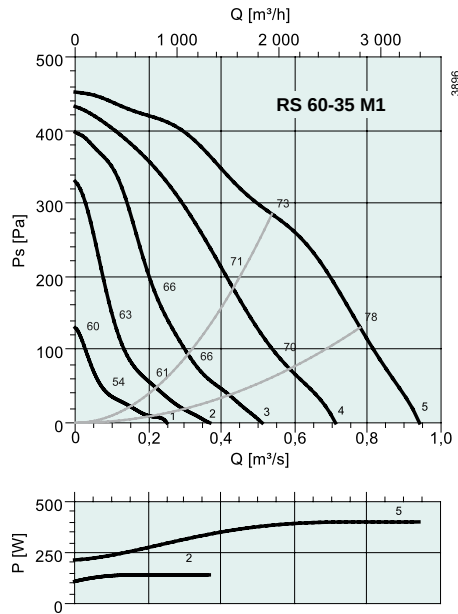


dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	68	59	66	60	55	56	50	47	45
L _{WA} Outlet	69	54	65	63	62	60	57	49	42
L _{WA} Surrounding	53	40	48	49	44	41	37	35	37

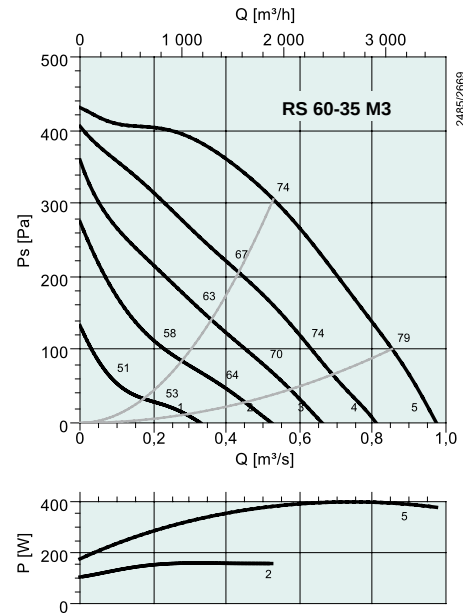
With LDR 50-25

L _{WA} Inlet	61	59	56	45	30	31	30	32	33
L _{WA} Outlet	58	54	55	48	37	35	37	34	30

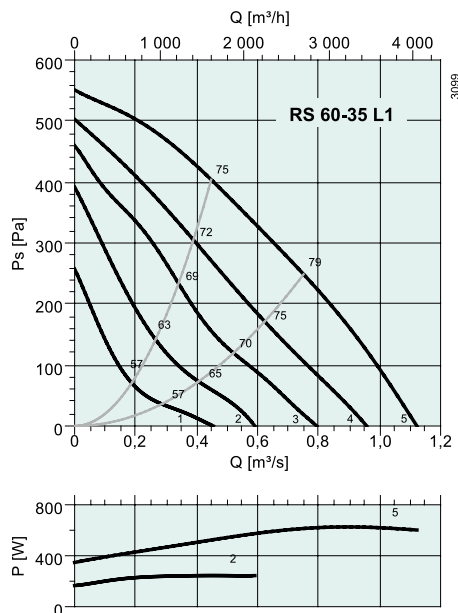
Measurement point: 0,222 m³/s; 190 Pa



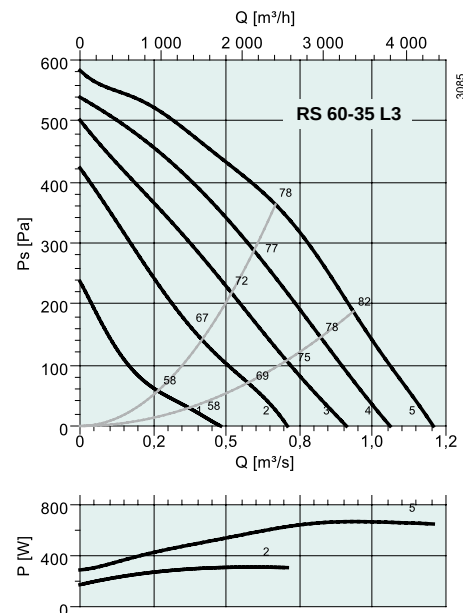
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	73	57	61	70	67	64	63	56	47
L _{WA} Outlet	81	60	68	78	74	73	70	61	50
L _{WA} Surrounding	65	41	54	62	56	56	53	46	37
With LDR 60-35									
L _{WA} Inlet	62	57	54	57	50	46	50	46	39
L _{WA} Outlet	68	60	61	65	57	55	57	51	42
Measurement point: 0,538 m³/s; 285 Pa									



dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	74	59	62	69	68	65	64	59	52
L _{WA} Outlet	79	57	65	74	72	71	70	62	53
L _{WA} Surrounding	65	44	54	63	55	55	53	48	38
With LDR 60-35									
L _{WA} Inlet	63	59	55	56	51	47	51	49	44
L _{WA} Outlet	66	57	58	61	55	53	57	52	45
Measurement point: 0,528 m³/s; 306 Pa									

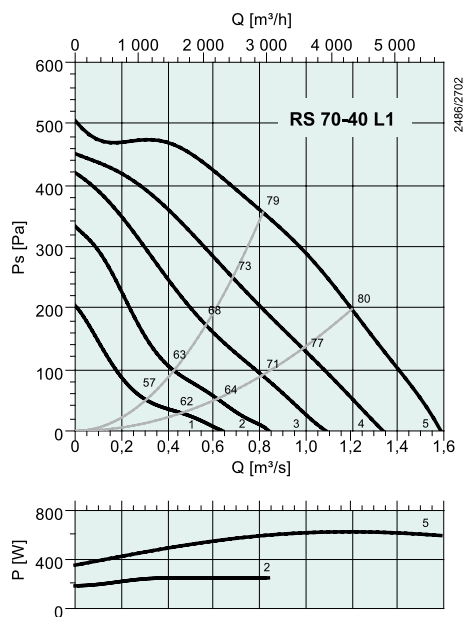


dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	75	63	67	69	68	66	65	59	52
L _{WA} Outlet	80	61	68	73	74	74	70	65	56
L _{WA} Surrounding	65	47	56	62	58	57	54	49	39
With LDR 60-35									
L _{WA} Inlet	66	63	60	56	51	48	52	49	44
L _{WA} Outlet	67	61	61	60	57	56	57	55	48
Measurement point: 0,448 m³/s; 404 Pa									



dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	78	64	68	72	72	70	69	63	56
L _{WA} Outlet	82	60	70	77	77	76	73	67	59
L _{WA} Surrounding	68	50	57	64	60	61	57	52	43
With LDR 60-35									
L _{WA} Inlet	68	64	61	59	55	52	56	53	48
L _{WA} Outlet	69	60	63	64	60	58	60	57	51
Measurement point: 0,668 m³/s; 363 Pa									

Rectangular duct fans

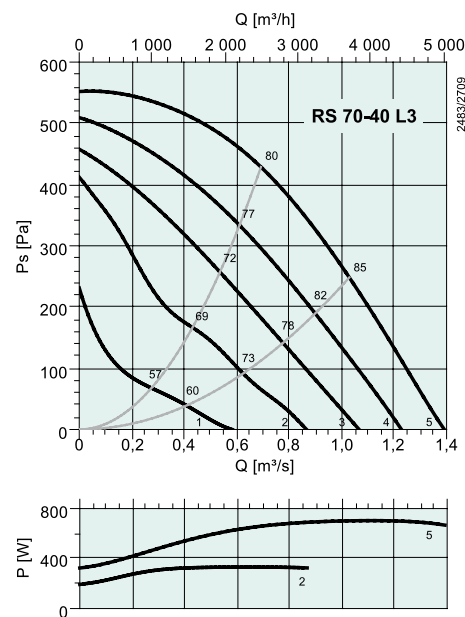


dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	77	62	65	72	72	68	68	62	53
L _{WA} Outlet	80	62	66	75	74	74	72	65	57
L _{WA} Surrounding	67	46	56	64	60	57	54	47	40

With LDR 70-40

L _{WA} Inlet	67	62	58	61	58	54	58	54	47
L _{WA} Outlet	70	62	59	64	60	60	62	57	51

