496.3.434-5
Vacuum cleaner motor performance

DOMEL®

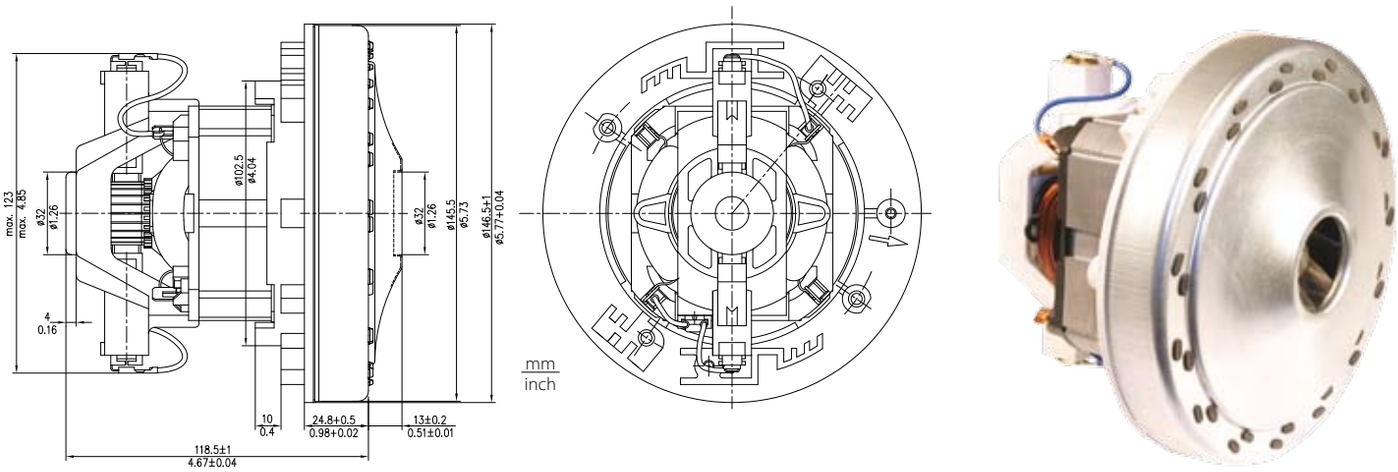
Vacuum cleaner motors with high efficiency 496.3.434-5/ 1600W/ 230V/ 50Hz are used for dry aspiration. Technical data and dimensions are given in the table. Vacuum cleaner motors consist of universal commutator motor and single fan stage. The rotor is supported with two ball bearings enabling vertical or horizontal installation of motor.
The motor is designed for insulation class 155 (F) and constructed according to EN 60335-1.

Technical data:

Normal operation:	P_m	>=	1360	W
Vacuum:	p_{max}	>=	29,0 116,7	kPa in H_2O
Air Flow:	Q_{max}	>=	56 119	dm^3/s CFM
Air Power:	P_{2max}	>=	620	W
Efficiency:	η_{max}	>=	42	%
Mass:	m	=	1,85	kg

Voltage:	230 V
Frequency:	50 Hz
Nominal Power:	1600 W

Max power 1750W



Dimensional and performance data are subject to change without notice.

Orifice		Current	Input Power	Speed	Pressure		Air Flow		Air power	Efficiency
mm	in*	A	W	min^{-1}	kPa	in H_2O	dm^3/s	CFM	W	%
40	1 1/2	7,94	1765	28705	3,3	13,3	55,3	117,2	183	10,4
30	1 1/8	7,57	1684	29290	8,8	35,3	50,0	105,8	439	26,0
23	7/8	6,96	1555	30730	16,3	65,3	39,2	83,0	637	40,9
19	3/4	6,40	1437	32216	21,2	85,3	30,2	63,9	641	44,6
16	5/8	5,89	1327	33633	24,6	99,0	22,9	48,5	564	42,5
13	1/2	5,41	1225	35212	26,0	104,5	15,5	32,9	404	33,0
10	3/8	4,97	1127	37559	28,3	113,6	9,6	20,3	271	24,0
6,5	1/4	4,56	1041	38673	28,1	112,7	4,1	8,7	115	11,0
0	0	4,23	967	41599	30,5	122,7	0,0	0,0	0	0,0

Data above represent the preformance of an average motor sample. Individual data may vary due to normal manufacturing variations.
* Orifice in inch is only approximative.