



54 Audia Court, Unit 2
Concord, ON L4K 3N5
(905)-738-1400

Submittal 24-256-004

PROJECT NAME	PROJECT ADDRESS	DATE SUBMITTED
NESHAMA HOSPICE	24-256 3 Cadillac Avenue North York, ON M3H 1R9	Oct 31, 2024

TO	FROM
Taranjeet Singh	PAUL LEDDY
COMPANY	COMPANY
1568796 ONTARIO INC. C/A RENOKREW	Consult Mechanical Inc.
EMAIL	EMAIL
taranjeet@renokrew.com	paul.l@consultmechanical.com
ADDRESS	ADDRESS
43 LEPAGE COURT TORONTO, ON M3J 1Z9	54 Audia Court, Unit 2 Concord, ON L4K 3N5

Title

Exhaust Fans

Description

Tag DBF- Reversomatic Model TLD 200L
Tag SF1/SF2 - Greenheck Model SQ-90-VG
Tag EF-11/13/14 - Greenheck Model SP-A510
Tag EF-2/3/8/9 - Greenheck Model SP-A250
Tag EF-4/5/6/7/8/10 - Greenheck Model SP-A390
Tag EF1 - Greenheck Model SQ-97-VG
Tag EF12 - Greenheck Model SQ-97-VG

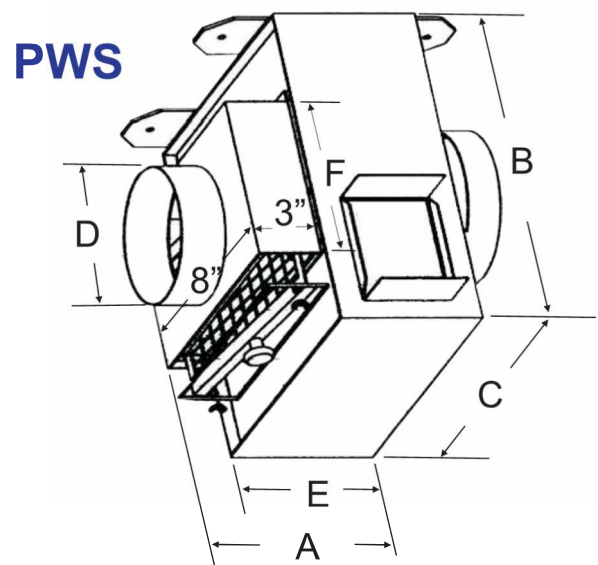
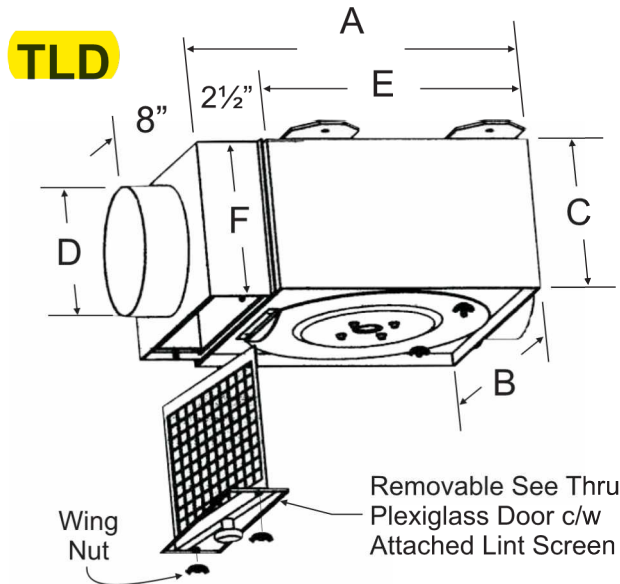
Package Items

SPEC	SUBSECTION	ITEM	TYPE
M15 Schedule of Equipment	M15		Shop Drawings



FANS WITH LINT TRAPS

Maintenance Instruction



DIMENSIONS:

MODEL	A	B	C	D (dia.)	E	F
TLD200L	13"	11"	6"	5"	10.5"	6"
TLD300L	14.5"	12"	8"	6"	12"	7"
PWS100L	6.5"	11"	9.5"	5"	4.5"	6"
PWS200L	6.5"	11"	9.5"	6"	4.5"	7"
PWS300L	7.5"	12.5"	11"	7"	5.5"	8"

