



VACUUM CLEANER MOTOR PERFORMANCE
CALCULATED FROM METRIC TO IMPERIAL UNITS & ASTM ORIFICE

Date: 11.1.2006

Zelezniki

Code: 496.3.720-2
Voltage / frequency: 120/60 V / Hz
Stator winding: 50/1,12
Rotor winding: 8/2x0,50
Brushes: X 89
Weight: 2510 g

Working order number: 128451
Request number: 00330106
Number: 2
Absolute pressure: 97,59 kPa
Ambient temperature: 23,18 °C
Correction factor: 1,0328

Pf = 1647,06 W, Pi = 1122,80 W, Pm = 1384,93 W

M E T R I C	Orifice mm	Current A	Input Pow. W	Speed /min	Vacuum kPa	Air flow dm3/s	Air Power W	Efficiency %	Vac (inH2O)	Flow (CFM)	M E A S U R E D
	50	14,09	1637,38	25894	2,22	70,80	157,01	9,59	8,91	150,02	
	40	14,26	1656,72	25773	4,71	65,69	309,68	18,69	18,91	139,19	
	30	14,39	1671,70	25665	10,65	54,71	582,74	34,86	42,76	115,92	
	23	14,17	1646,96	25909	16,75	39,71	665,01	40,38	67,25	84,14	
	21	13,86	1613,12	26162	18,56	34,70	644,01	39,92	74,51	73,53	
	19	13,49	1571,62	26545	20,41	29,67	605,42	38,52	81,94	62,87	
	16	12,86	1501,10	27503	23,14	22,28	515,42	34,34	92,90	47,21	
	13	12,00	1404,90	28801	25,95	15,51	402,37	28,64	104,18	32,86	
	10	11,00	1292,24	30542	27,84	9,51	264,75	20,49	111,77	20,15	
	6,5	10,03	1181,82	32748	29,64	4,18	124,05	10,50	118,99	8,86	
	0	9,25	1092,52	34859	31,42	0,00	0,00	0,00	126,14	0,00	

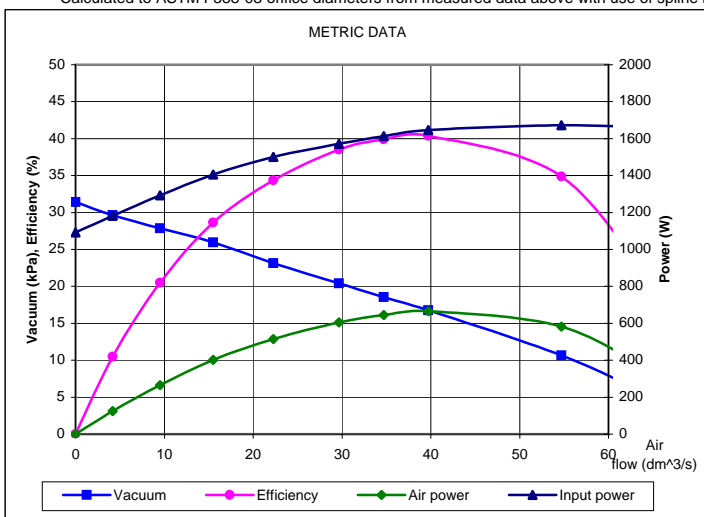
Maximum measured values:

Input power = 1671,7 W, Air power = 665,01 W, Vacuum = 31,42 kPa = 126,14 inH2O, Air Flow * = 70,8 L/s = 150,02 CFM, Efficiency = 40,38 %

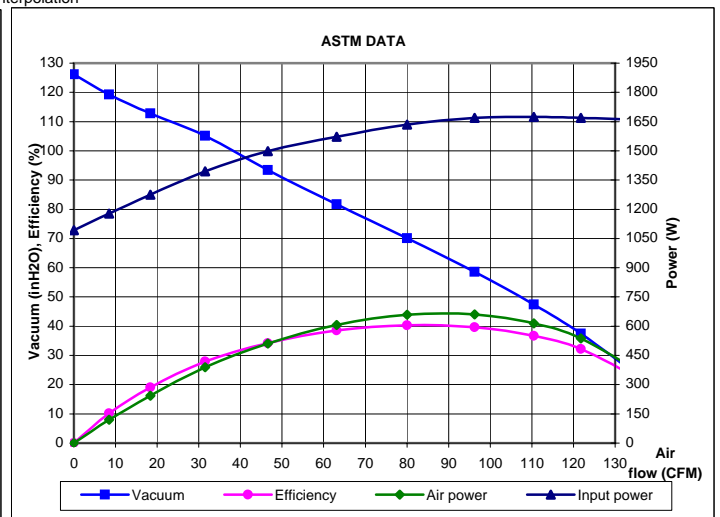
Note for units conversion: 1 inH2O = 0.2490889 kPa, 1 CFM = 0.4719474 l/s, 1 in = 25.4 mm (NIST Special Publication 811,1995)

I M P E R I A L	Orifice in	Current A	Input Power W	Speed RPM	Vacuum inH2O	Air Flow CFM	Air Power W	Efficiency %	Orifice mm	C A L C U L A T E D
	2,000	14,1	1636	25903	8,3	150,7	147,9	9,0	50,80	
	1,750	14,2	1649	25830	13,4	144,7	226,7	13,7	44,45	
	1,500	14,3	1660	25746	22,2	136,3	357,3	21,5	38,10	
	1,250	14,4	1669	25673	37,4	121,8	537,8	32,2	31,75	
	1,125	14,4	1673	25666	47,4	110,5	614,5	36,7	28,58	
	1,000	14,4	1668	25738	58,6	96,3	660,9	39,6	25,40	
	0,875	14,1	1635	25995	70,0	80,1	659,3	40,3	22,23	
	0,750	13,5	1573	26533	81,8	63,1	606,6	38,6	19,05	
	0,625	12,8	1498	27550	93,4	46,6	511,1	34,1	15,88	
	0,500	11,9	1394	28955	105,1	31,5	389,4	27,9	12,70	
	0,375	10,8	1275	30852	112,8	18,3	243,1	19,1	9,53	
	0,250	10,0	1178	32827	119,3	8,5	119,3	10,1	6,35	
**	0,000	9,3	1093	34859	126,1	0,0	0,0	0,0	0,00	

** Calculated to ASTM F588-03 orifice diameters from measured data above with use of spline interpolation



Measured in accordance with: IEC 60312



Measured by:

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