

University of Illinois Department of
Agricultural Engineering
BESS Lab

Project Number: 98203

Test Date: October 20, 1998

Fan

Make: Hired Hand

Model #: 6603-6032
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 column

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.: MA38

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 6603-6032

Test: 98203

▲ 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

Speed
rpm

Airflow
cfm

Efficiency
cfm/Watt

0.00

642

26,000

23.6

0.05

640

24,700

20.9

0.10

638

23,100

18.4

0.15

636

21,500

16.3

0.20

634

19,300

13.9

0.25

633

16,300

11.2

0.30

630

8,500

5.5