NOTE:

- Lint trap must be cleaned monthly or as required by removing the two wing nuts and pulling the lint screen door down by the handle
- Clean fan assembly as required by removing two wing nuts from the main plate and motor will swing open
- Make sure the motor is unplugged to ensure there is no power to the motor
- Install fan combination lint trap where it is easily accessible for cleaning

Contractor:	☐ TLD - _____ ☐ PWS - _____		
Architect:	Date	Supersedes	Drawing No.
Engineer:			

SUBMITTAL

Job Name: **NESHAMA HOSPICE,3 CADILLAC AVE,NORTH YORK**

Engineer: **SUSTAIN GLOBE LTD**

Elevation: (ft) **568**

Date: **10/30/2024**

Submitted By: **Amanda Stennett**

Email: **astennett@ehpricesales.com**

Phone: **(905)660-0066**

E H PRICE LIMITED

571 CHRISLEA ROAD UNIT 3

WOODBIDGE, ON L4L 8A2

CA

Phone: (905)669-8988

Fax: (905)660-9121

Email Address: astennett@ehpricesales.com



P.O. Box 410 Schofield, WI 54476 (715) 359-6171 FAX (715) 355-2399 www.greenheck.com

Model: SQ-90-VG

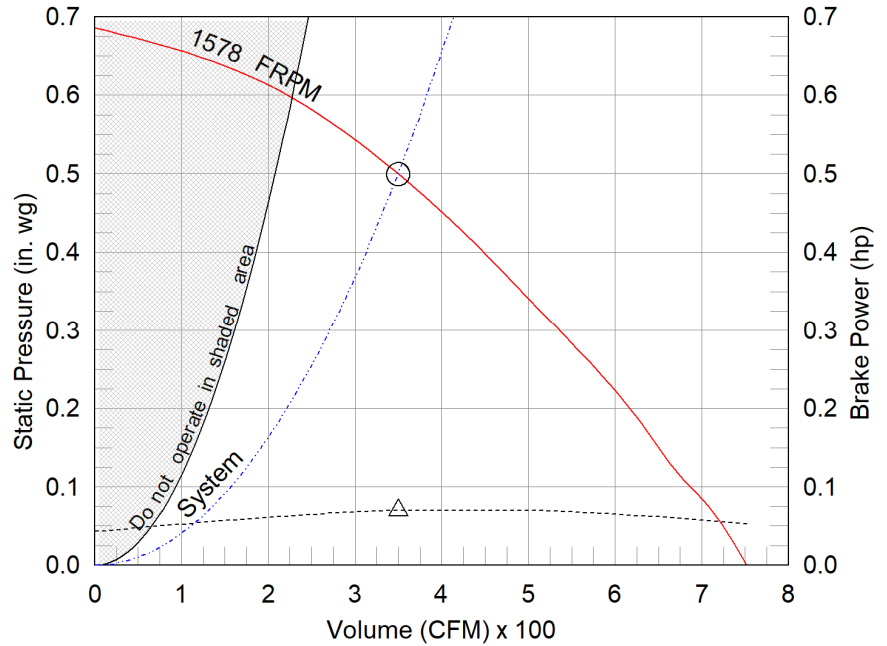
Direct Drive Centrifugal Inline Fan

Dimensional	
Quantity	2
Weight w/o Acc's (lb)	34
Weight w/ Acc's (lb)	51

Performance	
Requested Volume (CFM)	350
Actual Volume (CFM)	350
Total External SP (in. wg)	0.5
Fan RPM	1578
Operating Power (hp)	0.07
Elevation (ft)	568
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.073
Tip Speed (ft/min)	4,492
Static Eff. (%)	39

Misc Fan Data	
Fan Eff. Index (FEI)	-
Outlet Velocity (ft/min)	350

Motor	
Motor Mounted	Yes
Size (hp)	1/10
Voltage/Cycle/Phase	115/60/1
Enclosure	TENV
Motor RPM	1725
Windings	1
FLA (Amps)	1.38
Min. Circuit Ampacity (MCA)	2
Max. Overcurrent Protection (MOP)	15
Short Circuit Current Rtg (SCCR)	5 kA



- △ Operating Bhp point
- Operating point at Total External SP
- Fan curve
- - - System curve
- - - Brake horsepower curve

