

# 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.



CK SELECTION

### ELECTRICAL ACCESSORIES



REV p. 340



RTRD p. 321



RTRDU p. 321



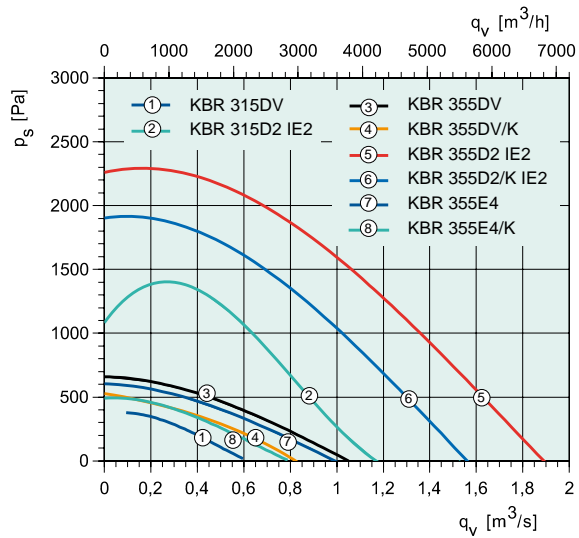
S-DT2 p. 340



STD T p. 342

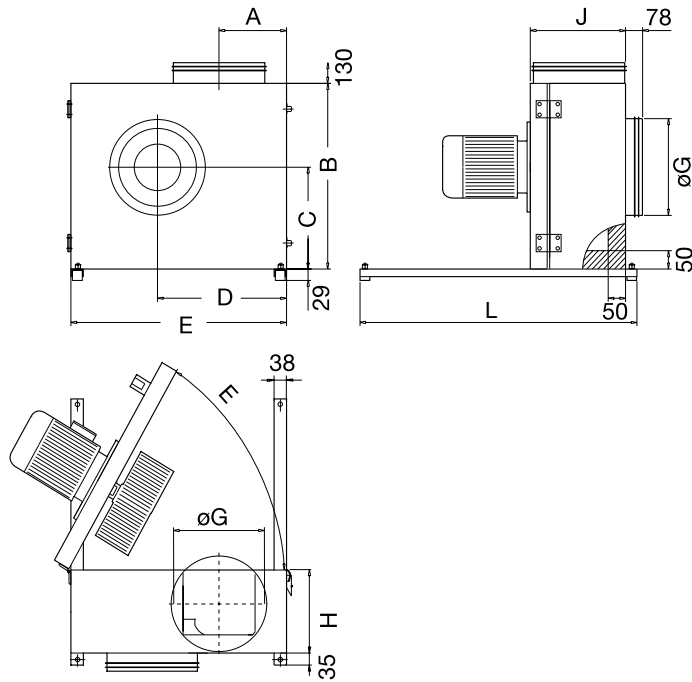


FRQ p. 325



T

DIMENSIONS



VENTILATION ACCESSORIES



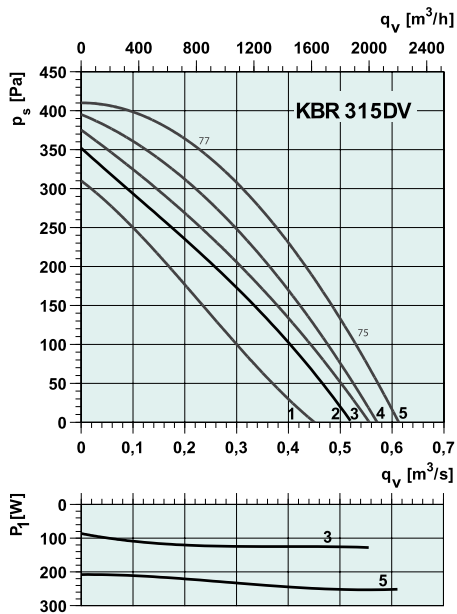
KBT	A	B	C	D	E	øG	H	J	L
160	127.4	382	213	248	435	160	149	207	450
180	134.4	412	230	269	470	200	161	219	450
200	142.7	445	249	292	510	200	174	232	450
225	146.5	455	256	301	522	225	193	251	600
250	162	500	282	333	576	250	213	272	600
280	171.5	537	295	360	625	280	234	291	600

