

University of Illinois Department of
Agricultural Engineering
BESS Lab

Project Number: 98202

Test Date: October 20, 1998

Fan

Make: Hired Hand

Model #: 6603-6034
with 6611-7000 shutter
Manufacturer: Hired Hand

Blade Size: 48.5"

Orifice Dia.: 49.1"

Blade

Number: 3

Shape: propeller

Material: galvanized steel

Pitch: -

Clearance: 0.3"

Shutter

Material: Aluminum

of Doors: 12 per row

of Columns: 2

Door Length: 25.6"

Location: intake

Other Attachments:

Discharge cone 31.5" deep, 49.1" i.d.,
59.8" o.d.

Motor

Make: Magnetek

Model #: 8-194005

H.P.: 1

Amps: 3.9-3.41.7

Volts: 208-230/460
3 phase
RPM: 1725

S.F.: 1.00

Drive

Drive Pulley Dia.: AK34

Axle Pulley Dia.: 10.4" o.d.

Housing

Material: Fiberglass

Intake Area: 54" x 54.5"

Discharge Area: 49.1"

Depth: 30.5" top
27.5" bottom

Guards

Description: wire

Spacing: 2" concentric

Location: exhaust

TEST RESULTS

HIRED HAND 6603-6034

Test: 98202

▲ 3 phase

Fan description:

48" belt drive, 1 hp Magnetek 8-194005

motor, fiberglass housing, aluminum

shutter 6611-7000, guard and discharge cone #6650-1000

Static Pressure

in. water

0.00

0.05

0.10

0.15

0.20

0.25

Speed

rpm

589

588

586

585

584

582

Airflow

cfm

23,500

22,000

20,300

18,100

15,100

7,900

Efficiency

cfm/Watt

26.4

22.9

19.9

16.8

13.3

6.5