



CMT series 1



Range of centrifugal single inlet fans suitable for continuous extraction of airstreams temperature up to 80°C or 110°C (Series 1) or 150°C (Series 2 and 3). All casings are manufactured from electro-welded sheet steel protected against corrosion by grey epoxy-polyester paint coating. All models incorporate forward curved centrifugal impellers manufactured from galvanised sheet steel. Available, depending upon the model, with single or three phase motors in 2, 4 or 6 poles.



CMT series 2 and 3

Motors

All motors are IP55, Class F (1) with ball bearings greased for life.

Electrical supply:

Single phase 230V-50Hz.

Three phase 230/400V-50Hz up to 3kW.

Three phase 400V-50Hz, for higher power motors.

[See characteristics chart].

Series 1 are equipped with B14 flange mounted motor.

Series 2 & 3 are equipped with B3 foot mounted motor.

(1) Series 1: Some motors are IP44, Class B [See characteristics chart].

Additional information

The scroll can be orientated in 8 different positions as per the table below.

Standard supplied position: LG 270.

ATEX versions CMT

On request, explosion proof versions in accordance with ATEX Directive, for 3 phase models.

For ambient working temperatures from -20°C to +40°C.

- ATEX Flameproof - Gas

⊕ II 2G Exd IIC T4

⊕ II 2G Exd IIB T5

- ATEX Increased safety - Gas

⊕ II 2G Exe II T3

- ATEX - Dust

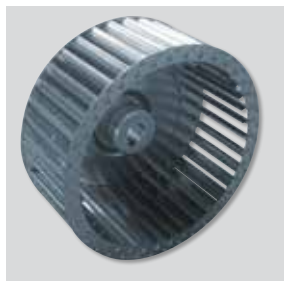
⊕ II 3D Ex tD 125°C or 135°C

To select CMT ATEX refer to performance curves, or Easyvent.

Note electrical data may vary for ATEX motors.

For single phase models, please consult S&P.

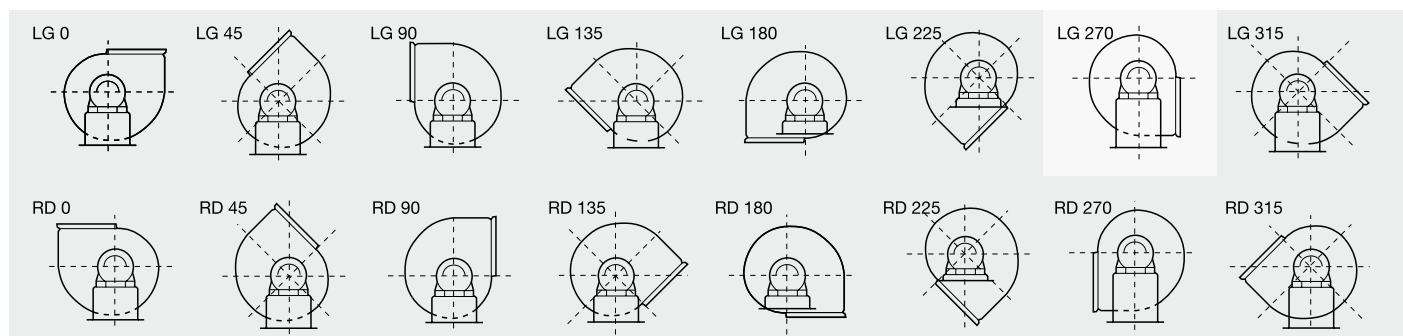
Specific applications



Impeller dynamically balanced

Forward curved centrifugal impellers dynamically balanced, according to ISO 1940 standard, providing vibration free operation.

POSITIONS



LG 270 standard supplied position. Special versions of RD configuration can be supplied under request.

TECHNICAL CHARACTERISTICS

Before installation check that the product electrical characteristics listed on the data plate label (voltage, power, frequency, etc.) match those of the intended electrical supply.

Serie 1	Speed (rpm)	Protection	Motor class	Motor power (kW)	Maximum absorbed current (A)		Maximum airflow (m³/h)	Sound pressure level* (dB(A))	Weight (kg)	Air maximum temperature (°C)	Speed controller**
					230 V	400 V					
SINGLE PHASE 2 POLE											
CMB/2-120/50 - 0,09	2800	IP44	B	0,09	0,7	-	495	62	4	80	-
CMB/2-140/50 - 0,25	2800	IP55	F	0,25	2	-	870	66	8,5	110	-
CMB/2-160/60 - 0,37	2800	IP55	F	0,37	2,8	-	1.120	69	9,5	110	-
CMB/2-180/75 - 0,75	2800	IP55	F	0,75	4,9	-	1.800	71	14,7	110	-
CMB/2-200/60 - 0,37	2800	IP55	F	0,37	2,8	-	935	69	9,5	110	-
CMB/2-200/80 - 1,1	2800	IP55	F	1,1	7,3	-	2.270	74	17,3	110	-
SINGLE PHASE 4 POLE											
CMB/4-120/50 - 0,01	1400	IP44	B	0,01	0,21	-	270	55	3,7	80	REB-1N
CMB/4-140/50 - 0,06	1400	IP44	B	0,06	0,35	-	450	59	7	80	REB-1N
CMB/4-160/60 - 0,07	1400	IP44	B	0,07	0,6	-	665	62	7	80	REB-1N
CMB/4-180/75 - 0,18	1400	IP55	F	0,18	1,45	-	1.030	64	10	110	-
CMB/4-200/80 - 0,25	1400	IP55	F	0,25	2,5	-	1.560	67	13	110	-
THREE PHASE 2 POLE											
CMT/2-120/50 - 0,09	2800	IP44	B	0,09	0,54	0,32	495	62	4	80	RMT-1,5
CMT/2-140/50 - 0,25	2800	IP55	F	0,25	1	0,6	870	66	8,5	110	VFTM TRI 0,37
CMT/2-160/60 - 0,37	2800	IP55	F	0,37	1,8	1,05	1.120	69	9,5	110	VFTM TRI 0,37
CMT/2-180/75 - 0,75	2800	IP55	F	0,75	3,3	1,9	1.800	71	14,7	110	VFTM TRI 0,75
CMT/2-200/60 - 0,37	2800	IP55	F	0,37	1,8	1,05	935	69	9,5	110	VFTM TRI 0,37
CMT/2-200/80 - 1,1	2800	IP55	F	1,1	4,67	2,7	2.270	74	17,3	110	VFTM TRI 1,1
THREE PHASE 4 POLE											
CMT/4-120/50 - 0,01	1400	IP44	B	0,01	0,2	0,12	270	55	3,7	80	RMT-1,5
CMT/4-140/50 - 0,06	1400	IP44	B	0,06	0,32	0,18	450	59	7	80	RMT-1,5
CMT/4-160/60 - 0,07	1400	IP44	B	0,07	0,58	0,33	665	62	7	80	RMT-1,5
CMT/4-180/75 - 0,18	1400	IP55	F	0,18	0,9	0,52	1.030	64	10	110	VFTM TRI 0,37
CMT/4-200/80 - 0,25	1400	IP55	F	0,25	1,26	0,73	1.560	67	13	110	VFTM TRI 0,37

* The values of sound pressure levels, are values measured in dB(A) at 1,5 m at the fan discharge side and at the maximum volume (Qmax).