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

KBR		315DV	315D2 IE2	355DV	355DV/K	355D2 IE2	355D2/K IE2	355E4	355E4/K
Art no.		5833	33559	5835	5977	33560	33561	5980	5978
Voltage/Frequency	V/50 Hz	400 3~	400 3~	400 3~	400 3~	400 3~	400 3~	230 1~	230 1~
Power at shaft	kW	0.37	1.5	0.37	0.37	3.0	2.2	0.37	0.37
Current	A	1.39	3.16	1.39	1.39	5.86	4.48	2.1	2.1
Max air flow	m³/s	0.611	1.14	1.06	0.82	1.97	1.53	0.972	0.778
R.p.m.	min <sup>-1</sup>	1360	2840	1360	1434	2890	2880	1330	1330
Max temp. of transported air	°C	120	120	120	120	120	120	120	120
Sound pressure level at 4/10 m	dB(A)	36/28	50/42	41/33	41/33	53/45	53/45	41/33	41/33
Weight	kg	75	67.1	81	81	83.3	78.3	70.1	80
Insulation class, motor		F	F	F	F	F	F	F	F
Enclosure class, motor		IP 54	IP 55	IP 54	IP 54	IP 55	IP 55	IP 54	IP 54
Capacitor	µF	-	-	-	-	-	-	12	12
Motor protection		STDT 16	U-EK 230E	STDT 16	STDT 16	U-EK 230E	U-EK 230E	S-ET 10	S-ET 10
Speed control, five step		RTRD 2	FRQ5(S)-4A	RTRD 2	RTRD 2	FRQ5(S)-10A	FRQ5(S)-10A	RTRE 3	RTRE 3
Speed control, five step high/low		RTRDU 2	-	RTRDU 2	RTRDU 2	-	-	REU 3*	REU 3*
Speed control, D/Y two step 400V		S-DT2	-	S-DT2	S-DT2	-	-	-	-
Speed control, stepless		FXDM	FRQ(S)-4A	FXDM	FXDM	FRQ5(S)-10A	FRQ5(S)-10A	-	-
Wiring diagram p. 391-400		17	13b Y	17	17	13b Y	13b Y	21	21

