

Centrifugal fans single inlet

KBT/KBR

- Max temperature of transported air 120°C
- Speed-controllable
- Integral thermal contacts
- Low sound level

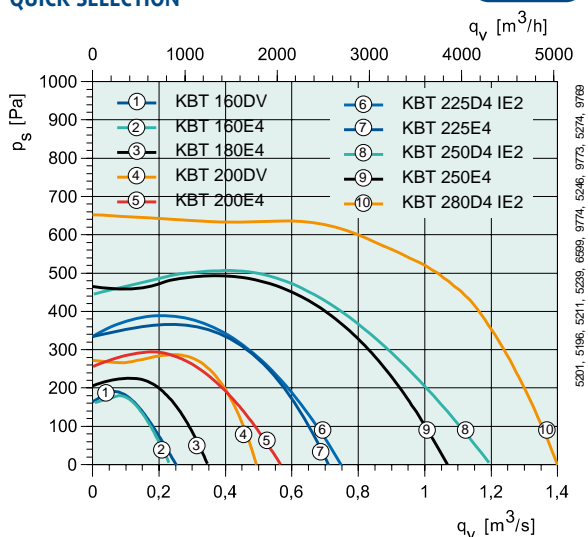
The fans have impellers manufactured from galvanised sheet steel, KBT with forward-curved blades, KBR with backward-curved blades. The casing is manufactured from double-skinned galvanised sheet steel and is insulated with 50 mm mineral wool.

KBT/KBR fans have a swing-out door for easy inspection and service. The direction of the door opening can easily be changed from left to right at site. The fan is isolated from the casing via connectors and anti-vibration dampers are incorporated into the base frame.

To protect the motors from overheating the fans have integral thermal contacts with external leads for connection to a motor protection device.



QUICK SELECTION



TECHNICAL DATA

KBT		160DV	160E4	180E4	200DV	200E4	225D4 IE2	225E4	250D4 IE2	250E4	280D4 IE2
Art no.		5823	5976	5824	5825	5826	33556	5828	33557	5830	33558
Voltage/Frequency	V/50 Hz	400 3~	230 1~	230 1~	400 3~	230 1~	400 3~	230 1~	400 3~	230 1~	400 3~
Power at shaft	kW	0.16	0.14	0.14	0.55	0.75	0.75	0.88	1.5	1.84	2.2
Current	A	0.57	1.1	1.11	1.88	5.1	1.78	5.5	3.39	10.5	4.64
Max air flow	m³/s	0.248	0.231	0.345	0.583	0.541	0.747	0.653	1.2	1.08	1.41w
R.p.m.	min ⁻¹	1120	1476	1490	1360	1370	1390	1417	1400	1400	1420
Max temp. of transported air	°C	120	120	120	120	120	120	120	120	120	120
Sound pressure level at 4/10 m	dB(A)	31/23	31/23	34/26	37/29	37/29	39/31	38/30	44/36	45/37	47/39
Weight	kg	24	25	29	35.6	40.2	40.3	43	52.5	52	63
Insulation class, motor		F	F	F	F	F	F	F	F	F	F
Enclosure class, motor		IP 54	IP 54	IP 54	IP 54	IP 54	IP 55	IP 54	IP 55	IP 54	IP 55
Capacitor	µF	-	6	6	-	30	-	30	-	50	-
Motor protection		STDT 16	S-ET 10	S-ET 10	STDT 16	S-ET 10	U-EK 230E	S-ET 10	U-EK 230E	S-ET 10	U-EK 230E
Speed control, five step		RTRD 2	RTRE 1.5	RTRE 1.5	RTRD 2	RTRE 7	FRQ5(S)-4A	RTRE 7	FRQ5(S)-4A	RTRE 12	FRQ5(S)-10A
Speed control, five step high/low		RTRDU 2	REU 1.5*	REU 1.5*	RTRDU 2	REU 7*	-	REU 7*	-	-	-
Speed control, D/Y two step 400V		S-DT2	-	-	S-DT2	-	-	-	-	-	-
Speed control, stepless		FXDM	-	-	FXDM	-	FRQ(S)-4A	-	FRQ(S)-4A	-	FRQ(S)-10A
Wiring diagram p. 391-400		17	21	21	17	21	13b Y	21	13b Y	21	13b Y

