

Bioenvironmental and Structural Systems Lab

Fan Description Form

Project Number: 96280 Series/Test: /

Test Date: October 22, 1996 File Name: _____

Fan

Make: Canarm

Model #: PBF18

Serial #: -

Manufacturer: Canarm

Blade Size: 18" dia.

Orifice Dia.: 18.6"

Blade

Number: 3

Shape: propeller

Material: polypropylene

Pitch: 47 degree

Clearance: 0.3"

Hub Diameter: -

Shutter

Material: plastic

Number Doors: 6

Number Rows: 1

Door Length: 22.4"

Location: intake

Other Attachments

Motor

Make: Marathon

Model #: 3WC48A17T272AP

Serial #: -

H.P.: 1/3

Amps: 3.8/1.9

Volts: 115/230

RPM: 1625

S.F.: 1.0

Drive Pulley Dia.: direct

Axle Pulley Dia.: drive

Center Spacing: -

Housing

Material: plastic

Intake Area: 21.2"x21.5"

Discharge Area: 20" dia.

Depth: $\frac{30'' \text{ top}}{27'' \text{ bottom}}$

Guards

Description: wire

Spacing: 2" x 2"

Location: exhaust

TEST RESULTS

CANARM PBF18

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 96280	0.00	1668	4460	11.6
Fan description:	0.05	1665	4260	11.0
18" direct drive, 1/3 hp Marathon	0.10	1666	4050	10.7
3WC48A17T2772AP motor, plastic housing,	0.15	1665	3830	10.1
plastic shutter and guard	0.20	1667	3570	9.5
	0.25	1667	3290	8.9
	0.30	1672	2840	7.6
