

INDIRECT DRIVEN CENTRIFUGAL FANS HE

- Air volume from 1.000 to 100.000 m³/h
- Single or double inlet
- Forward and backward curved impellers
- Indirect driven centrifugal fans
- Speed controllable

Description

IMOFA, a partner of Thermo Air, has been designing and producing fans for more than 25 years. This experience has steered the development of the HE indirect driven centrifugal fans towards situations that demand quality, durability and performance in air displacement.

IMOFA offers 4 main types:

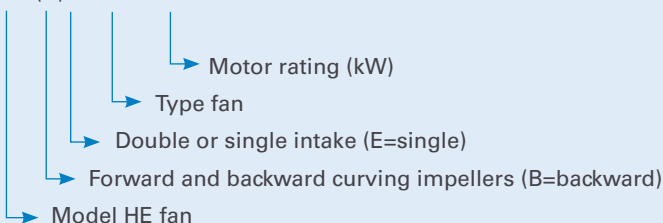
- HE: double inlet, impellers with forward curved impeller
- HEB: double inlet, impellers with backward curved impeller
- HEE: single inlet, impellers with forward curved impeller
- HEBE: single inlet, impellers with backward curved impeller

With the 4 types, 54 models and, a variety of impellers, configurations and motors, these fans ensure maximum flexibility for air displacement. IMOFA fans can be found in other equipment and applications as well as our own Thermo Air products. If required, these fans can be supplied complete with motor and positioned on a base frame. Various protective coatings are also available.

Even in situations that fall under the strict ATEX standards, such as temperature and dangerous chemicals, the HE range offers excellent possibilities.

Codes

HE(B)E - 630 - 5.5



Supplied with:

- dynamically balanced blade wheel
- steel bearing cover in rubber framework (till HE(B)(E) 315) or with cast iron bearing cover (>HE(B)(E)355)
- re-lubricatable bearings
- foundation (optional)
- mounting foot (optional)
- frequency regulator (optional)



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Technical specifications

Casing: the scroll shaped casing is constructed of robust galvanised steel. Along with the bearing speed selection and high standard blade balance, this sturdy construction guarantees a vibration free and silent operation. The standard version is supplied with outlet flange and cubed frame.

Impellers: depending on the diameter, temperature and air volume, the impeller blades are constructed of robust galvanised steel or from fibreglass reinforced polyamide (HE(B)/HE(B)(E) 200 t/m 450). The impellers are all fully adjustable and are supplied dynamically balanced.

Forward curving impellers in galvanised steel.

Backward curving impellers ≤ type 450 in fibreglass reinforced polyamide.
> type 500 in coated steel.

Bearings: all ball bearings are pre-lubricated and fitted within "sealed for life" casings. The types 200-315 fitted within a steel casing with rubber rings. The types 355-1000 are self-aligning bearings, fitted within a cast iron casing with grease nipples.

Base frames: the base frames are constructed of thick walled, welded steel U-profiles and/or angle steel frames and finished with a special coating.

Motors: the electric motors are selected per type so that the combination of fan, motor and propulsion type meets your specific requirements. The motors are also available with various motor safety devices such as PTO and PTC. Frequency regulators are also available.

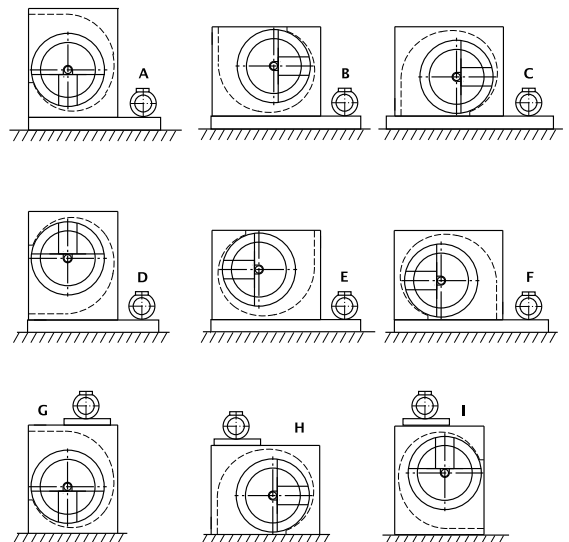
These fans comply with the following standards/demands:

- Machine Directive 89/336 EC, attachment 2B
- Low Voltage Directive 73/23/EEC and 89/392/EEC
- ISO and IEC Directives
- Motor protection IP 54 or IP55



Examples of outlet positions

HE + EM POSITIONS A to I



INDIRECT DRIVEN CENTRIFUGAL FANS HE

Technical data

HE (forward curving impeller)