*+ S-ET 10

ELECTRICAL ACCESSORIES



REV p. 340



RTRD p. 321



RTRDU p. 321



S-DT2 p. 340

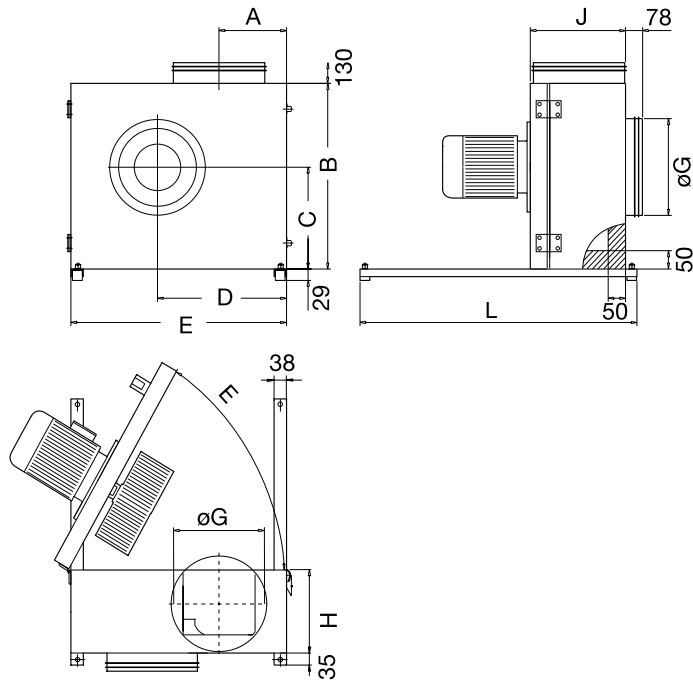


STDT p. 342



FRQ p. 325

DIMENSIONS



KBT	A	B	C	D	E	ØG	H	J	L
160	127.4	382	213	248	435	160	149	207	450
180	134.4	412	230	269	470	200	161	219	450
200	142.7	445	249	292	510	200	174	232	450
225	146.5	455	256	301	522	225	193	251	600
250	162	500	282	333	576	250	213	272	600
280	171.5	537	295	360	625	280	234	291	600

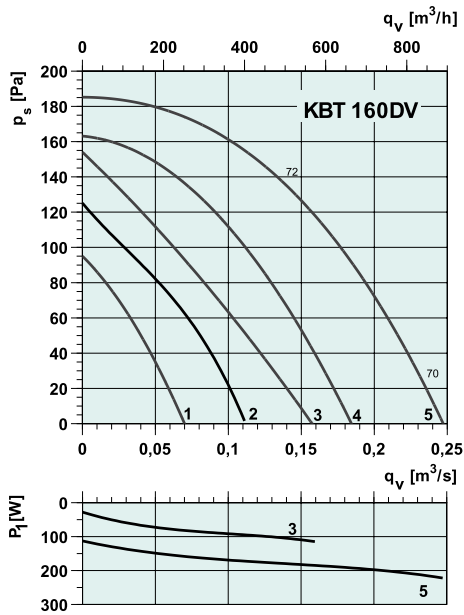
KBR	A	B	C	D	E	ØG	H	J	L
315	187.5	600	339	398	690	315	249	307	800
355	206.7	655	372	451	770	355	273	331	770

VENTILATION ACCESSORIES



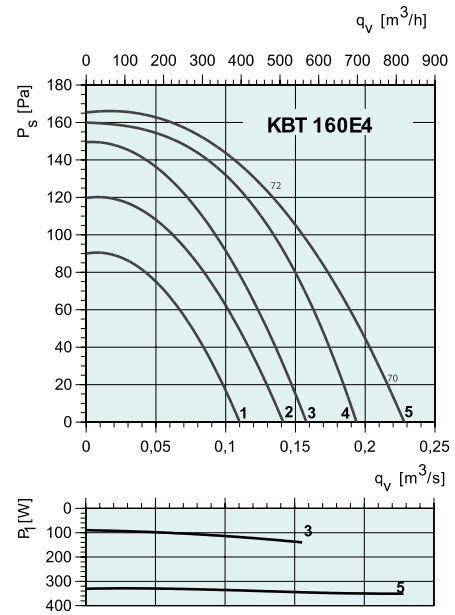
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PERFORMANCE



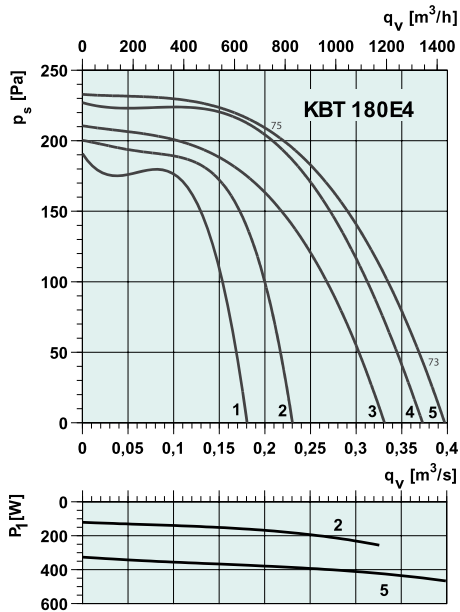
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	72	-	70	66	63	59	57	53	49
L _{WA} Outlet	74	-	72	68	65	61	59	55	51
L _{WA} Surrounding	54	-	52	48	45	41	39	35	31