** Three phase speed controllers (RMT) are suitable for 400V.

TECHNICAL CHARACTERISTICS

Before installation check that the product electrical characteristics listed on the data plate label (voltage, power, frequency, etc.) match those of the intended electrical supply.

Series 2	Speed (rpm)	Protection	Motor class	Motor power (kW)	Maximum absorbed current (A)		Maximum airflow (m ³ /h)	Sound pressure level* (dB(A))	Weight (kg)	Antivibration mount type (KSE)	Speed controller**
					230 V	400 V					

SINGLE PHASE 4 POLE

CMB/4-225/ 90 - 0,55	1390	IP55	F	0,55	4,39	–	2.600	71	22	45	–
CMB/4-250/100 - 1,1	1390	IP55	F	1,1	7,09	–	3.790	72	32	45	–

THREE PHASE 2 POLE

CMT/2-225/ 90 - 1,1	2780	IP55	F	1,1	4,7	2,70	2.080	66	23	45	VFTM TRI 1,1
CMT/2-225/ 90 - 1,5	2800	IP55	F	1,5	5,96	3,45	2.170	71	27,5	45	VFTM TRI 1,5
CMT/2-225/ 90 - 2,2	2820	IP55	F	2,2	8,5	4,9	3.040	76	29,7	45	VFTM TRI 2,2
CMT/2-250/100 - 2,2	2820	IP55	F	2,2	8,5	4,9	2.080	73	34,5	45	VFTM TRI 2,2
CMT/2-250/100 - 3	2820	IP55	F	3	10,9	6,3	3.685	79	36,5	45	VFTM TRI 3
CMT/2-280/115 - 3	2820	IP55	F	3	10,9	6,3	2.600	77	43	45	VFTM TRI 3
CMT/2-280/115 - 4	2870	IP55	F	4	–	8,4	3.210	81	47	45	VFTM TRI 4

THREE PHASE 4 POLE

CMT/4-225/ 90 - 0,55	1360	IP55	F	0,55	2,2	1,27	2.600	71	22	45	VFTM TRI 0,55
CMT/4-250/100 - 1,1	1390	IP55	F	1,1	4,8	2,8	3.790	72	32	45	VFTM TRI 1,1
CMT/4-280/115 - 2,2	1400	IP55	F	2,2	9,1	5,3	5.200	75	43	45	VFTM TRI 2,2
CMT/4-315/130 - 2,2	1400	IP55	F	2,2	9,1	5,3	5.660	72	48	45	VFTM TRI 2,2
CMT/4-315/130 - 3	1400	IP55	F	3	12,6	7,3	6.800	75	51,5	45	VFTM TRI 4
CMT/4-315/130 - 4	1420	IP55	F	4	–	9,3	7.100	78	57,5	70	VFTM TRI 4

THREE PHASE 6 POLE

CMT/6-315/130 - 1,1	930	IP55	F	1,1	6,6	3,8	5.400	69	44	45	VFTM TRI 1,5
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Series 3	Speed (rpm)	Protection	Motor Ins. Class	Motor power (kW)	Maximum absorbed current (A)		Maximum airflow	Sound pressure level* (dB(A))	Weight (kg)	Antivibration mount type (KSE)	Speed controller**
					230 V	400 V					

THREE PHASE 4 POLE

CMT/4-355/145 - 3	1400	IP55	F	3	12,65	7,3	6.325	75	52	45	VFTM TRI 4
CMT/4-355/145 - 4	1420	IP55	F	4	–	9,3	7.740	78	58	70	VFTM TRI 4
CMT/4-355/145 - 5,5	1445	IP55	F	5,5	–	12	9.450	81	68,7	70	VFTM TRI 5,5
CMT/4-400/165 - 4	1420	IP55	F	4	–	9,3	7.200	77	70.0	70	VFTM TRI 4
CMT/4-400/165 - 5,5	1445	IP55	F	5,5	–	12	8.300	80	80	70	VFTM TRI 5,5
CMT/4-400/165 - 7,5	1445	IP55	F	7,5	–	15,5	10.460	83	99	70	VFTM TRI 7,5
CMT/4-450/185 - 5,5	1445	IP55	F	5,5	–	12	7.560	83	92	70	VFTM TRI 5,5
CMT/4-450/185 - 7,5	1445	IP55	F	7,5	–	15,5	9.900	86	111	70	VFTM TRI 7,5
CMT/4-500/205 - 7,5	1445	IP55	F	7,5	–	15,5	8.410	83	112	70	VFTM TRI 7,5
CMT/4-500/205 - 9,2	1450	IP55	F	9,2	–	21,5	10.300	85	120	70	VFTM TRI 11
CMT/4-500/205 - 11	1450	IP55	F	11	–	22,5	11.250	87	132	70	VFTM TRI 11
CMT/4-500/205 - 15	1460	IP55	F	15	–	31	15.930	89	147	70	VFTM TRI 15

THREE PHASE 6 POLE

CMT/6-355/145 - 1,5	945	IP55	F	1,5	7,5	4,3	6.700	72	53	45	VFTM TRI 2,2
CMT/6-400/165 - 2,2	920	IP55	F	2,2	10,74	6,2	7.590	73	60,5	70	VFTM TRI 3
CMT/6-450/185 - 2,2	920	IP55	F	2,2	10,74	6,2	7.110	76	88	70	VFTM TRI 3

* The values of sound pressure levels, are values measured in dB(A) at 1,5 m at the fan discharge side and at the maximum volume (Qmax).