HE	Unit	HE 200	HE 225	HE 250	HE 280	HE 315	HE 355	HE 400	HE 450	HE 500	HE 560	HE 630	HE 710	HE 800	HE 900	HE 1000
Max. motor capacity	kW	1,5	1,5	2,2	2,2	4,0	7,5	7,5	11,0	11,0	11,0	11,0	15,0	22,0	30,0	37,0
Max. Speed	rev./min	2400	2000	1800	1600	2200	1800	1600	1400	1200	1100	900	800	700	600	500
Weight	Kg	9,4	10,6	13,4	18,1	22,8	38,4	45,7	56,1	76,4	88,2	111,1	145,3	272,2	330,7	394,6
Other data		see graphs, available separately														
Article number	HE	016-005	016-010	016-015	016-020	016-025	016-030	016-035	016-040	016-045	016-050	016-055	016-060	016-065	016-070	016-075

HEB (backward curving impeller)

HEB	Unit	HEB 200	HEB 225	HEB 250	HEB 280	HEB 315	HEB 355	HEB 400	HEB 450	HEB 500	HEB 560	HEB 630	HEB 710	HEB 800	HEB 900	HEB 1000
Max. motor capacity	kW	1,5	2,2	4,0	4,0	4,0	5,5	7,5	7,5	11,0	15,0	18,5	22,0	37,0	55,0	55,0
Max. Speed	rev./min	5500	5700	5400	4400	3500	3200	2750	2400	2560	2285	2030	1745	1550	1380	1240
Weight	Kg	8,6	10,2	13,4	16,2	19,8	36,8	43,1	52,1	88,8	108,9	156,9	189,9	285,3	355,5	433,2
Other data		see graphs, available separately														
Article number	HEB	017-005	017-010	017-015	017-020	017-025	017-030	017-035	017-040	017-045	017-050	017-055	017-060	017-065	017-070	017-075

HEE (forward curving impeller, single inlet)

HEE	Unit	HEE 280	HEE 315	HEE 355	HEE 400	HEE 450	HEE 500	HEE 560	HEE 630	HEE 710	HEE 800	HEE 900	HEE 1000
Max. motor capacity	kW	2,2	4,0	5,5	5,5	7,5	7,5	11,0	11,0	15,0	18,5	22,0	30,0
Max. Speed	rev./min	2730	2425	2150	1910	1700	1530	1210	855	850	750	670	600
Weight	Kg	14,4	17,1	30,7	37	44,5	59,5	71,9	91,2	111,2	199,5	243	291
Other data		see graphs, available separately											
Article number	HEE	016-120	016-125	016-130	016-135	016-140	016-145	016-150	016-155	016-160	016-165	016-170	016-175

HEBE (backward curving impeller, single inlet)

HEBE	Unit	HEBE 280	HEBE 315	HEBE 355	HEBE 400	HEBE 450	HEBE 500	HEBE 560	HEBE 630	HEBE 710	HEBE 800	HEBE 900	HEBE 1000
Max. motor capacity	kW	2,2	2,2	3,0	3,0	4,0	7,5	11,0	11,0	18,5	18,5	30,0	37,0
Max. Speed	rev./min	4400	3500	3200	2750	2400	2560	2285	2030	1745	1550	1380	1240
Weight	Kg	13	16	28	34	43	60	70	94	116	204	257	318
Other data		see graphs, available separately											
Article number	HEBE	017-120	017-125	017-130	017-135	017-140	017-145	017-150	017-155	017-160	017-165	017-170	017-175