Nameplate Model: SQ-90-VG-X

Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	76	73	69	62	58	55	52	44	66	55	7.6
Radiated	75	68	59	52	47	36	33	31	57	46	4.2

Notes:

All dimensions shown are in units of in.
*NEC FLA, MCA and MOP are for reference only – based on tables 430.248 or 430.25 of National Electric Code 2020. Actual motor FLA may vary, for sizing thermal overload, consult factory.MCA and MOP values shown only account for the motor, not accessories (damper actuator, field supplied VFD, etc).
LwA - A weighted sound power level, based on ANSI S1.4
dBA - A weighted sound pressure level, based on 11.5 dB attenuation per Octave band at 5 ft - dBA levels are not licensed by AMCA International
Sones - calculated using AMCA 301 at 5 ft



Model: SQ-90-VG

Direct Drive Centrifugal Inline Fan

Tags: SF-1 SF-2

Greenheck model SQ Mixed Flow meets or exceeds legacy centrifugal models SQ/BSQ in performance and features. SQ Mixed flow is an approved equal and can be considered a direct replacement for these models.

Standard Construction Features:

- Galvanized steel housing - Backward inclined composite (sizes 60-95) or aluminum (sizes 97-160) wheel - Two bolted access panels - Integral duct connection flanges - Ball bearing motors (sizes 97-160 and all vari-green motors), sleeve bearing motors (sizes 60-95) - Corrosion resistant fasteners

Selected Options & Accessories:

Motor - Vari-Green EC motor

Control - Vari-Green Dial on Exterior of Fan Housing, Mounted and Wired

Provided motor meets the motor efficiency requirements set forth in 2024 Title 24/California

UL/cUL 705 Listed - "Power Ventilators"

Junction Box Mounted and Wired

Switch, NEMA-1, Toggle, Shipped Separate

Composite Centrifugal Wheel

Insulated Housing - 1 in. Thick: Fan Housing

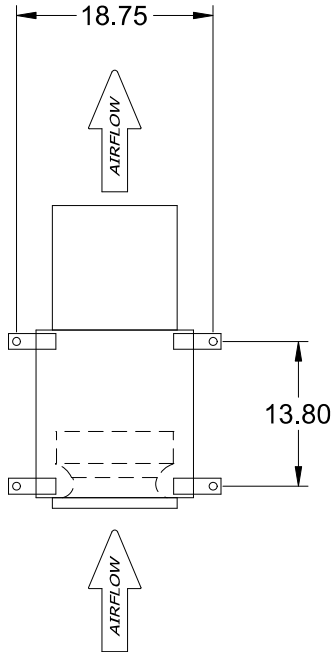
Motor Cover

Fan: Spring, Hanging, 1 Inch Isolator PN: 850343, Incl. 4 isolators and 4 brackets

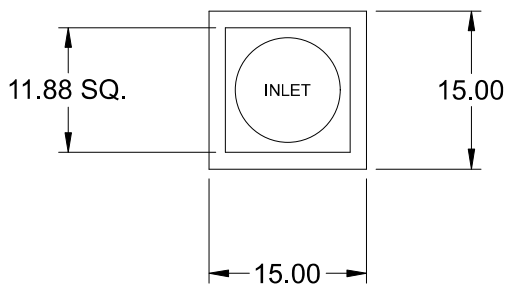
Unit Warranty: 1 Yr (Standard)

