

Aggressive media centrifugal fans



PRF

- Temperature of transported air from -15°C to +70°C
- Single-inlet impellers from PP with effective blade geometry
- The powder painted pedestal is manufactured from galvanised steel
- Position of casing can be easily adapted
- Perfect fitting accessories: connections, dampers, splinter protection

The PRF fans have been developed especially for the exhaust of aggressive media. This is the right fan when corrosive gases, contaminated air or other aggressive components are part of the exhaust air. Typical applications are medical facilities, the food-, electrical- or chemical industry.

The sintered casing from UV-resistant PE is absolutely waterproof and offers a variety of applications with its connectors from $\varnothing 125$ -250 mm. The casing can be easily adjusted through turning it (standard position is LG270, see picture).

ELECTRICAL ACCESSORIES



REU p. 320



RTRE p. 320

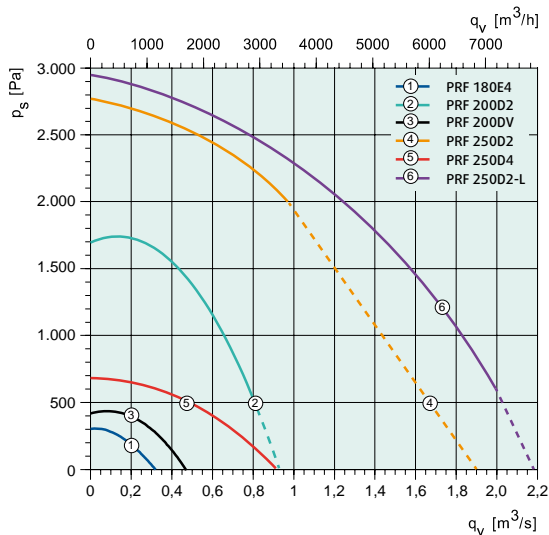
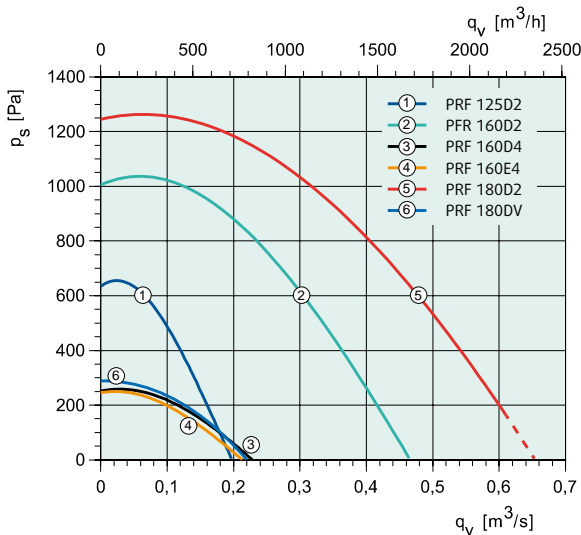


REV p. 340



S-ET p. 341

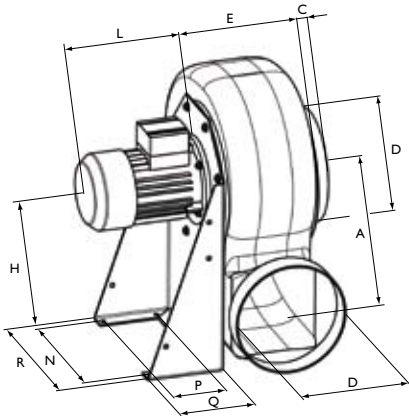
QUICK SELECTION



TECHNICAL DATA

PRF		125D2	160D2 IE2	160D4	160E4	180D2 IE2	180DV
Art no.		31525	33562	31495	31545	33563	31497
Voltage/Frequency	V/50 Hz	400 3~	400 3~	400 3~	230 1~	400 3~	400 3~
Power	W	250	750	142	171	1100	229
Current	A	0.579	1.68	0.571	0.75	2.37	1.01
Max air flow	m^3/s	0.197	0.464	0.228	0.213	0.635	0.32
R.p.m.	min^{-1}	2806	2825	1467	1427	2825	1365
Max temp. of transported air	$^{\circ}C$	70	70	70	70	70	70
" when speed controlled	$^{\circ}C$	70	70	-	-	70	70
Sound pressure level at 3 m	dB(A)	59	67	50	46	68	49
Weight	kg	9	13	14	14	19	14
Insulation class, motor	F	F	F	F	F	F	F
Enclosure class, motor	IP 55	IP 55	IP 55	IP 54	IP 55	IP 54	
Capacitor	μF	-	-	-	6	-	-
Motor protection	-	-	-	-	S-ET 10	-	STDT 16
Speed control, five-step	Transformer	-	FRQ5(S)-4A	-	RTRE 1.5	FRQ5(S)-4A	RTRD 2
Speed control, five-step high/low	Transformer	-	-	-	REU 1.5	-	RTRDU 2
Speed control, stepless	-	-	FRQ(S)-4A	-	-	FRQ(S)-4A	-
Wiring diagram p. 391-400		13b Y	13b Y	13b Y	21	13b Y	13b D

