

University of Illinois Department of
Agricultural Engineering
BEES Lab

Project Number: 03055bd

Test Date: April 30, 2003

Fan

Make: Big Dutchman

Model #: 60-36-5258

Manufacturer: Canarm

Blade Size: 36" dia.

Orifice Dia.: 37"

Blade

Number: 4

Shape: propeller

Material: galvanized steel

Pitch: -

Clearance: 0.5"

Shutter

Material: plastic

of Doors: 13 per column

of Columns: 2

Door Length: 20.1"

Location: intake

Other Attachments:

Motor

Make: Marathon

Model #: AWA56T17T5600A

H.P.: 1/2

Amps: 2.0-1.8/0.9 60Hz
1.8-2.0/.9-1.0 50 Hz

Volts: 208-230/460 60 Hz
190-240/380-480 50 Hz

RPM: 1725/1425

S.F.: 1.00

Drive

Drive Pulley Dia. 3.5" o.d.

Axle Pulley Dia.: 9" o.d.

Housing

Material: galvanized steel

Intake Area: 40" x 42"

Discharge Area: 37" dia.

Depth: 34" top
25.5" bottom

Guards

Description: wire

Spacing: 2" x 2"

Location: exhaust

TEST RESULTS

BIG DUTCHMAN 60-36-5258

Test: 03055bd

▲ 3 phase, 380V, 50 Hz

Fan description:

36" belt drive, ½ hp Marathon AWA56T17T5600A
motor, galvanized steel slant housing, plastic shutter
and guard

Static Pressure
in. water

Speed
rpm

Airflow
cfm

Efficiency
cfm/Watt

0.00

545

10,490

23.3

0.05

544

9,530

20.4

0.10

542

8,260

17.0

0.15

540

6,280

12.3

0.20

539

4,170

8.0

0.25

536

2,770

5.0

0.30

531

1,340

2.2