

University of Illinois Department of
Agricultural Engineering
BEES Lab

Project Number: 03060bd

Test Date: April 29, 2003

Fan

Make: Big Dutchman

Model #: 6-36-5207 w/cone

Manufacturer: Canarm

Blade Size: 35.9"

Orifice Dia.: 36.8"

Motor

Make: FHP

Model #: M009649

H.P.: 1

Amps: 5.2/2.6

Volts: 208-230/460

Blade

Number: 3

Shape: propeller

Material: galvanized steel

Pitch: -

Clearance: .5"

RPM: 850

S.F.: 1.0

Drive

Drive Pulley Dia. direct

Axle Pulley Dia.: drive

Shutter

Material: plastic

of Doors: 12 per column

of Columns: 2

Door Length: 20"

Location: intake

Housing

Material: fiberglass

Intake Area: 42" x 41"

Discharge Area: 40.3" dia.

Depth: 36" top
26" bottom

Guards

Description: wire

Spacing: 2"

Other Attachments:

Discharge cone 19.5" deep, 40.3" i.d., 44.5" o.d.

Location: exhaust

TEST RESULTS

BIG DUTCHMAN 60-36-5207 w/cone

Test: 03060bd

▲ 3 phase

Fan description:

36" direct drive, 1 hp FHP M009649 motor,
fiberglass housing, plastic shutter, guard
and discharge cone

Static Pressure
in. water

Speed
rpm

Airflow
cfm

Efficiency
cfm/Watt

0.00

834

16,210

19.4

0.05

830

15,340

17.4

0.10

825

14,440

15.5

0.15

820

13,600

13.9

0.20

815

12,540

12.3

0.25

811

11,420

10.8

0.30

809

8,710

8.2