** Three phase speed controllers (RMT) are suitable for 400V.

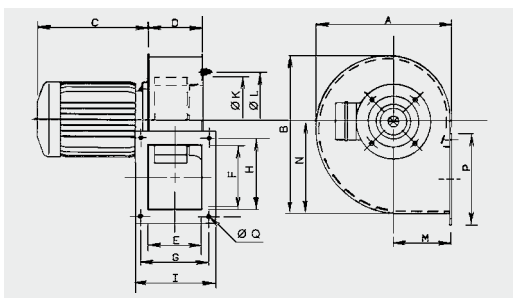
ACOUSTIC CHARACTERISTICS

Sound power level spectrum in dB(A) at the corresponding frequency band in Hz.

Description	SOUND POWER SPECTRUM								TOTAL
	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Lw
2 POLE									2 POLE
CMT/2-120/50 - 0,09	42	53	64	68	70	73	69	67	77
CMT/2-140/50 - 0,25	46	57	68	71	73	77	73	71	81
CMT/2-160/60 - 0,37	48	60	71	74	76	80	75	73	84
CMT/2-180/75 - 0,75	51	62	73	76	78	82	78	76	86
CMT/2-200/60 - 0,37	49	60	71	74	76	80	76	74	84
CMT/2-200/80 - 1,1	53	65	76	79	81	85	80	79	89
CMT/2-225/90 - 1,1	46	57	68	71	73	77	73	71	81
CMT/2-225/90 - 1,5	51	62	73	76	78	82	78	76	86
CMT/2-225/90 - 2,2	56	67	78	81	83	87	83	81	91
CMT/2-250/100 - 2,2	53	64	75	78	80	84	80	78	88
CMT/2-250/100 - 3	58	69	80	84	86	89	85	83	93
CMT/2-280/115 - 3	56	67	78	82	84	87	83	81	91
CMT/2-280/115 - 4	61	72	83	86	88	92	88	86	96
4 POLE									4 POLE
CMT/4-120/50 - 0,01	39	52	58	59	64	65	61	58	70
CMT/4-140/50 - 0,06	43	56	62	63	68	69	65	62	74
CMT/4-160/60 - 0,07	46	59	65	66	71	72	68	65	77
CMT/4-180/75 - 0,18	48	61	67	68	73	74	70	67	79
CMT/4-200/60 - 0,07	46	59	65	66	71	72	68	65	76,6
CMT/4-200/80 - 0,25	51	64	70	71	76	77	73	70	82
CMT/4-225/90 - 0,55	55	67	74	75	80	81	77	73	85
CMT/4-250/100 - 1,1	56	69	75	76	81	82	78	75	87
CMT/4-280/115 - 2,2	59	72	78	79	84	85	81	78	90
CMT/4-315/130 - 2,2	56	69	75	76	81	82	78	75	87
CMT/4-315/130 - 3	59	72	78	79	84	85	81	78	90
CMT/4-315/130 - 4	62	75	81	82	87	88	84	81	93
CMT/4-355/145 - 3	59	72	78	79	84	85	81	78	90
CMT/4-355/145 - 4	62	75	81	82	87	88	84	81	93
CMT/4-355/145 - 5,5	65	78	84	85	90	91	87	84	94
CMT/4-400/165 - 4	61	74	80	81	86	87	83	80	93
CMT/4-400/165 - 5,5	64	77	83	84	89	90	86	83	95
CMT/4-400/165 - 7,5	67	80	86	87	92	93	89	86	98
CMT/4-450/185 - 5,5	67	80	86	87	92	93	89	86	98
CMT/4-450/185 - 7,5	70	83	89	90	95	96	92	89	101
CMT/4-500/205 - 7,5	67	80	86	87	92	93	89	86	98
CMT/4-500/205 - 9,2	69	82	88	89	94	95	91	88	100
CMT/4-500/205 - 11	71	84	90	91	96	97	93	90	102
CMT/4-500/205 - 15	73	86	92	93	98	99	95	92	104
6 POLE									6 POLE
CMT/6-315/130 - 1,1	54	67	70	78	78	79	74	70	84
CMT/6-355/145 - 1,5	56	69	72	80	80	81	76	72	86
CMT/6-400/165 - 2,2	58	70	73	81	81	82	78	74	87
CMT/6-450/185 - 2,2	60	73	76	84	84	85	80	76	90

DIMENSIONS (mm)

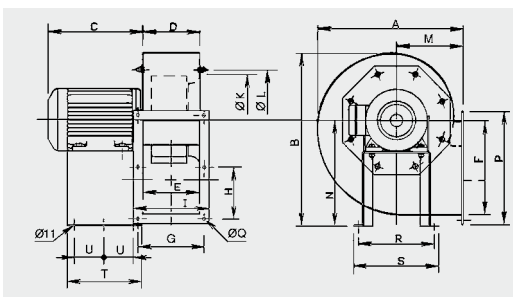
Series 1



Model	A	B	C1		D	E	F	G	H	I	K	L	M	N	P	Q
			2*	4*												
120/50	180	203	153	153	74,5	72	85	92	105	106	113	132	81	116	118	5,5
140/50	222	249	177	153	82,5	80	105	105	128	123	144	152	100	147	147	7
160/60	254	293	207	153	102,5	100	120	128	148	153	166	180	109	171	172	7
180/75	302	347	232	177	117,5	115	140	145	170	168	187,5	210	128	203	192	9
200/60	300	347	207	153	107,5	105	100	135	128	158	209	230	128	203	152	9
200/80	321	375	232	207	132,5	130	160	160	188	183	209	230	138	222	212	9

* Number of poles.

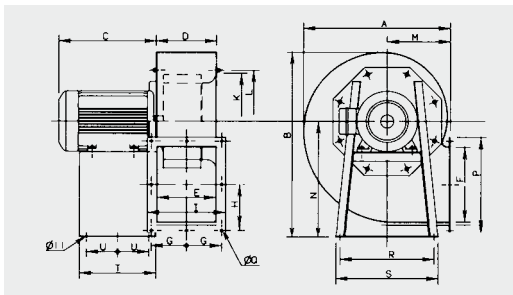
Series 2



Model	A	B	C1		D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	U
			2*	4*																
225/90	386	452	248	235	144	140	216	180	128	203	234	256	181	280	279	10	220	250	200	50
250/100	425	501	300	248	169	165	250	205	145	228	261	282	197	310	313	10	228	260	225	74
280/115	471	553	320	300	184	184	300	220	170	243	293	320	216	340	363	10	245	275	240	95
315/130	524	628	-	320	206	200	320	240	180	263	326	354	238	390	383	11	322	352	230	140

* Number of poles.

