AERODYNAMIC TEST

Object of inspection :

Fan Type :	R11x-40LPx-4T-3854
Motor specification :	3~ Y400/D230V 50Hz 190W 0,38/0,66A 1360RPM TH.PROT. INS.CL.F IP54
Fan manufacturer :	HRF
Aplication specification :	Measured in full bell mouth without guard grill

Performed by :

Rotomatika Fans , Spodnja Kanomlja 23 , 5281 Spodnja Idrija - SLOVENIJA Performer : Jure Novak

Test rig, type of inlet nozzle, type of instalation :

Dps=1600Pa , Q=5m3/s , P=10kW Quadrant inlet nozzle 0,300 Type of installation: A

Reference source :

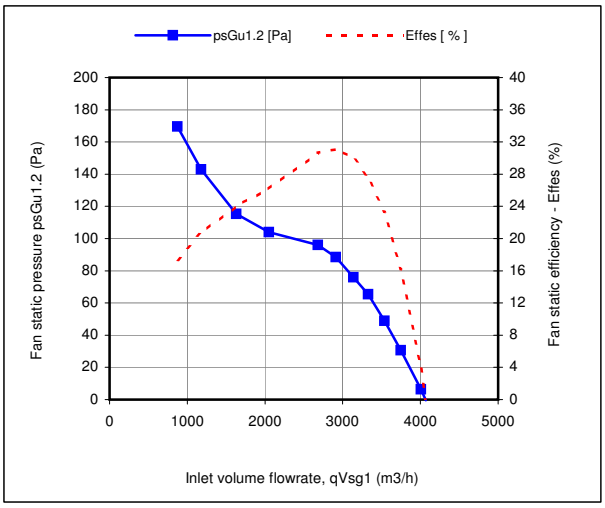
lam3539a3859_121221.xls

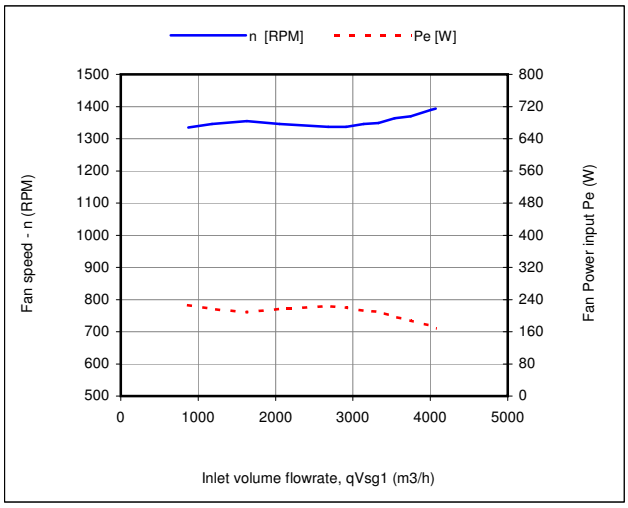
Test conditions :

Date of testing :	21.12.2012	
Testing Voltage / Frequency :	400V/50Hz	
Testing Capacitor / Connection :	star high voltage	
Direction of rotation :	CCW from cable side	
According to standards :	ISO 5801 - 1997	
Ambient temperature :	22,5	°C
Ambient humidity :	0,27	/
Barometric pressure :	97800	Pa
Ambient air density :	1,149322	kg/m^3

Aerodynamic test :

q_{Vsg1}	$p_{sGu1.2}$	$p_{FGu1.2}$	p_5	p_3	n	Eff_{es}	U	f	I_{avg}	P_e	time
[m^3/h]	[Pa]	[Pa]	[Pa]	[Pa]	[RPM]	[%]	[V]	[Hz]	[A]	[W]	[hh:mm]
872	169,5	171,7	7,0	162,3	1335	17,37	402,04	49,954	0,422	226,4	7:39:23
1179	142,9	146,9	12,7	136,8	1346	20,67	401,215	49,972	0,410	216,9	7:35:54
1631	115,3	123,1	24,1	110,4	1355	24,01	401,355	49,992	0,401	208,4	7:32:29
2051	103,9	116,3	38,1	99,5	1346	26,21	400,83	49,991	0,411	216,3	7:29:05
2681	96,1	117,1	64,9	92,0	1337	30,64	400,64	50,011	0,417	223,6	7:25:36
2913	88,5	113,4	76,6	84,8	1337	31,10	398,695	49,97	0,415	220,6	7:22:10
3137	76,0	104,9	88,8	72,8	1346	30,00	398,9	49,936	0,405	211,6	7:18:23
3328	65,3	97,8	99,9	62,6	1349	27,57	399,2	49,968	0,404	209,8	7:14:03
3539	48,9	85,6	112,9	46,9	1364	23,30	399,2	49,981	0,394	197,7	7:10:24
3748	30,5	71,7	126,6	29,3	1370	16,19	397,875	50,01	0,383	188,1	7:07:04
4007	6,5	53,5	144,7	6,2	1390	3,96	401,06	50,067	0,369	174,0	7:03:13
4071	-0,5	48,1	149,3	-0,4	1394	-0,29	399,98	50,012	0,363	167,9	6:58:41





Remarks :

ErP2015 compliant.