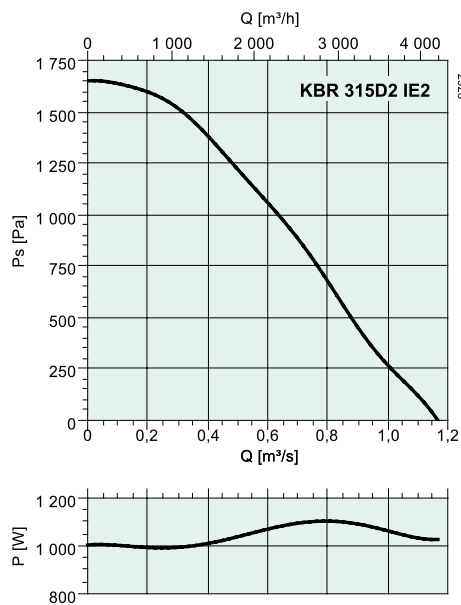
\* + S-ET 10

# Centrifugal fans single inlet



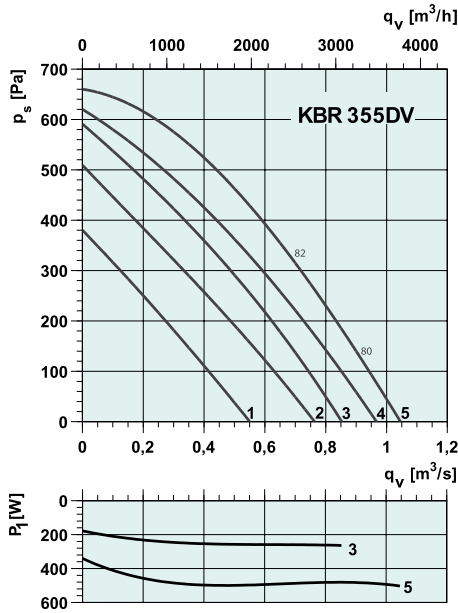
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L <sub>WA</sub> Inlet	77	-	75	74	69	67	63	57	54
L <sub>WA</sub> Outlet	79	-	77	76	71	68	65	59	56
L <sub>WA</sub> Surrounding	59	-	57	56	51	49	45	39	36

Measurement point: 0,38 m<sup>3</sup>/s; 250 Pa



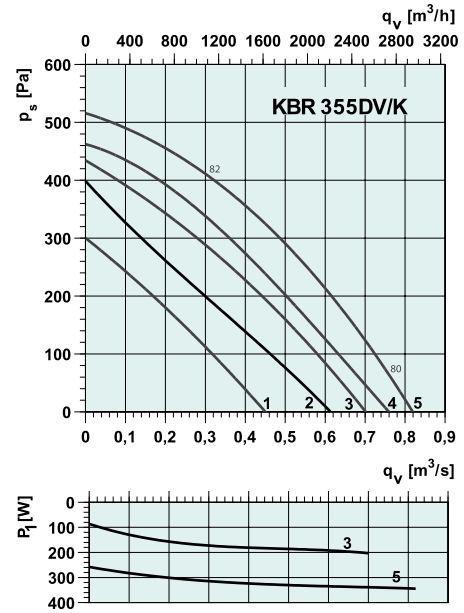
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L <sub>WA</sub> Inlet	91	-	89	88	83	81	77	71	68
L <sub>WA</sub> Outlet	93	-	31	90	85	83	80	73	70
L <sub>WA</sub> Surrounding	73	-	71	70	65	63	59	53	50

Measurement point: 0,46 m<sup>3</sup>/s; 1276 Pa



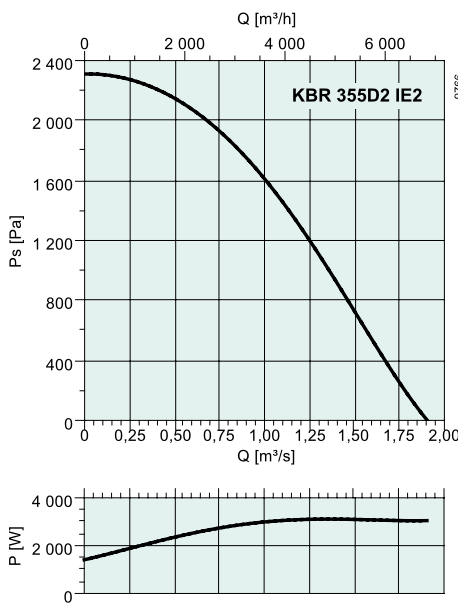
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L <sub>WA</sub> Inlet	82	-	80	79	74	72	68	62	-
L <sub>WA</sub> Outlet	84	-	82	81	76	74	70	64	-
L <sub>WA</sub> Surrounding	64	-	62	61	56	54	50	44	-

Measurement point: 0,69 m³/s; 320 Pa



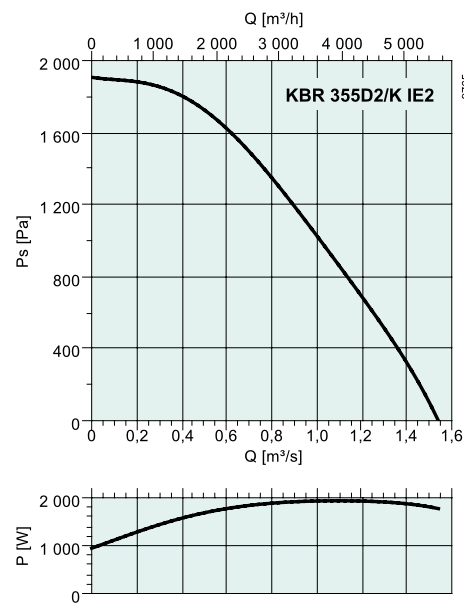
dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L <sub>WA</sub> Inlet	82	-	80	79	74	72	68	62	59
L <sub>WA</sub> Outlet	84	-	82	81	76	74	70	64	61
L <sub>WA</sub> Surrounding	64	-	62	61	56	54	50	44	41