Series 3

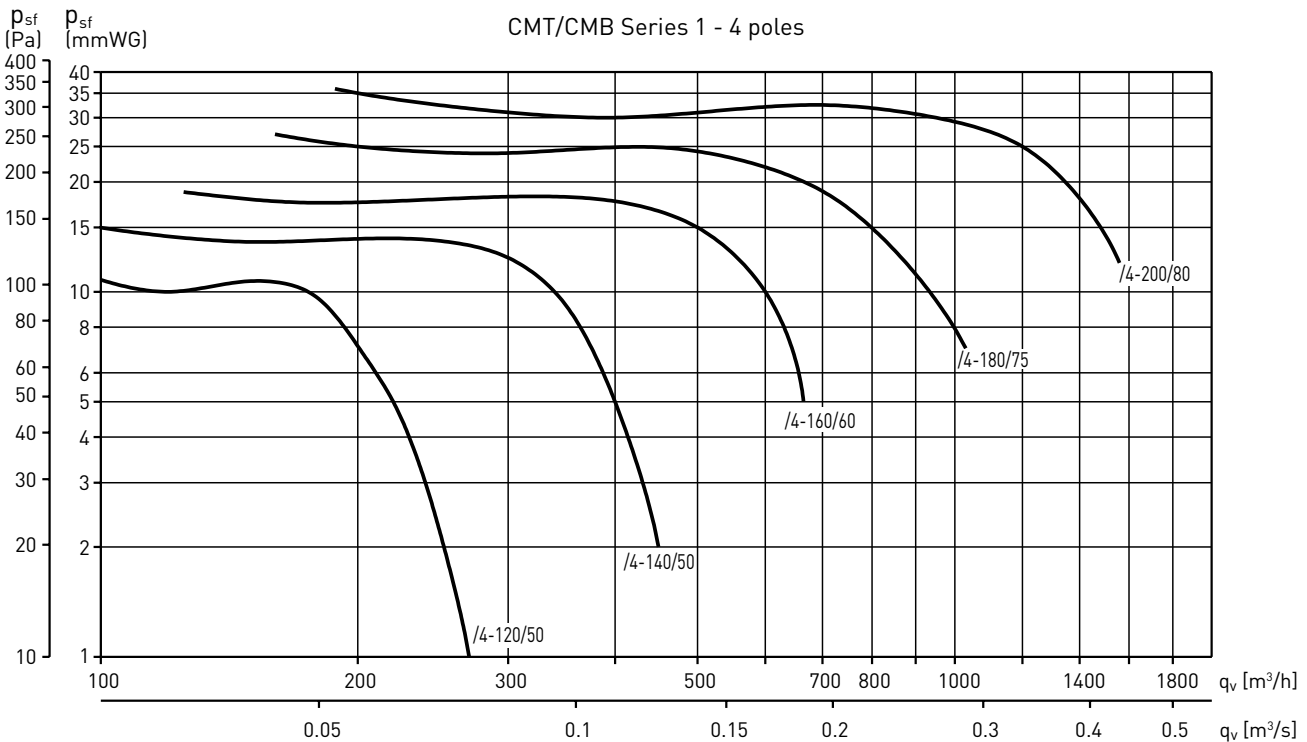
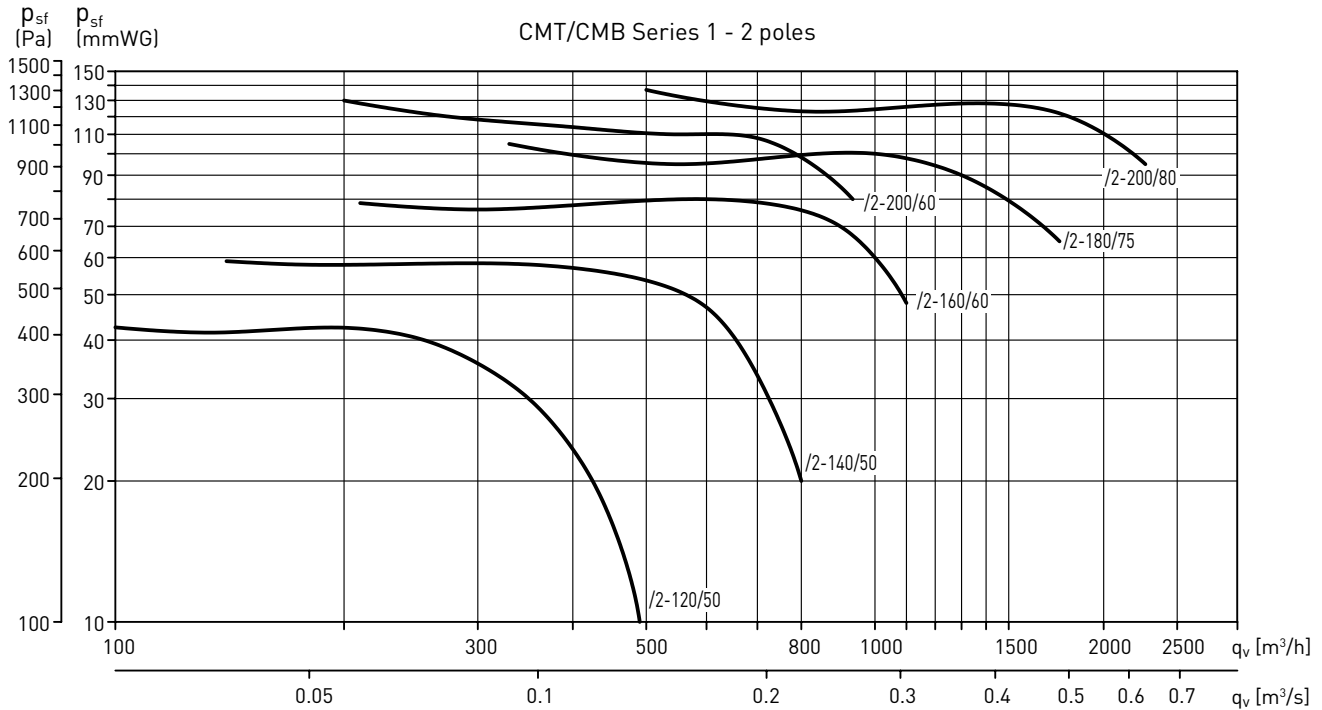


Model	A	B	C max.		D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	U
			/4*	/6*																
355/145	572	713	390	320	231	228	280	133	159	291	367	394	250	445	343	11	420	450	333	136,5
400/165	632	796	425	340	254	250	320	150	185	334	413	438	270	495	404	11	402	438	327	133,5
450/185	709	898	425	340	288	284	360	164	202	368	463	485	302	560	444	11	502	538	340	140
500/205	795	984	550	445	319	315	450	182,5	250	409	513	535	345	610	544	11	613	653	435	187,5

* Number of poles.