DIMENSIONS



PRF	A	C	øD	E	H	L	N	P	Q	R
125D2	140	40	125	150	250	195	200	100	140	235
160D2	183	40	160	180	310	210	255	100	140	290
160D4/E4	183	40	160	180	310	190	255	100	140	290
180D2	208	40	180	190	350	230	277	120	190	320
180E4/DV	208	40	180	190	350	190	277	120	190	320
200D2	240	40	200	200	410	245	320	150	230	355
200DV	240	40	200	200	410	210	320	150	230	355
250D2	290	40	250	240	495	340	330	170	250	370
250D2-L	290	40	250	240	495		330	170	250	370
250DV	290	40	250	240	495	230	330	170	250	370

VENTILATION ACCESSORIES



ASS-P p. 285



SD-PRF p. 285



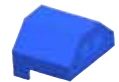
VKA-P p. 285



VKS-P p. 285



VP p. 285

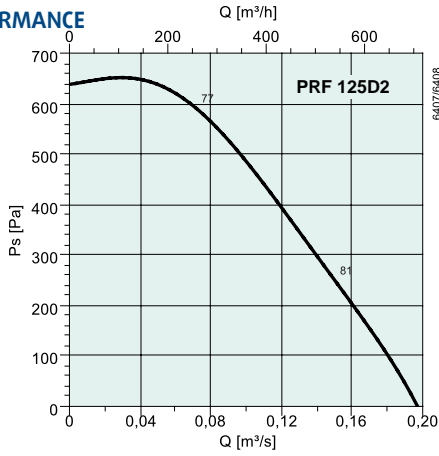


WSD PRF p. 285

PRF		180E4	200D2 IE2	200DV	250D2 IE2	250D2-L IE2	250D4 IE2
Art no.		31564	33564	31499	33566	34531	33565
Voltage/Frequency	V/50 Hz	230 1~	400 3~	400 3~	400 3~	400 3~	400 3~
Power	W	140	1500	250	4000	5500	750
Current	A	1.11	3.16	0.95	7.64	10.4	1.78
Max air flow	m³/s	0.32	0.937	0.47	1.83	1.87	0.911
R.p.m.	min-1	1365	2840	1413	2890	2855	1400
Min. back pressure	Pa	-	400	-	2000	600	-
Max temp. of transported air	°C	70	70	70	70	70	70
" when speed controlled	°C	70	70	70	70	70	70
Sound pressure level at 3 m	dB(A)	49	74	60	95	95	66
Weight	kg	15	29	19	50	60	35
Insulation class, motor		F	F	F	F	F	F
Enclosure class, motor		IP 54	IP 55	IP 54	IP 55	IP 54	IP 54
Capacitor	µF	6	-	-	-	-	-
Motor protection		S-ET 10	-	STDT 16	-	-	-
Speed control, five step	Transformer	RTRE 1.5	-	RTRD 2	-	-	-
Speed control, five step high/low	Transformer	REU 1.5	-	RTRDU 2	-	-	-
Wiring diagram p. 391-400		21	13b Y	13b D	13b D	13b D	13b D

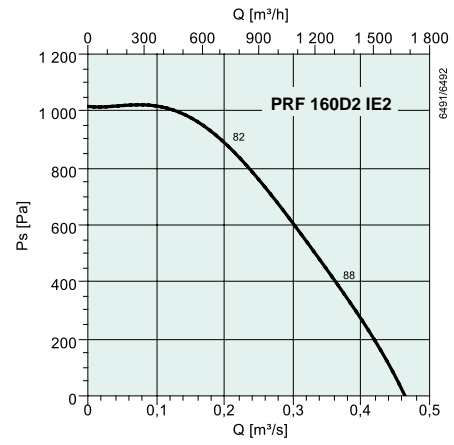
Aggressive media centrifugal fans

PERFORMANCE



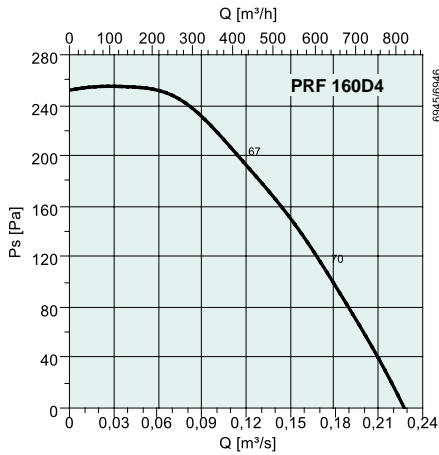
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	77	69	61	74	70	68	62	55	48
L _{WA} Outlet	80	71	68	77	74	69	62	58	48
L _{WA} Surrounding	66	48	25	52	59	64	55	48	39