Measurement point: 0,14 m³/s; 134 Pa



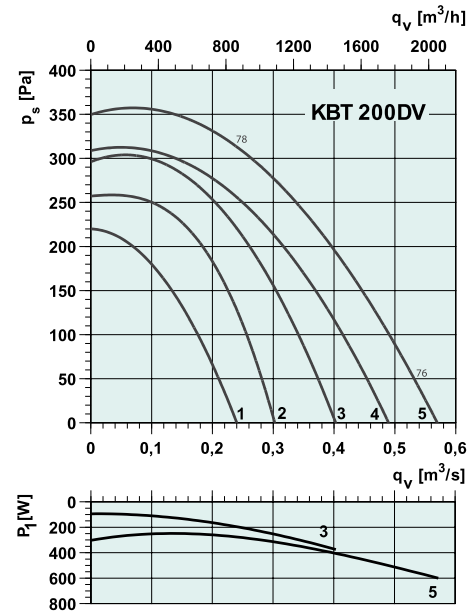
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	72	-	70	66	63	59	57	53	49
L _{WA} Outlet	74	-	72	68	65	61	59	55	51
L _{WA} Surrounding	54	-	52	48	45	41	39	35	31

Measurement point: 0,12 m³/s; 120 Pa



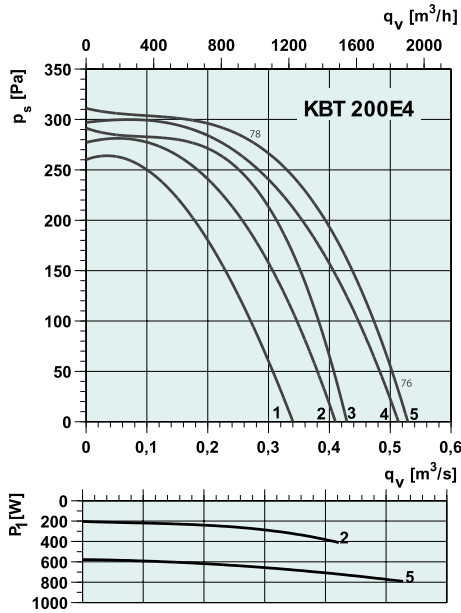
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	75	-	73	69	66	62	60	56	-
L _{WA} Outlet	77	-	75	71	68	64	62	58	-
L _{WA} Surrounding	57	-	55	51	48	44	42	38	-

Measurement point: 0,21 m³/s; 210 Pa



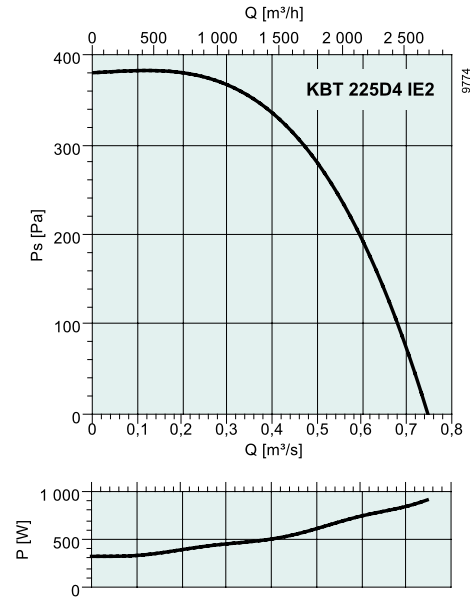
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	78	-	76	72	69	65	63	59	55
L _{WA} Outlet	80	-	78	74	71	67	65	61	57
L _{WA} Surrounding	60	-	58	54	51	47	45	41	37

Measurement point: 0,29 m³/s; 280 Pa



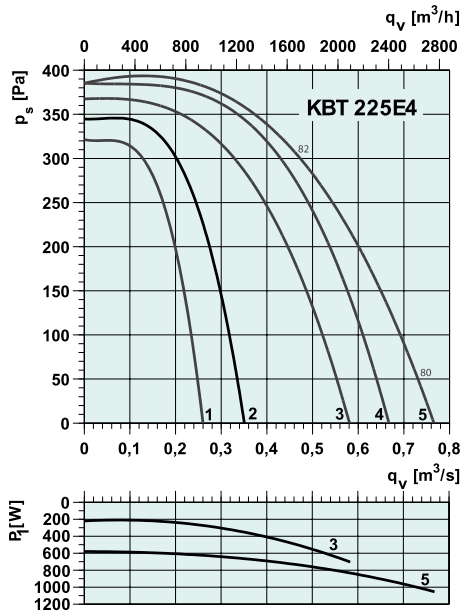
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	78	-	76	72	69	65	63	59	55
L _{WA} Outlet	80	-	78	74	71	67	65	61	57
L _{WA} Surrounding	60	-	58	54	51	47	45	41	37