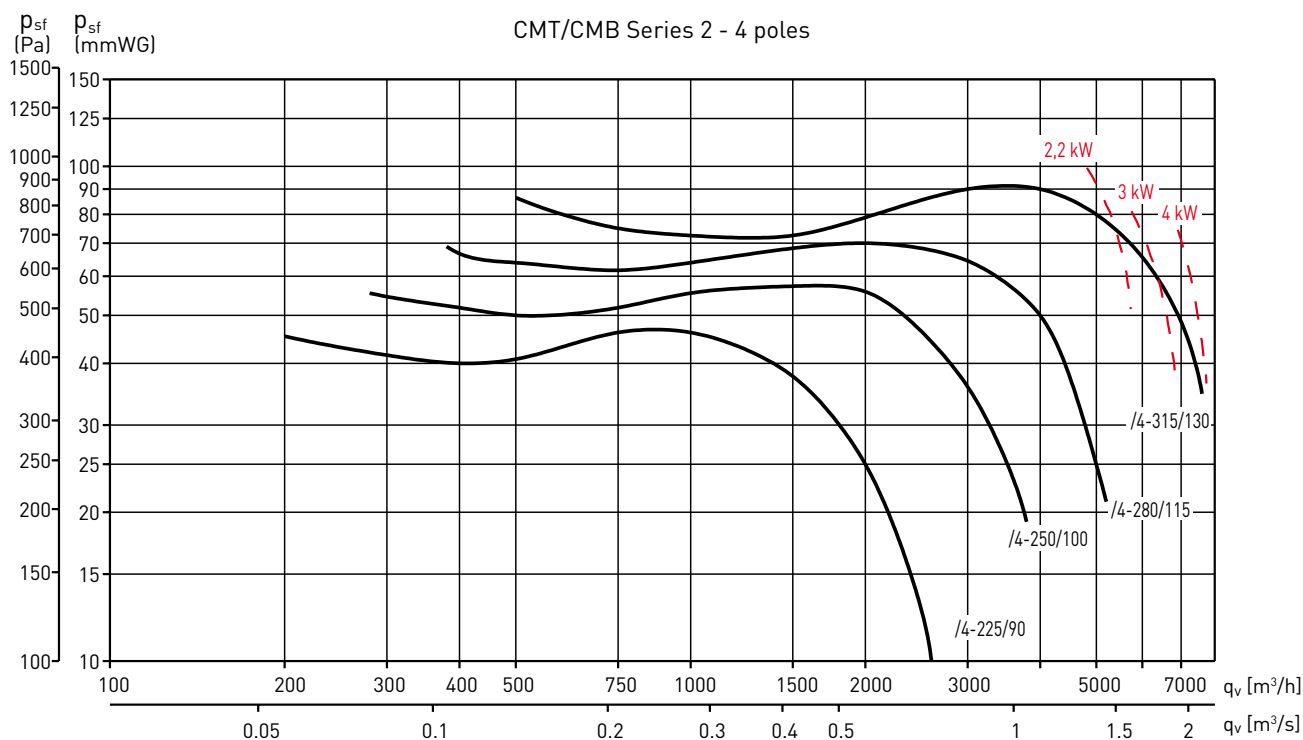
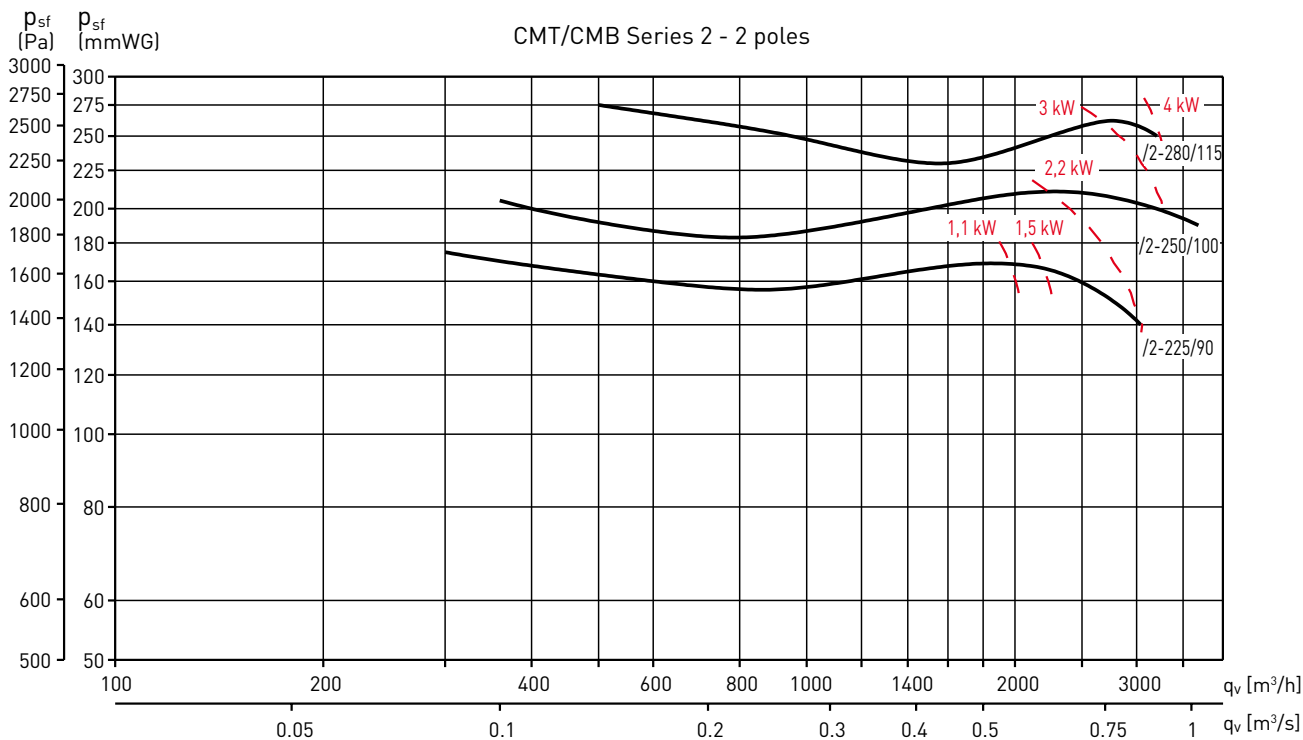
PERFORMANCE CURVES

- q_v : Airflow in m^3/h and m^3/s .
- p_{sf} : Static pressure in mmWG and Pa.
- Dry air at 20°C and 760 mmHg.
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.