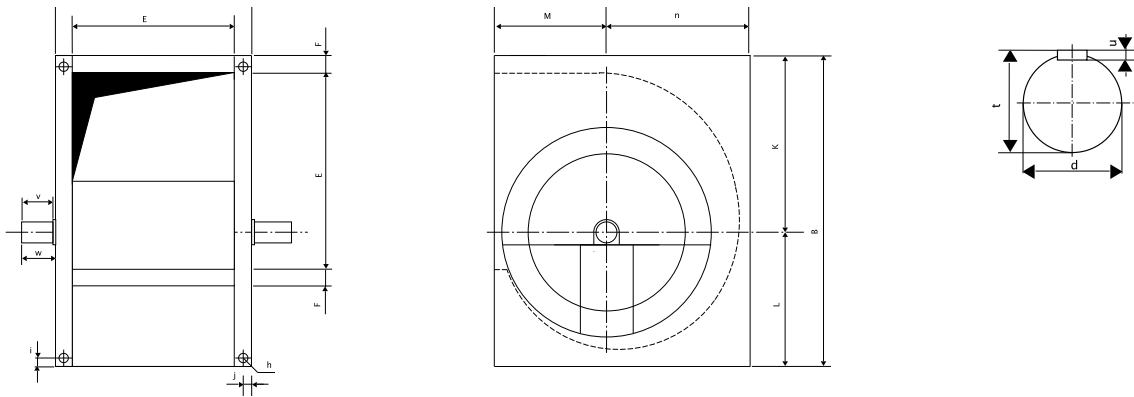
Product Options

Installation on a base frame complete with motor, v-belt and protective cover are some of the possibilities. These fans are also available in a EX or ATEX version. Available with a protective coating as well as transition pieces from rectangular to circular.

- A spark minimising version is not applicable for HEB / HEBE type 200 to 450. These are fitted standard with polyamide impellers.
- Dimensions for the vibration damper are dependant on the HE fan type. Dimensions (DxH) type A = 30x20-M8 ; type B= 50 x 30-M10 mm.
Type A : =< HE-560 of HEB-450 and motor =< 4.0 kW Type B: => HE-630 or HEB 500 and motor => 5.5 kW

INDIRECT DRIVEN CENTRIFUGAL FANS HE

Measurements HE / HEB / HEE / HEBE



Dimensions HE / HEB

HE(B) fans, double inlet (forward or backward curving impellers)															
HE, HEB	200	225	250	280	315	355	400	450	500	560	630	710	800	900	1000
A	293	323	358	398	443	524	574	634	704	784	874	974	1075	1195	1325
B	395	435	465	535	590	690	765	865	389	429	474	524	1075	1195	1325
C	325	355	405	445	505	560	615	695	765	865	995	1105	1250	1400	1540
E	250	280	315	355	400	450	500	560	630	710	800	900	1000	1120	1250
f	21	21	21	21	21	37	37	37	37	37	37	37	38	38	38
h	(10x16)	(10x16)	(10x16)	(10x16)	(10x16)	(12x20)	(12x20)	(12x20)	(12x20)	(12x20)	(12x20)	(12x20)	(12x20)	(12x20)	(12x20)
ii	53	53	53	53	53	92	92	92	92	92	92	92	92	92	92
j	10	10	10	10	10	18	18	18	18	18	18	18	18	18	18
k	243	263	279	327	353	417	468	525	571	651	716	809	915	1020	1100
l	152	172	186	208	237	273	297	340	369	409	469	526	590	665	730
m	143	152	180	193	217	236	255	289	325	365	420	459	542	603	696
n	182	203	225	252	288	324	360	406	440	500	575	646	708	797	844
v	46	46	46	73	73	84	84	84	88	88	88	88	125	125	125
w	66	66	66	98	98	103	103	103	113	113	113	113	162	162	162
d	20	20	20	25	25	30	30	30	40	40	40	40	60	60	60
t	22,8	22,8	22,8	28	28	33	33	33	43	43	43	43	64	64	64
u	6	6	6	8	8	8	8	8	12	12	12	12	18	18	18

Dimensions HEE / HEBE

HE(B)E fans, single inlet (forward or backward curving impellers)												
HEE, HEBE	280	315	355	400	450	500	560	630	710	800	900	1000
A	227	243	299	324	354	389	429	474	524	576	636	706
B	535	590	690	765	865	389	429	474	524	1075	1195	1325
C	445	505	560	615	695	765	865	995	1105	1250	1400	1540
E	185	200	225	250	280	315	355	400	450	500	560	630
f	21	21	37	37	37	37	37	37	37	38	38	38
h	(10x16)	(10x16)	(12x20)	(12x20)	(12x20)	(12x20)	(12x20)	(12x20)	(12x20)	(12x20)	(12x20)	(12x20)
ii	53	53	92	92	92	92	92	92	92	92	92	92
j	10	10	18	18	18	18	18	18	18	18	18	18
k	327	353	417	468	525	571	651	716	809	915	1020	1100
l	208	237	273	297	340	369	409	469	526	590	665	730
m	193	217	236	255	289	325	365	420	459	542	603	696
n	252	288	324	360	406	440	500	575	646	708	797	844
v	73	73	84	84	84	88	88	88	88	125	125	125
w	98	98	103	103	103	113	113	113	113	162	162	162
v1	59	62	89	89	87	88	88	88	88	125	125	125
w1	84	87	108	108	105	113	113	113	113	162	162	162
d	25	25	30	30	30	40	40	40	40	60	60	60
t	8	8	8	8	8	12	12	12	12	18	18	18
u	55	55	55	55	55	80	80	80	80	120	120	120