POLE STAR
PRODUCTS LIMITED

PMA3-400S4-2A

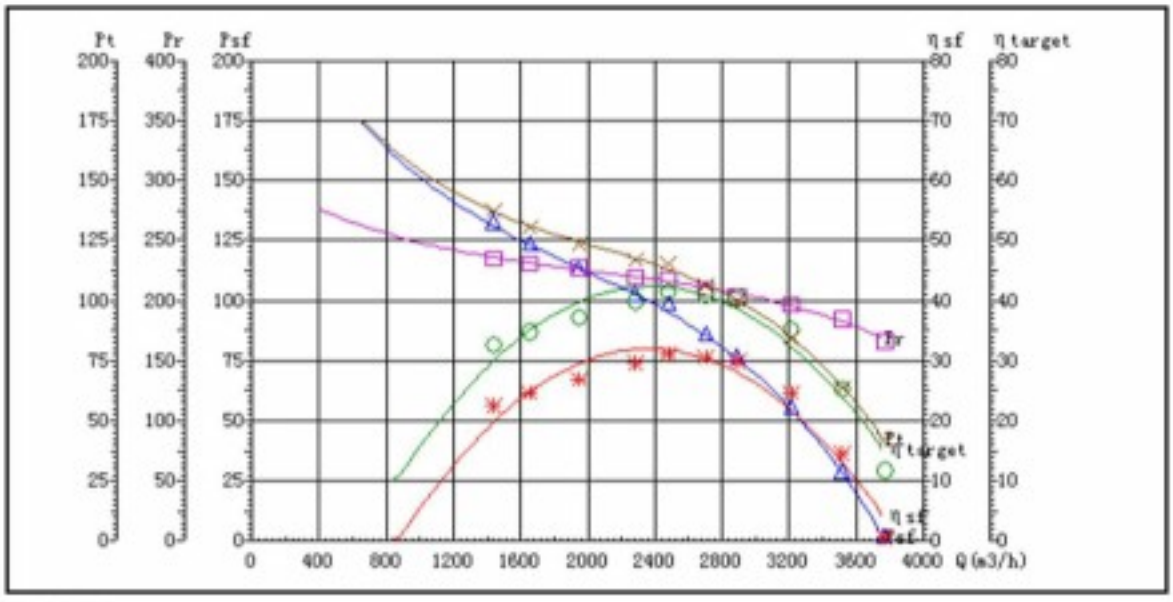
ErP 2015

Fan Air-dynamic Performance Test Report

Test No	20141220-400S-01	Product No	01	Flow Test Method		Motor Model	380V-50HZ-YS
Flow(m^3/h)	4300.0	Total Pressure(Pa)	1.00	Rotate Speed(rpm)	1400	Electric Current(A)	0.480
Noise(dB(A))	1.00	Outlet Area(m2)	0.126	Impeller Dia.(m)	0.4000	Standard	ISO5801-2000

Items	Unit	1	2	3	4	5	6	7	8	9	10
p=101325.00Pa		θ=20.0℃		ρ=1.2000kg/m^3		Dc=0.400m					
Air Flow	m^3/h	1441.4	1659.1	1950.9	2285.2	2483.8	2707.7	2892.6	3215.1	3517.8	3768.1
Total Pressure	Pa	137.09	130.25	123.05	116.66	115.18	105.82	99.58	83.95	63.29	42.14
Static Pressure	Pa	131.05	122.25	111.98	101.48	97.25	84.52	75.25	53.88	27.28	0.81
Electric Current	A	0.477	0.472	0.469	0.462	0.461	0.453	0.449	0.445	0.434	0.424
Input Power	W	234.9	230.3	226.9	218.8	216.7	208.9	202.9	196.4	184.3	165.9
Output Power	W	145.6	142.8	140.7	135.6	134.3	129.5	125.8	121.8	114.3	102.8
Rotate Speed	rpm	1348	1353	1356	1362	1362	1370	1374	1385	1397	1407
Total Pt. Eff.	%	23.37	26.06	29.38	33.85	36.68	38.10	39.43	38.18	33.56	26.60
Total Eff.	%	14.49	16.16	18.22	20.99	22.74	23.62	24.45	23.67	20.81	16.49
Fan Noise	dB(A)	/	/	/	/	/	/	/	/	/	/
Energy Efficiency		32.5	34.7	37.0	39.8	41.4	40.9	40.4	35.2	25.3	11.6

Performance Curve



X: Q(m3/h)

Y: △Psf(Pa) ✳ηsf(%) □Pr(w) ○η target ×Pt(Pa)