Measurement point: 0,32 m³/s, Ps = 398 Pa



dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L <sub>WA</sub> Inlet	94	-	92	91	86	84	80	74	71
L <sub>WA</sub> Outlet	96	-	94	93	88	86	82	76	73
L <sub>WA</sub> Surrounding	76	-	74	73	68	66	62	56	53

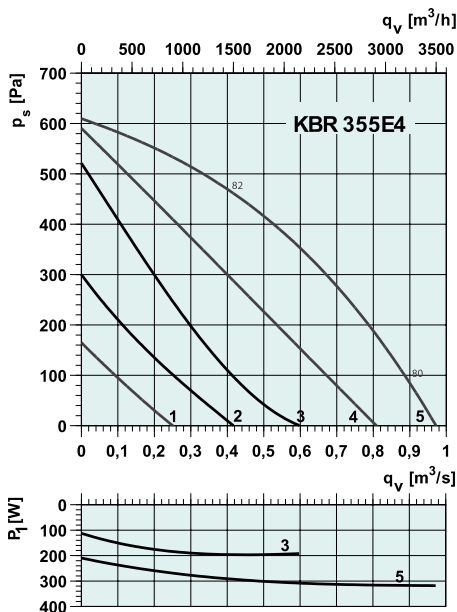
Measurement point: 0,83 m³/s; 1800 Pa



dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L <sub>WA</sub> Inlet	94	-	92	91	86	84	80	74	71
L <sub>WA</sub> Outlet	96	-	94	93	88	86	82	76	73
L <sub>WA</sub> Surrounding	76	-	74	73	68	66	62	56	53

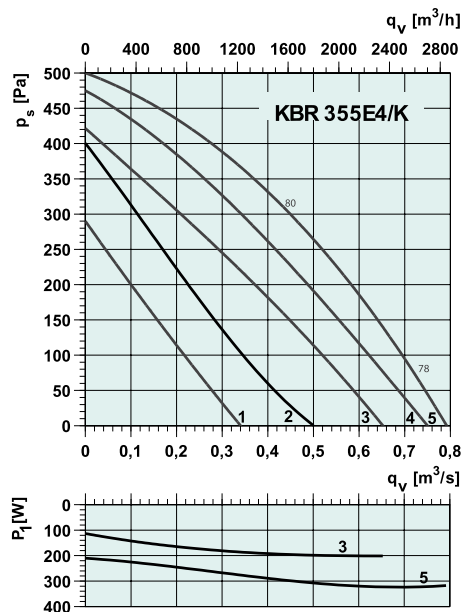
Measurement point: 0,72 m³/s; 1431 Pa

# Centrifugal fans single inlet



dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L <sub>wA</sub> Inlet	82	-	80	79	74	72	68	62	59
L <sub>wA</sub> Outlet	84	-	82	81	76	74	70	64	61
L <sub>wA</sub> Surrounding	64	-	62	61	56	54	50	44	41

Measurement point: 0,42 m<sup>3</sup>/s; 465 Pa



dB(A)	Tot	Frequency bands [Hz]							
		63	125	250	500	1k	2k	4k	8k
L <sub>wA</sub> Inlet	80	-	78	74	71	67	65	61	57
L <sub>wA</sub> Outlet	82	-	80	76	73	69	67	63	59
L <sub>wA</sub> Surrounding	62	-	60	56	53	49	47	43	39

Measurement point: 0,42 m<sup>3</sup>/s; 320 Pa