Measurement point: 0,0725 m³/s; 589 Pa



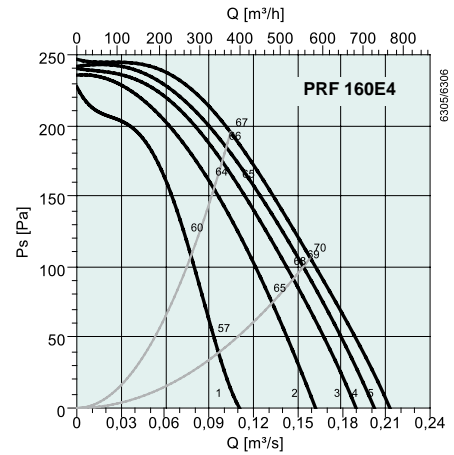
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	82	71	73	76	76	75	68	60	53
L _{WA} Outlet	87	73	77	83	82	78	74	68	60
L _{WA} Surrounding	74	53	45	68	70	67	63	53	45

Measurement point: 0,205 m³/s; 877 Pa



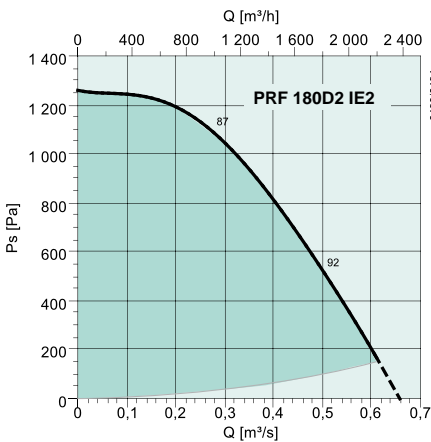
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	67	57	59	63	59	53	51	42	33
L _{WA} Outlet	70	58	64	66	62	55	51	43	34
L _{WA} Surrounding	57	17	25	53	52	44	48	38	29

Measurement point: 0,118 m³/s; 196 Pa



dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	67	63	62	58	57	53	49	41	33
L _{WA} Outlet	67	55	59	64	62	56	51	43	34
L _{WA} Surrounding	53	32	40	43	48	47	45	35	31

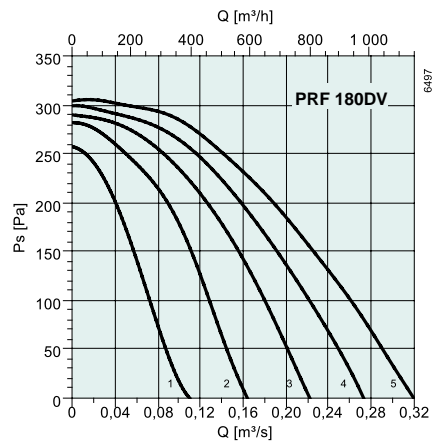
Measurement point: 0,104 m³/s; 195 Pa



Minimum back pressure 180 Pa

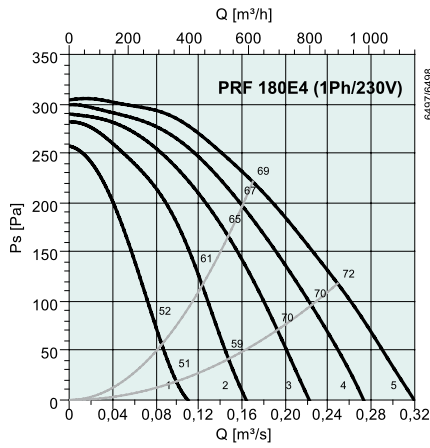
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	87	78	81	80	81	80	73	67	61
L _{WA} Outlet	91	70	86	85	85	83	78	71	63
L _{WA} Surrounding	74	68	46	60	69	69	62	53	47

Measurement point: 0,274 m³/s; 1093 Pa



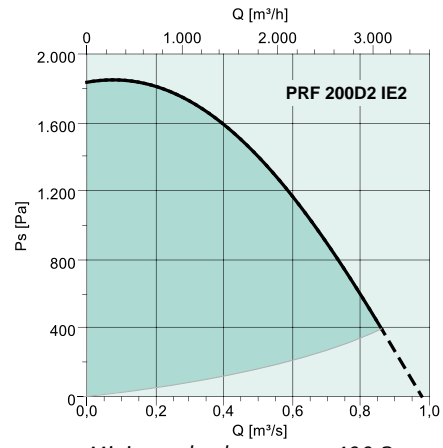
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	70	53	67	62	62	58	54	48	41
L _{WA} Outlet	73	54	70	67	66	60	58	49	41
L _{WA} Surrounding	56	32	34	45	54	49	46	37	34

