

三協工業有限公司

COMMONWEALTH INDUSTRIAL CORPORATION  
SPECIFICATION

CLASSIFICATION

MODEL: FP-108ES-A 230V S1B

<b>A. SCOPE:</b>	
THIS SPECIFICATION DEFINES THE ELECTRICAL AND MECHANICAL OF THE AXIAL FLOW FAN.	
<b>B. MECHANICAL</b>	
1) DIMENSIONS:	PER DRAWING
2) FRAME:	DIE CAST ALUMINUM PAINTED BLACK
3) BEARING SYSTEM:	BALL BEARING
<b>C. ELECTRICAL</b>	
1.) RATED VOLTAGE:	220/240 AC
2.) ROTATION	CCW<FROM LABEL SIDE>
3.) AIR FLOW	9.00 M3/MIN AT RATED VOLTAGE AT 60 HZ
AT ZERO STATIC PRESSURE	7.60 M3/MIN AT RATED VOLTAGE AT 50HZ
4.) STATIC PRESSURE	21mm- H2O MIN. AT 60HZ 16mm-NCH H2O MIN. AT 50HZ
5.) INPUT POWER	IN FREE AIR RATED VOLT 60 WATT AT 60HZ IN FREE AIR RATED VOLT 44 WATT AT 50 HZ
6.) INPUT CURRENT	IN FREE AIR, RATED VOLT 0.49A AT 60HZ IN FREE AIR, RATED VOLT 0.38A AT 50HZ
7.) INSULATION RESISTANCE	10 MEG OHM MIN. AT 500V DC (BETWEEN FRAME AND TERMINAL)
8.) DIELECTRIC STRENGTH	1 SEC. 2000 VAC AT 50/60HZ
9) LIFE EXPECTANCY	40,000 HOURS AT 25 DEGREE C , 65% RH
10) ACOUSTAL NOISE	50 dB(A) -AT 50 HZ @1M 54 dB(A) -AT 50 HZ @1M
11) SPEED	2900 RPM +/- 10% AT 50 HZ , 3400 RPM +/- 10% AT 60 HZ
12) VIBERATION TEST	AMPLITUDE 1.5M 10-55 HZ 3 DIRECTION X.Y.Z. 1 HR
13) SHOCK TEST	ACCELERATION OF GRAVITY 30G AT 6M Y.Y.G 1 HR
14) AIR-FLOW DIRECTION	AIR INTAKE OVER THE STRUTS
15) INSULATION RANK	UL :CLASS B

- LIFE IS DEFINED AS THE TIME MOTOR SPEED DECREASED MORE THAN 30% COMPARED WITH INITIAL VALUE

**C) MECHANICAL**

- C-1) DIMENSIONS-----SEE ATTACHED
- C-2) FRAME-----DIE CAST ALUMINUM PAINTED BLACK
- C-3) FAN BLADE-----PLASTIC PBT UL: 94V-0 RATING +FIBER GLASS
- C-4) BEARING SYSETM-----BALL BAIRNG
- C-5) TERMINAL TYPE-----8.0 (L) x 3.0 (W) x 0.5 (T)

**D) PROTECTION:**

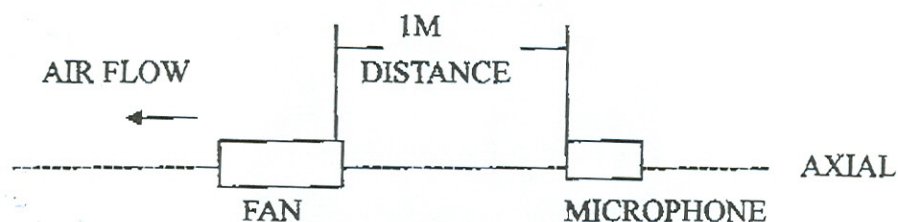
- D-1) THERMALLY PROTECTION

**E) ENVIERONMENTAL:**

- E-1) OPERATING TEMPERATURE ----- 0 TO + 70 DEGREE C
- E-2) STORAGE TEMPERATURE----- -20 TO + 75 DEGREE C
- E-3) DROP TEST  
IN MINIMUM PACKAGING CONDITION FANS WITHSTANDS EACH ONE DROP OF THREE FACES FROM 30 CM DISTANCE HEIGHT ONTO 10MM THICKNESS OF WOODEN BOARD
- E-4) VIBRATION TEST  
FREQUENCY: 10-50 HZ AMPLITUDE  
X. Y. Z. DIRECTION EACH FOR 1 HR
- E-5) SHOCK TEST  
APPLY PEAK ACCELERATION 50g AND KEEP DURATION OF THE PULSE FOR 11