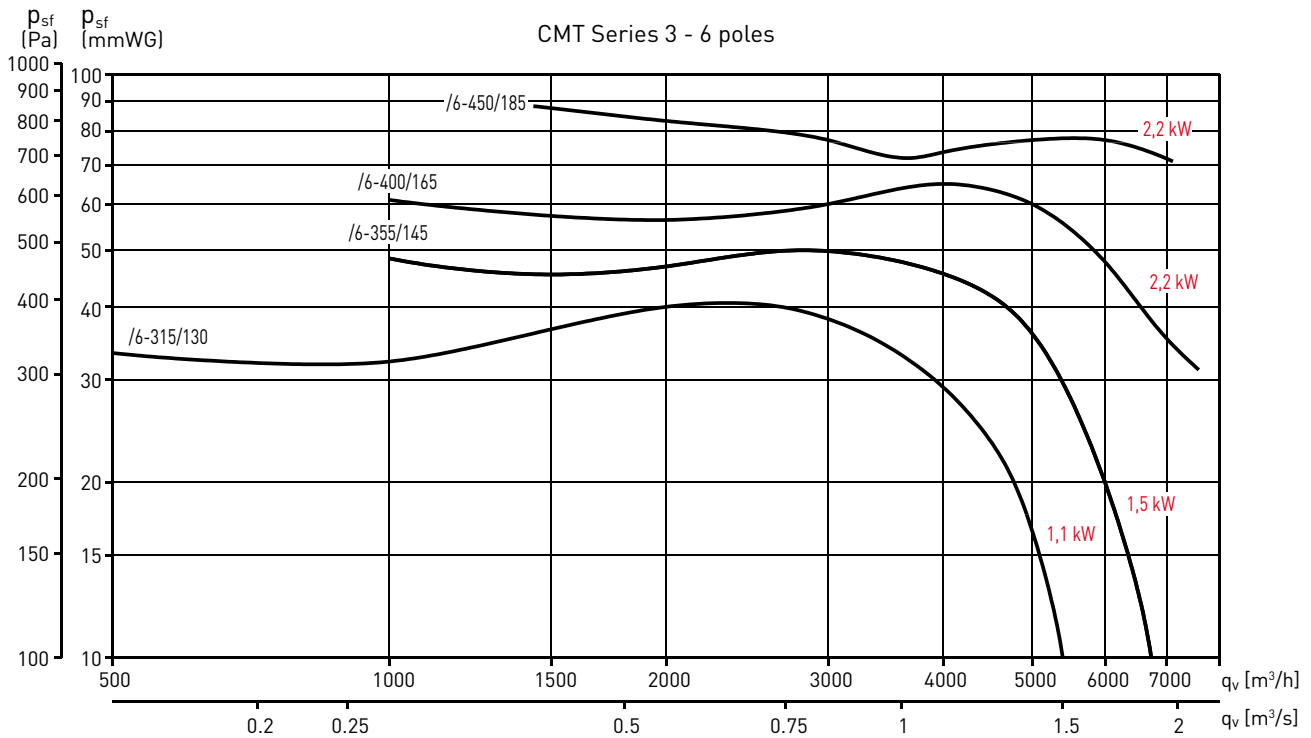
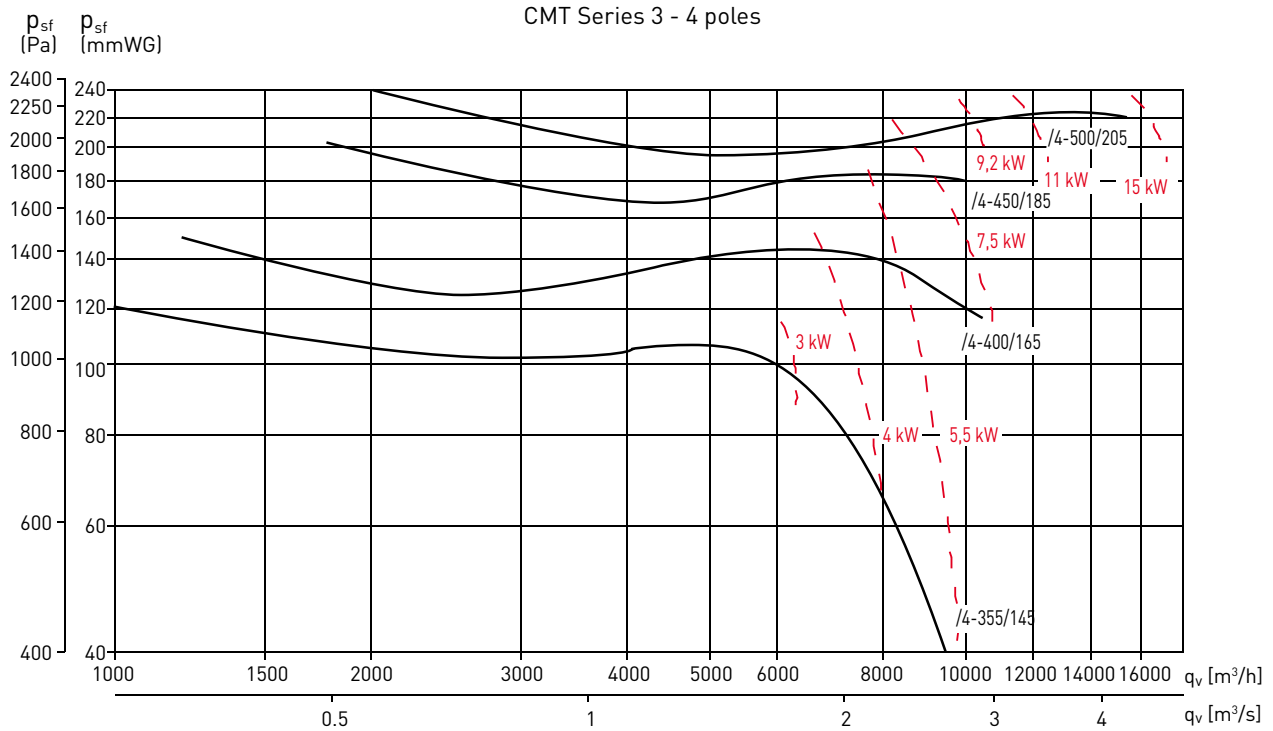
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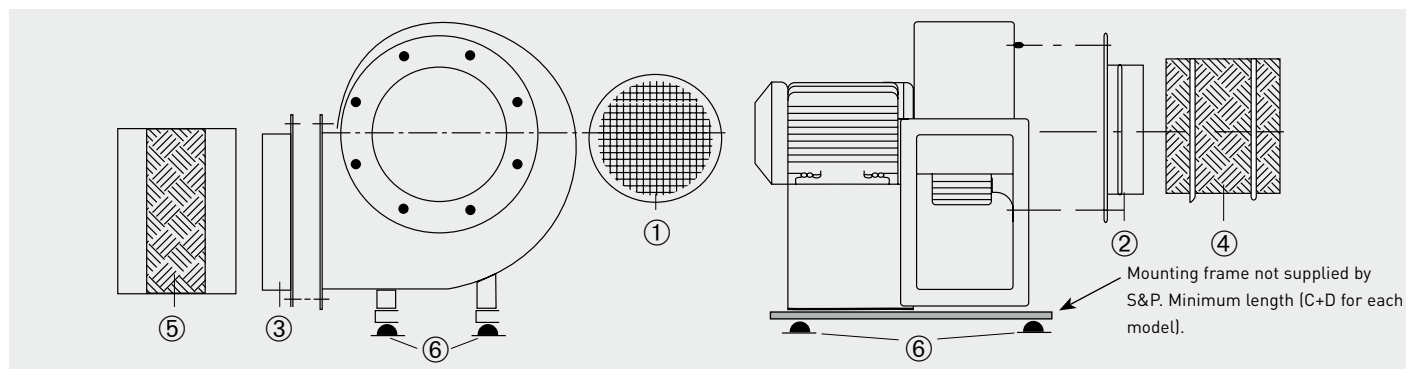