Measurement point: 0,17 m³/s; 221 Pa



dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	69	52	66	61	61	58	54	47	41
L _{WA} Outlet	73	53	70	66	66	60	58	49	41
L _{WA} Surrounding	56	32	34	45	54	49	46	37	34

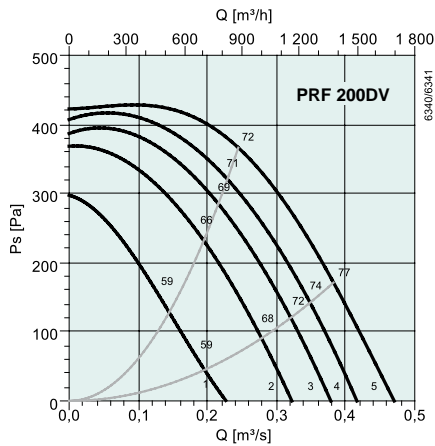
Measurement point: 0,17 m³/s; 221 Pa



Minimum back pressure 400 Pa

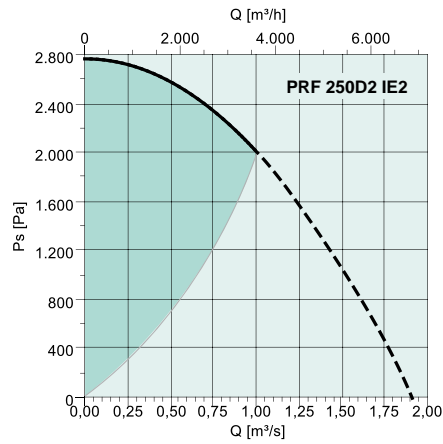
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	90	83	78	81	85	84	81	74	67
L _{WA} Outlet	93	85	86	85	87	85	83	74	65
L _{WA} Surrounding	81	77	47	63	74	75	72	63	55

Measurement point: 0,345 m³/s; 1576 Pa



dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	77	59	66	70	72	70	65	58	51
L _{WA} Outlet	74	58	69	69	68	63	61	51	42
L _{WA} Surrounding	67	32	38	54	65	58	54	48	43

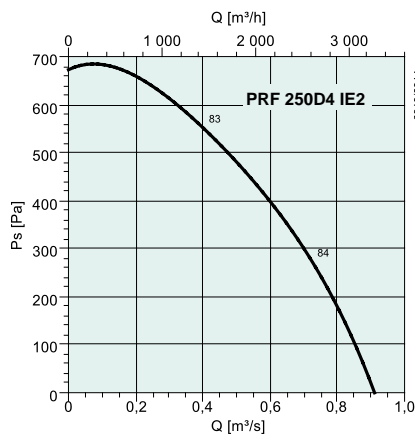
Measurement point: 0,383 m³/s; 171 Pa



Minimum back pressure 2000 Pa

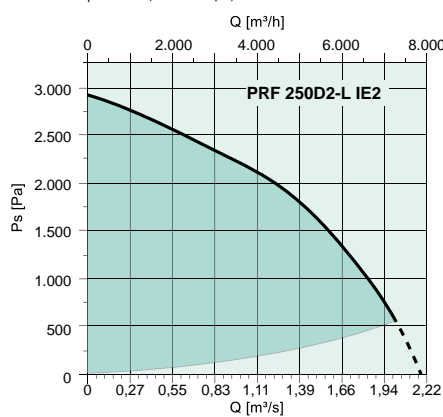
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	102	91	92	96	96	93	92	87	78
L _{WA} Outlet	102	86	96	96	96	94	93	85	75
L _{WA} Surrounding	95	69	82	90	89	88	86	83	73

Measurement point: 0,824 m³/s; 2002 Pa



dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	83	76	75	72	77	76	73	65	56
L _{WA} Outlet	87	83	78	77	77	77	76	64	55
L _{WA} Surrounding	73	47	51	60	66	71	65	58	44

Measurement point: 0,406 m³/s; 548 Pa



Minimum back pressure 550 Pa

dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	102	91	92	96	96	93	92	87	78
L _{WA} Outlet	102	86	96	96	96	94	93	85	75
L _{WA} Surrounding	95	69	82	90	89	88	86	83	73

Measurement point: 0,824 m³/s; 2002 Pa