

University of Illinois Department of
Agricultural Engineering
BESS Lab

Project Number: 03057bd

Test Date: April 29, 2003

Fan

Make: Big Dutchman

Model #: 60-36-5202

Manufacturer: Canarm

Blade Size: 35.9"

Orifice Dia.: 36.8"

Blade

Number: 3

Shape: propeller

Material: galvanized steel

Pitch: -

Clearance: .5"

Shutter

Material: plastic

of Doors: 12 per column

of Columns: 2

Door Length: 20"

Location: intake

Other Attachments:

Motor

Make: FHP

Model #: M099839

H.P.: 1/2

Amps: 2.4/1.2

Volts: 208-230/460

RPM: 850

S.F.: 1.0

Drive

Drive Pulley Dia. direct

Axle Pulley Dia.: drive

Housing

Material: fiberglass

Intake Area: 42" x 41"

Discharge Area: 40.3" dia.

Depth: 36" top
26" bottom

Guards

Description: wire

Spacing: 2"

Location: exhaust

TEST RESULTS

BIG DUTCHMAN 60-36-5202

Test: 03057bd

▲ 3 phase

Fan description:

36" direct drive, ½ hp FHP M099839 motor,
fiberglass housing, plastic shutter and guard

Static Pressure	Speed	Airflow	Efficiency
<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
0.00	817	11,160	24.2
0.05	807	10,300	20.6
0.10	798	9,340	17.5
0.15	788	8,380	14.8
0.20	779	7,070	11.8
0.25	766	5,190	8.1
0.30	745	3,830	5.5