SQ-90-VG

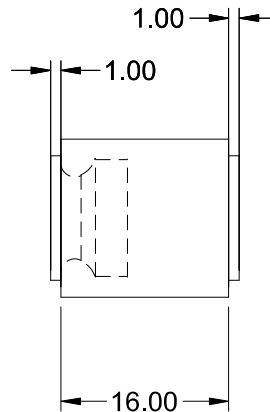
Direct Drive Centrifugal Inline Fan



TOP VIEW



END VIEW



SIDE VIEW

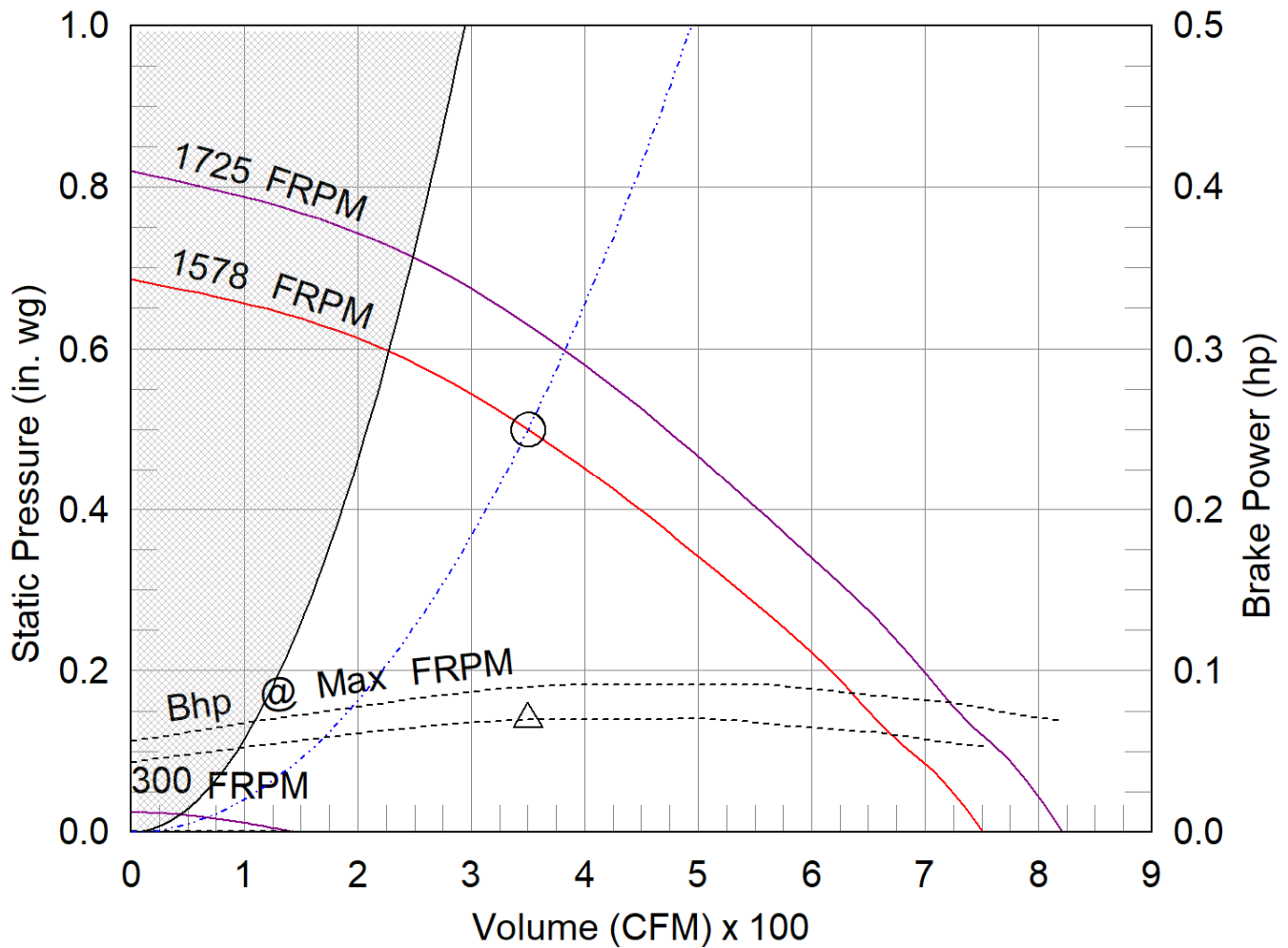
Notes: All dimensions shown are in units of in.

