

University of Illinois Department of
Agricultural Engineering
BEES Lab

Project Number: 99225

Test Date: November 17, 1999

Fan

Make: Aerotech

Model #: VX5115F3CR

Manufacturer: Aerotech

Blade Size: 51.2"

Orifice Dia.: 51.6"

Blade

Number: 3

Shape: propeller

Material: aluminum

Pitch: -

Clearance: 0.2"

Shutter

Material: plastic

of Doors: 16 per column

of Columns: 2

Door Length: 26.5"

Location: intake

Other Attachments:

discharge cone 51.4" i.d., 59.5" o.d., 25.3"

Motor

Make: Aerotech

Model #: 8-182697

H.P.: 1.5

Amps: 4.5-4.4/2.2

Volts: 200-230/460 3 phase

RPM: 1725

S.F.: 1.15

Drive

Drive Pulley Dia. 3.3 " o.d.

Axle Pulley Dia.: 10.3" o.d.

Housing

Material: fiberglass

Intake Area: 55.8" x 57.5"

Discharge Area: 51.6"

Depth: 24.3" top
23.5" bottom

Guards

Description: wire

Spacing: 2.3" concentric(modified)

Location: exhaust

TEST RESULTS

AEROTECH VX5115F3CR	Static Pressure	Speed	Airflow	Efficiency
Test: 99225	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
▲ 3 phase	0.00	-	-	-
Fan description:	0.065	575	29,600	20.3
51" belt drive, 1.5 hp 8-182697 Aerotech	0.10	574	28,200	18.8
motor, fiberglass housing, plastic shutter,	0.15	573	26,400	17.2
guard and discharge cone	0.20	572	23,900	15.2
	0.25	571	20,900	13.1
	0.30	571	17,400	10.9