**F) ACOUSTICAL NOISE:**

- F-1) MEASUREMENT STE-UP



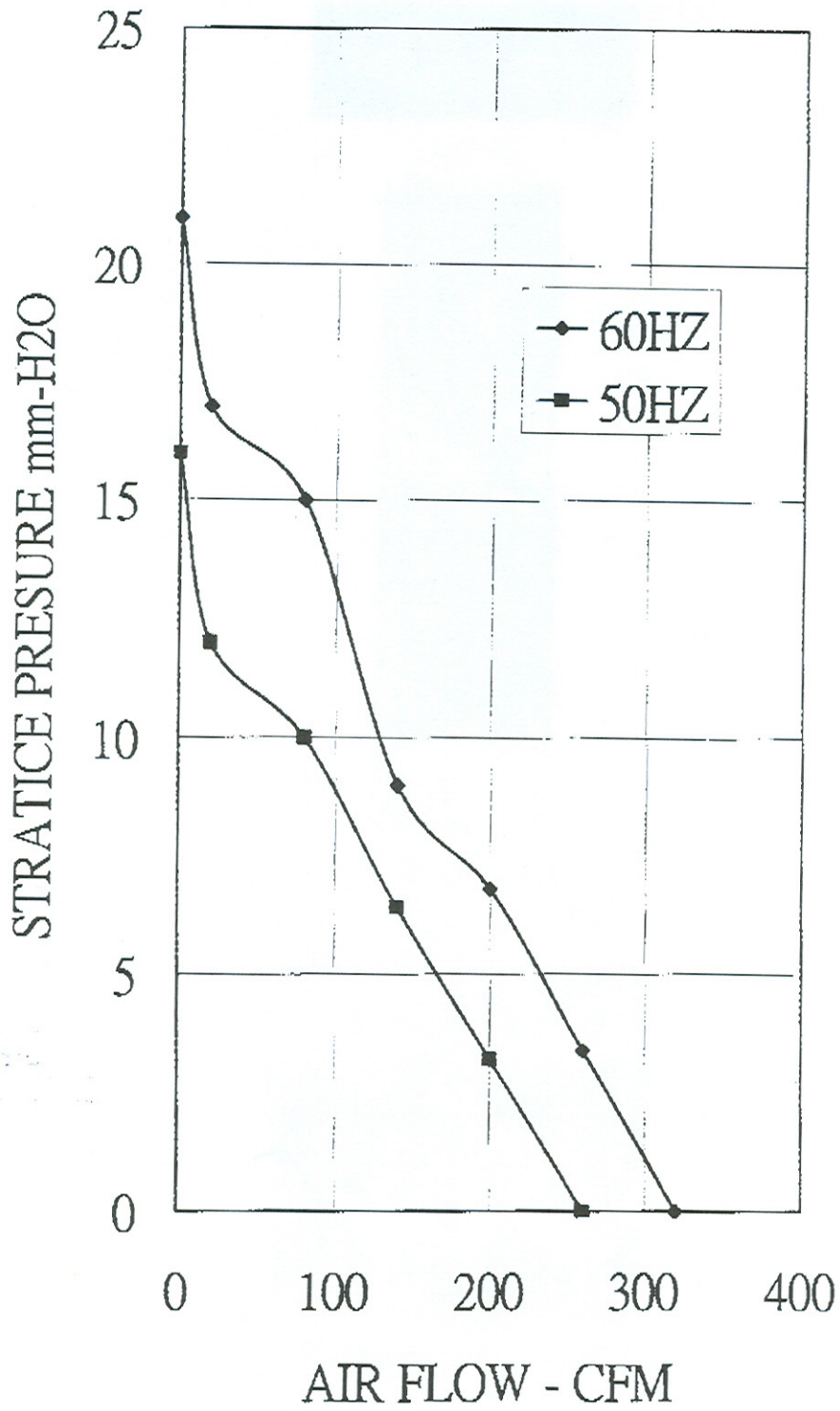
- F-2) MEASUREMENT PERFORMED IN ANECHOIC EST CHAMBER UNDER FREE AIR CONDITON
- F-3) CHAMBER BACK GROUND NOISE 17 dB MAX.
- F-4) READING TAKEN FROM SPECTRUN ANALYZER

**G) STATICS PRESSURE VS AIR FLOW CURVE:**

- AS ATTACHED PAGE:



# PERFORMANCE



MODEL: : FP-108ES-A

Unit:mm(inch)

