

University of Illinois
Department of Agricultural Engineering

Bioenvironmental and Structural Systems Lab
Fan Description Form

Project Number: 96159p

Series/Test: /

Test Date: June 26, 1996

File Name:

Fan

Make: Pro-Terra

Model #: A38265-3622

Serial #: -

Manufacturer: Chore-Time

Blade Size: 36"

Orifice Dia.: 36.5" Volts: 208/230

Blade 36-3-18

Number: 3

Shape: propeller

Material: cast aluminum

Pitch: -

Clearance: 0.3"

Hub Diameter: -

Motor

Make: GE

Model #: 5KCP49UN9806AS

Serial #: PLL-CT#28936

H.P.: 1/2

Amps: 3.70/3.80

RPM: 850

S.F.: 1.00

Drive Pulley Dia.: direct

Axle Pulley Dia.: drive

Center Spacing: -

Housing

Material: fiberglass

Intake Area: 42" x 42"

Discharge Area: 36.5" dia.

Depth: 18"

Shutter

Material: Plastic

Number Doors: 12 per row

Number Rows: 2

Door Length: 20.1"

Location: intake

Guards

Description: wire

Spacing: 2" concentric

Location: exhaust

Other Attachments

discharge cone 25.3" deep, 46.5" o.d.

TEST RESULTS

PRO-TERRA A38265-3622

Test: 96159p

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
	0.00	853	11,710	20.5
Fan description:	0.05	850	10,970	18.6
36" belt drive, 1/2 hp GE 5KCP49UN9806AS	0.10	847	10,200	16.8
motor, fiberglass housing, plastic shutter,	0.15	845	9,390	15.1
guard and discharge cone	0.20	843	8,020	12.8
	0.25	844	6,260	10.1
	0.30	846	4,290	7.0