



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

Date: 17.7.1998

Zelezniki

Code: 492.3.784  
Voltage / fequency: 120/60 V/Hz  
Stator winding:  
Rotor winding:  
Brushes:  
Weight: 2410 g

Working order number:  
Request number:  
Number:  
Absolute pressure: kPa  
Ambient temperature: °C  
Correction factor:

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	0,00	0,00	0	0,00	0,00	0,00	0,00	0,00	0,00	
	40	12,03	1304,96	19843	3,34	55,47	185,03	14,18	13,39	117,53	
	30	12,09	1303,22	19687	8,00	47,78	382,04	29,31	32,11	101,24	
	23	11,61	1258,62	20132	13,26	35,70	473,30	37,60	53,22	75,64	
	19	10,91	1179,62	20632	15,56	26,28	408,78	34,65	62,45	55,68	
	16	10,43	1148,82	21525	17,52	19,72	345,42	30,07	70,34	41,78	
	13	9,73	1080,46	22407	19,03	13,56	258,04	23,88	76,41	28,73	
	10	9,03	1013,24	23345	20,26	8,30	168,14	16,59	81,34	17,59	
	6,5	8,32	943,38	24392	21,30	3,64	77,44	8,21	85,51	7,71	
	0	7,79	890,76	25290	22,93	0,00	0,00	0,00	92,05	0,00	

Maximum measured values:

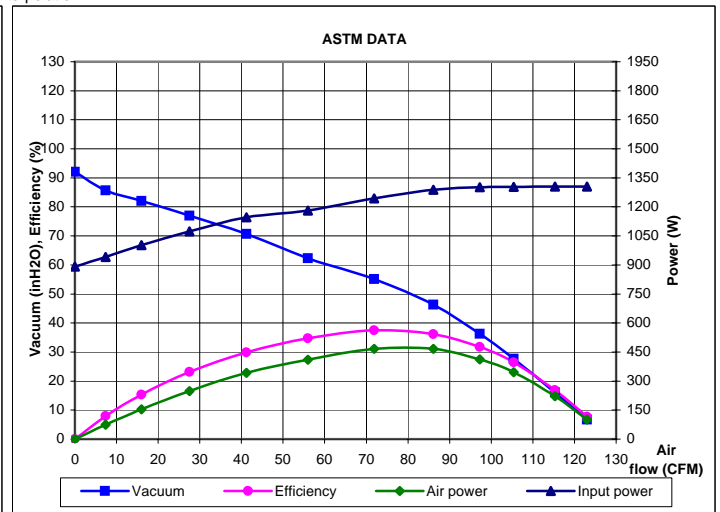
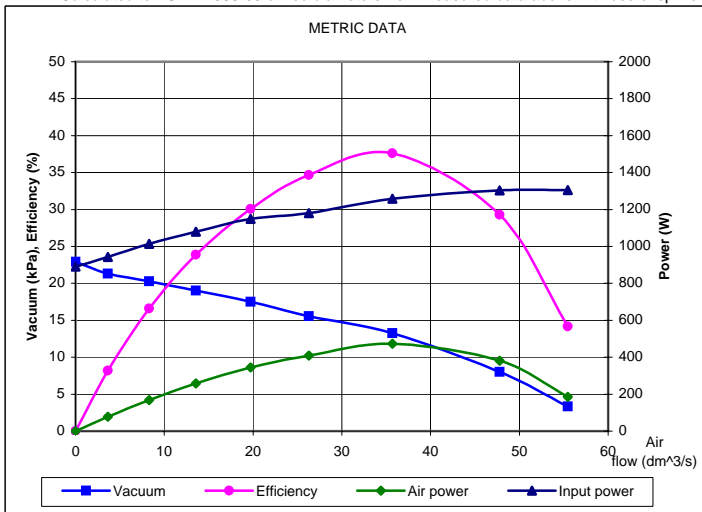
Input power = 1304,96 W, Air power = 473,3 W, Vacuum = 22,928 kPa = 92,05 inH2O, Air Flow = 55,47 L/s = 117,53 CFM, Efficiency = 37,6 %

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								50,80	
	1,750	12,0	1305	19998	6,7	123,0	100,6	7,7	44,45	
	1,500	12,1	1305	19769	16,1	115,3	220,8	16,9	38,10	
	1,250	12,1	1304	19651	27,6	105,4	345,2	26,5	31,75	
	1,125	12,1	1302	19747	36,3	97,2	412,6	31,7	28,58	
	1,000	11,9	1289	19951	46,3	86,1	466,1	36,2	25,40	
	0,875	11,5	1243	20191	55,1	71,9	466,5	37,5	22,23	
	0,750	10,9	1180	20621	62,3	55,9	409,8	34,7	19,05	
	0,625	10,4	1147	21564	70,6	41,2	342,3	29,8	15,88	
	0,500	9,7	1073	22496	76,9	27,5	248,8	23,2	12,70	
	0,375	8,9	1003	23499	82,0	16,0	154,4	15,4	9,53	
	0,250	8,3	941	24428	85,7	7,4	74,4	7,9	6,35	
	0,000	7,8	891	25290	92,0	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:

Ivan Krmelj