Measurement point: 0,29 m³/s; 280 Pa



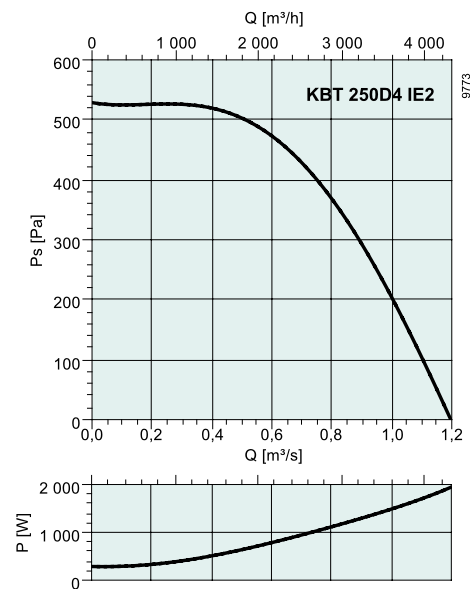
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	81	-	79	75	72	68	66	62	58
L _{WA} Outlet	83	-	81	77	74	70	68	64	60
L _{WA} Surrounding	63	-	61	57	54	50	48	44	40

Measurement point: 0,37 m³/s; 382 Pa



dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	82	-	80	76	73	69	67	63	59
L _{WA} Outlet	84	-	82	78	75	71	69	65	61
L _{WA} Surrounding	64	-	62	58	55	51	49	45	41

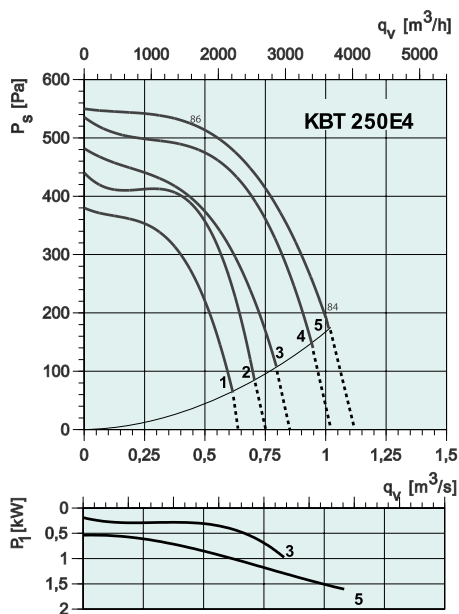
Measurement point: 0,49 m³/s; 285 Pa



dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	85	-	83	79	76	72	70	66	62
L _{WA} Outlet	87	-	85	81	78	74	72	68	64
L _{WA} Surrounding	67	-	65	61	58	54	52	48	44

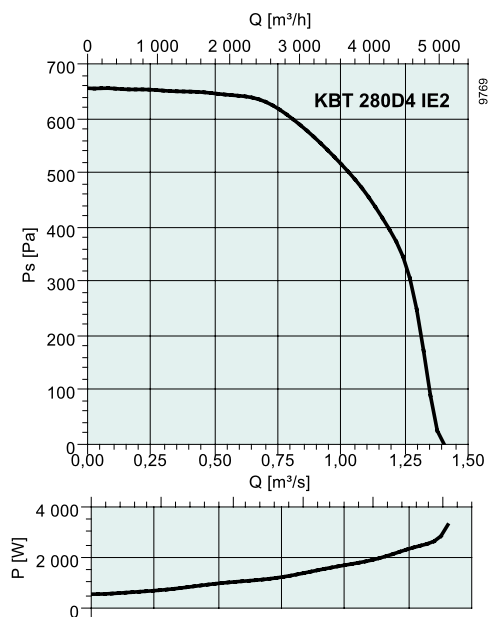
Measurement point: 0,67 m³/s; 400 Pa

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dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L_{wA} Inlet	86	-	84	80	77	73	71	67	63
L_{wA} Outlet	88	-	86	82	79	75	73	69	65
L_{wA} Surrounding	68	-	66	62	59	55	53	49	45

Measurement point: 0,56 m^3/s ; 500 Pa



dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L_{wA} Inlet	88	-	86	82	79	75	73	69	65
L_{wA} Outlet	90	-	88	84	81	77	75	71	67
L_{wA} Surrounding	70	-	68	64	61	57	55	51	45

Measurement point: 0,60 m^3/s ; 630 Pa