Measurement point: 0,815 m³/s; 355 Pa

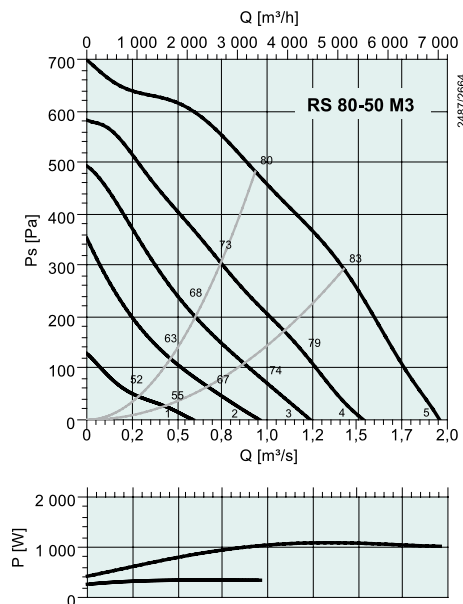


dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	78	60	67	73	72	69	70	65	57
L _{WA} Outlet	81	63	66	76	75	74	72	65	57
L _{WA} Surrounding	68	44	59	64	59	59	58	52	45

With LDR 70-40

L _{WA} Inlet	68	60	60	62	58	55	60	57	51
L _{WA} Outlet	70	63	59	65	61	60	62	57	51

Measurement point: 0,693 m³/s; 429 Pa

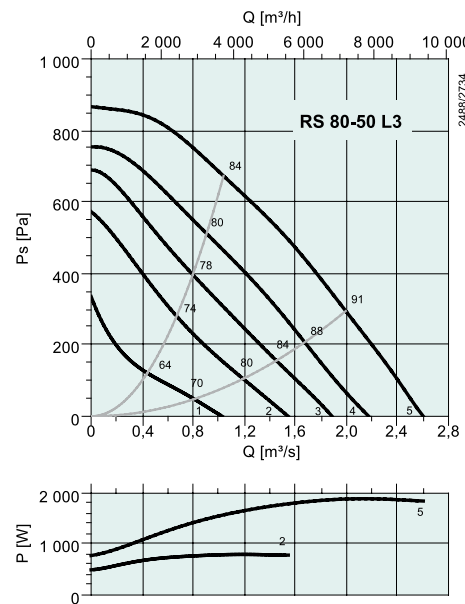


dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	78	60	68	69	73	71	69	64	57
L _{WA} Outlet	83	60	69	80	77	76	72	65	57
L _{WA} Surrounding	67	47	56	61	62	59	58	51	45

With LDR 80-50

L _{WA} Inlet	70	60	62	61	63	60	61	58	54
L _{WA} Outlet	75	60	63	72	67	65	64	59	54

Measurement point: 0,935 m³/s; 482 Pa

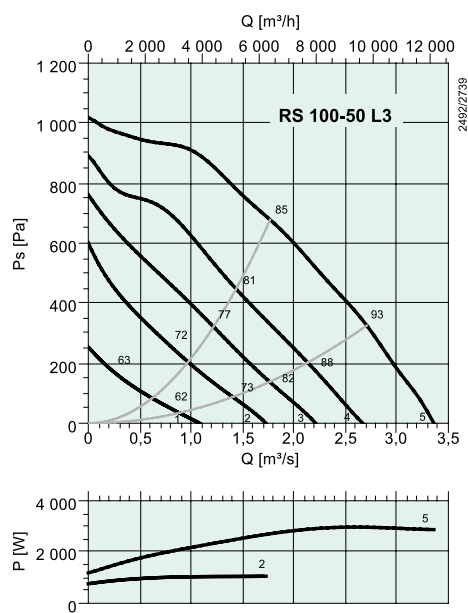


dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	82	64	73	73	77	74	72	67	60
L _{WA} Outlet	88	70	74	81	82	83	79	72	64
L _{WA} Surrounding	70	51	62	64	66	62	60	53	47

With LDR 80-50

L _{WA} Inlet	73	64	67	65	67	63	64	61	57
L _{WA} Outlet	79	70	68	73	72	72	71	66	61

Measurement point: 1,04 m³/s; 672 Pa



dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	83	69	73	74	77	77	76	72	66
L _{WA} Outlet	91	73	78	84	85	87	82	75	66
L _{WA} Surrounding	72	61	66	64	66	65	64	59	52
With LDR 100-50									
L _{WA} Inlet	76	69	67	66	67	66	68	66	63
L _{WA} Outlet	83	73	72	76	75	76	74	69	63
Measurement point: 1,77 m³/s; 678 Pa									