

**University of Illinois Department of
Agricultural Engineering
BESS Lab**

Project Number: 98249

Test Date: November 12, 1998

Fan

Make: Schaefer
Model #: FM3600-1G
Manufacturer: Schaefer
Blade Size: 36"
Orifice Dia.: 36.5"

Motor

Make: Magnetek
Model #: C580
H.P.: 1/2
Amps: 3.2/6.4
Volts: 230/115

Blade

Number: 4
Shape: propeller
Material: galvanized steel
Pitch: -
Clearance: 0.3"

RPM: 1725
S.F.: 1.0

Drive

Drive Pulley Dia. 2.8" o.d.
Axle Pulley Dia.: 9.4" o.d.

Shutter

Material: aluminum
of Doors: 11 per column
of Columns: 2
Door Length: 20.7"
Location: intake

Housing

Material: fiberglass
Intake Area: 42.7" x 43.3"
Discharge Area: 36.4"
Depth: 33" top
28.5" bottom

Guards

Description: wire
Spacing: 1" concentric
Location: exhaust

Other Attachments:

TEST RESULTS

SCHAEFER FM3600-1G

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 98249	0.00	497	10080	19.2
Fan description:	0.05	496	9320	17.2
36" belt drive, ½ hp Magnetek C580	0.10	498	8380	15.3
motor, fiberglass housing, aluminum shutter	0.15	497	6910	12.5
and guard	0.20	494	4390	7.2
	0.25	491	3630	5.4