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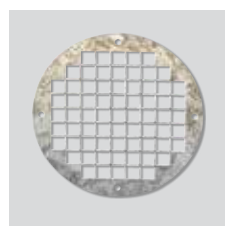


MOUNTING ACCESSORIES

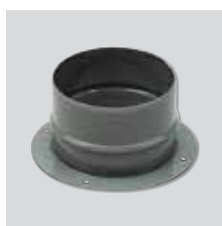


Model CMB/CMT	① Inlet guard	② Inlet flange	③ Discharge flange	④ Circular flexible connector	⑤ Rectangular flexible connector	⑥ Anti-vibration mounts (1 KSE = 4 mounts)	
120/50	KRJ-120	KBA-120	KBD-120	ACOPEL F400-112/160 N	KAD-120	-	
140/50	KRJ-140	KBA-140	KBD-140	ACOPEL F400-125/160 N	KAD-140	-	
160/60	KRJ-160	KBA-160	KBD-160	ACOPEL F400-160/160 N	KAD-160	-	
180/75	KRJ-180	KBA-180	KBD-180	ACOPEL F400-180/160 N	KAD-180	-	
200/60	KRJ-200	KBA-200	KBD-200/60	ACOPEL F400-200/160 N	KAD-200/60	-	
200/80	KRJ-200	KBA-200	KBD-200/80	ACOPEL F400-200/160 N	KAD-200/80	-	
225/90	KRJ-225	KBA-225	KBD-225	ACOPEL F400-224/160 N	KAD-225	Motor power < = 3 kW: KSE-45	
250/100	KRJ-250	KBA-250	KBD-250	ACOPEL F400-250/160 N	KAD-250		
280/115	KRJ-280	KBA-280	KBD-280	ACOPEL F400-280/160 N	KAD-280		
315/130	KRJ-315	KBA-315	KBD-315	ACOPEL F400-315/160 N	KAD-315		
355/145	KRJ-355	KBA-355	KBD-355	ACOPEL F400-355/160 N	KAD-355		
400/165	KRJ-400	KBA-400	KBD-400	ACOPEL F400-400/160 N	KAD-400		
450/185	KRJ-450	KBA-450	KBD-450	ACOPEL F400-450/160 N	KAD-450		
500/205	KRJ-500	KBA-500	KBD-500	ACOPEL F400-500/160 N	KAD-500		
							Motor power > = 4 kW: KSE-70

* According to motor power.



KRJ
Inlet guard.



KBA
Inlet flange.



KBD
Discharge flange.



ACOPEL F400 N
Circular flexible connector.
Certified F400-120.
Can be installed at the inlet or outlet side.

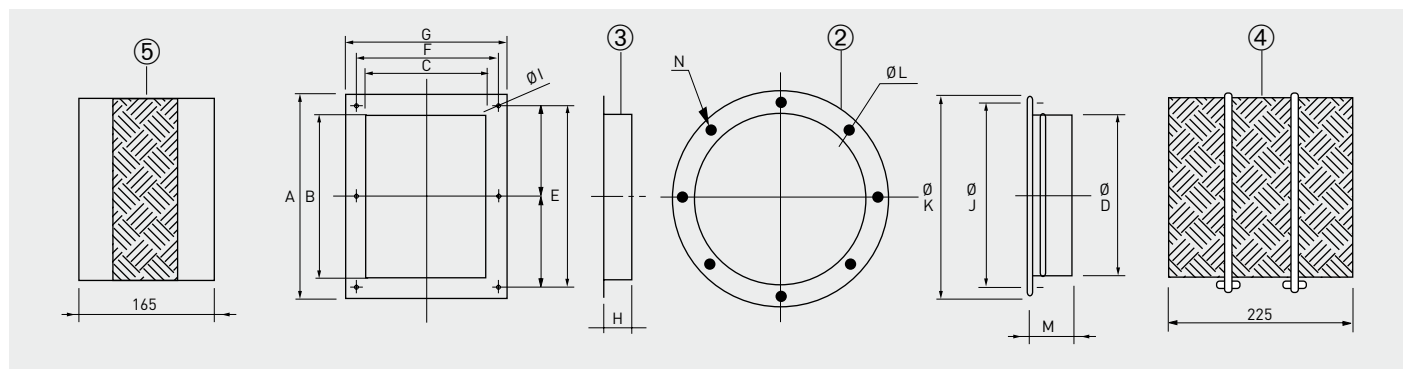


KAD
Rectangular flexible connector.



KSE
Anti-vibration mounts.

MOUNTING ACCESSORIES



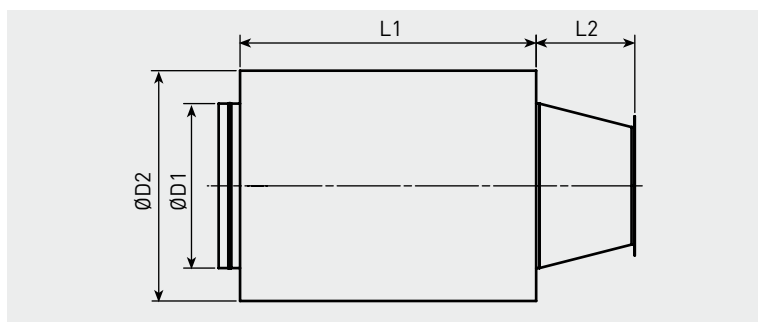
Accessory model	A	B	C	ØD	E	F	G	H	ØI	ØJ	ØK	ØL	M	N
120/50	118	87	75	112	105	92	106	40	5,5	132	150	5	65	4
140/50	147	107	83	125	128	105	123	40	7	152	170	5	65	4
160/60	172	122	103	160	148	128	153	40	7	180	205	7	65	4
180/75	192	142	118,5	180	170	145	168	40	9	210	244	7	65	4
200/60	158	108,5	102	200	135	128	152	45	9	230	255	7	65	4
200/80	212	162	134	200	188	160	183	45	9	230	255	7	65	4
225/90	279	219	143	224	256	180	203	45	10	256	280	9	65	8
250/100	313	253	168	250	290	205	228	45	10	282	306	9	65	8
280/115	363	303	183	280	340	220	243	50	10	320	348	9	65	8
315/130	383	323	203	315	360	240	263	50	11	354	382	9	65	8
355/145	343	283	231	355	318	266	291	50	11	394	422	9	65	8
400/165	404	324	254	400	370	300	334	55	11	438	464	9	65	8
450/185	444	364	288	450	404	328	368	55	11	485	515	9	65	8
500/205	544	454	319	500	500	365	409	60	11	535	565	9	65	8



KMTA
Sound attenuators for mounting at the CMT fan inlet.

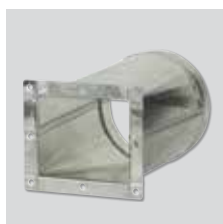


KMTI
Sound attenuators for mounting at the CMT fan outlet.

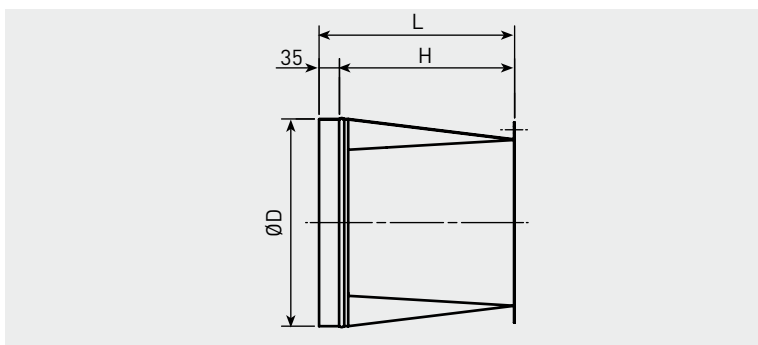


Model CMT	Model KMTA	Model KMTI	L1	L2 (KMTA)	L2 (KMTI)	D1	D2
225	KMTA-225	KMTI-225	600	250	300	315	515
250	KMTA-250	KMTI-250	900	250	300	355	555
280	KMTA-280	KMTI-280	900	300	300	400	600
315	KMTA-315	KMTI-315	900	300	300	450	650
355	KMTA-355	KMTI-355	900	300	300	500	700
400	KMTA-400	KMTI-400	900	300	300	500	700
450	KMTA-450	KMTI-450	900	300	450	560	760
500	KMTA-500	KMTI-500	900	300	450	630	830

ACCESSORIES



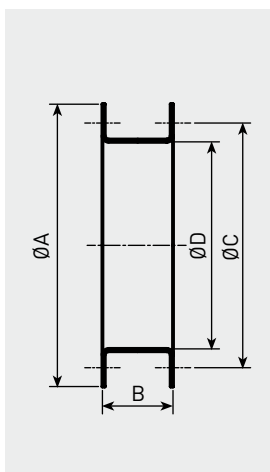
KMBI
Rectangular/circular connection flange for mounting at the CMT fan outlet.



Model CMT	Model KMBI	L	H	D	Model CMT	Model KMBI	L	H	D
120	KMBI-120	235	200	125	250	KMBI-250	335	300	250
140	KMBI-140	235	200	140	280	KMBI-280	335	300	280
160	KMBI-160	235	200	160	315	KMBI-315	335	300	315
180	KMBI-180	235	200	180	355	KMBI-355	335	300	355
200/60	KMBI-200	335	300	200	400	KMBI-400	335	300	400
200/80	KMBI-201	335	300	200	450	KMBI-450	485	450	450
225	KMBI-225	335	300	225	500	KMBI-500	485	450	500



KMBD
Double connection flange for mounting at the CMT fan inlet.



Model CMT	Model KMBD	A	B	C	D
120	KMBD-120	150	60	132	112
140	KMBD-140	170	80	152	125
160	KMBD-160	205	80	180	160
180	KMBD-180	244	80	210	180
200	KMBD-200	255	80	230	200
225	KMBD-225	280	80	256	224
250	KMBD-250	306	80	282	250
280	KMBD-280	346	100	320	280
315	KMBD-315	382	100	354	315
355	KMBD-355	422	100	394	366
400	KMBD-400	464	100	438	400
450	KMBD-450	515	100	485	450
500	KMBD-500	565	100	535	500

ELECTRICAL ACCESSORIES



REB
Electronic single phase speed controllers.



RMT
Three phase auto transformer speed controllers.



VFTM TRI IP54
Adjustable frequency drive for three phase motors from 0,37 to 15 kW 400 V.