SQ-90-VG

Min/Max Fan Curve

Performance

Requested Volume (CFM)	Actual Volume (CFM)	Total External SP (in. wg)	Fan RPM	Operating Power (hp)
350	350	0.5	1578	0.07



- △ Operating Bhp point
- Operating point at Total External SP
- Construction Limit
- Fan curve
- Min FRPM
- System curve
- Brake horsepower curve

Model: SP-A510

Ceiling Exhaust Fan

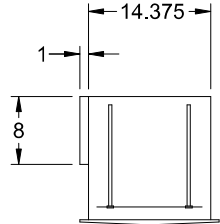
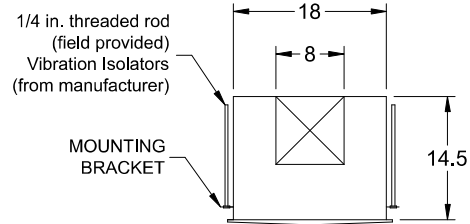
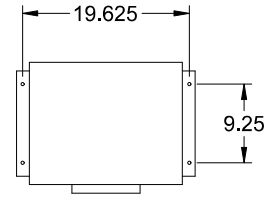
Tags: EF-11 EF-13 EF-14

Standard Construction Features:

- Galvanized steel housing - Sound absorbing insulation - White coated aluminum grille - Outlet duct collar with integral backdraft damper - Forward curved wheel - Plug type disconnect - Adjustable mounting brackets - Square duct connection - Field rotatable discharge

Selected Options & Accessories:

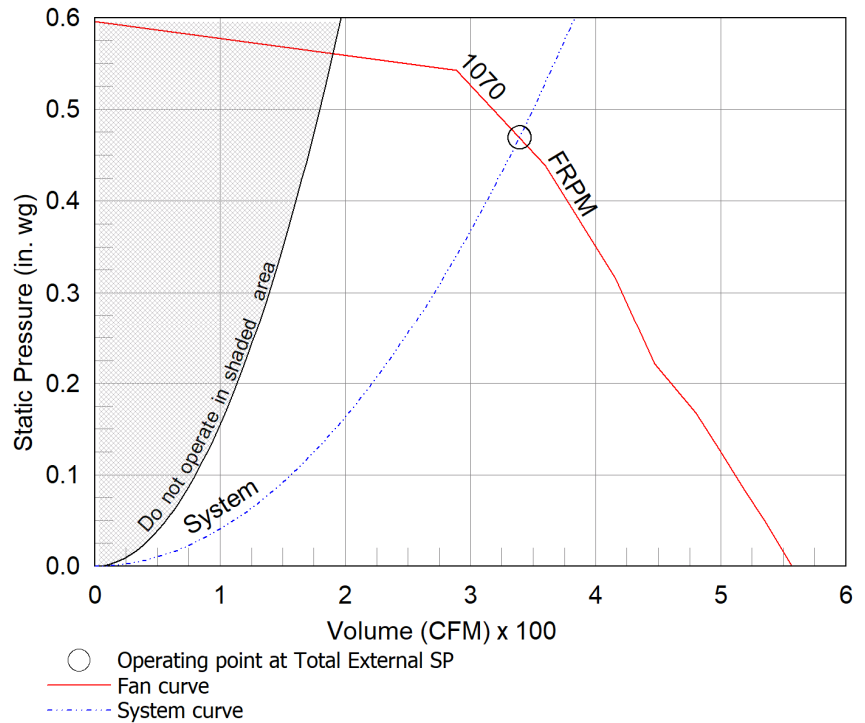
Motor rated for continuous use
Motor with Thermal Overload
Motor with CSA Approval
Motor with 40 Degree C Ambient Temperature
UL/cUL 507 Listed - Electric Fan
Solid State Speed Control, 6 Amp, Shipped Loose
Isolation Kit, (PN: VI KIT-SP/CSP), Shipped Loose
Adjustable easy installation mounting bracket
Aluminum Grille with White Enamel Finish
Polypropylene Wheel Material



Dimensional	
Quantity	3
Weight w/o Acc's (lb)	31
Weight w/ Acc's (lb)	33

Performance	
Requested Volume (CFM)	350
Actual Volume (CFM)	339
Total External SP (in. wg)	0.469
Fan RPM	1070
* FLA (A)	3.3
Elevation (ft)	568
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.073
Sones	4.0

Motor	
Motor Mounted	Yes
** Input Watts (W)	224
Voltage/Cycle/Phase	115/60/1
Enclosure	ODP



Notes:

All dimensions shown are in units of in.
*FLA is approximate and will vary slightly with the motor.
Sones - calculated using AMCA 301 at 5 ft
** Wattage is shown at free air.
** Wattage is approximate and may vary between motors.

Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	68	69	59	57	51	50	44	39	60	45	4.0



Model: SP-A250

Ceiling Exhaust Fan

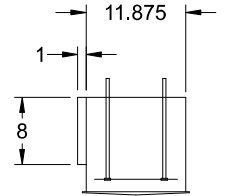
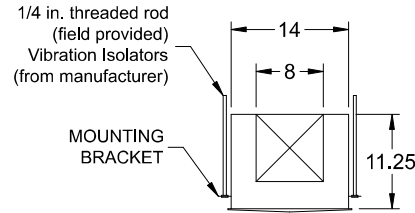
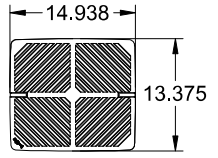
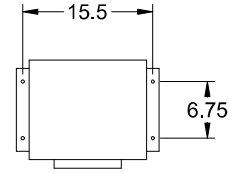
Tags: EF-2 EF-3 EF-8 EF-9

Standard Construction Features:

- Corrosion resistant galvanized steel scroll and housing - Sound absorbing insulation - White designer non-yellowing grille - Rectangular outlet duct collar with integral spring loaded backdraft damper - Double inlet forward curved wheel - Plug type disconnect - Adjustable mounting brackets - Field rotatable discharge

Selected Options & Accessories:

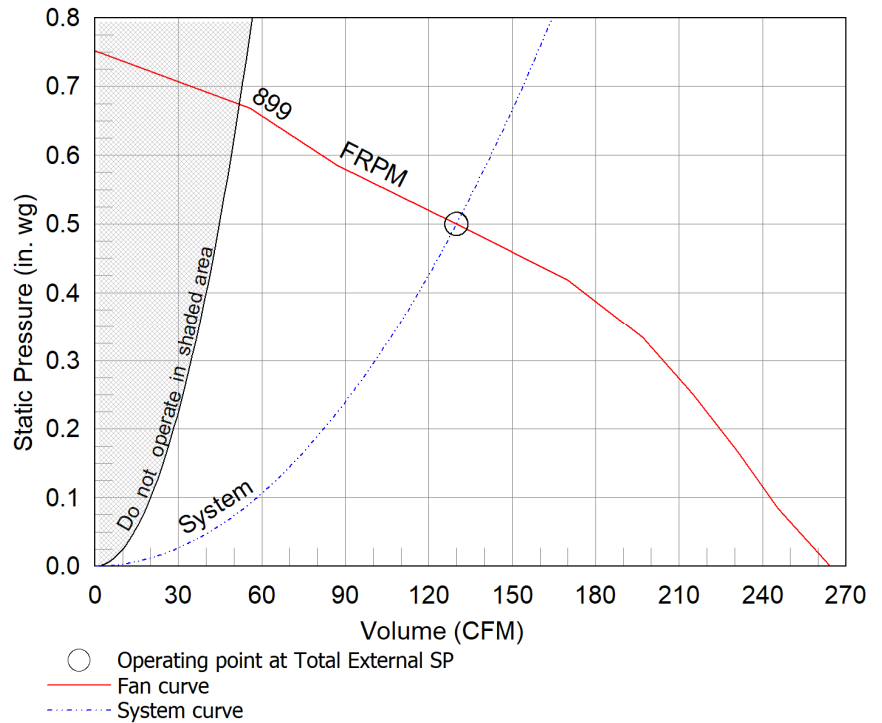
Motor rated for continuous use
Motor with Thermal Overload
Motor with CSA Approval
Motor with 40 Degree C Ambient Temperature
UL/cUL 507 Listed - Electric Fan
Solid State Speed Control, 6 Amp, Shipped Loose
Isolation Kit, (PN: VI KIT-SP/CSP), Shipped Loose
Adjustable easy installation mounting bracket
Energy Star Certified
Standard Grille
Polypropylene Wheel Material
Can Be Used to Comply with: ASHRAE 62.2, California Title 24, and Washington State Energy Code



Dimensional	
Quantity	4
Weight w/o Acc's (lb)	24
Weight w/ Acc's (lb)	26

Performance	
Requested Volume (CFM)	130
Actual Volume (CFM)	130
Total External SP (in. wg)	0.5
Fan RPM	899
* FLA (A)	0.56
Elevation (ft)	568
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.073
Sones	3.5

Motor	
Motor Mounted	Yes
** Input Watts (W)	83
Voltage/Cycle/Phase	115/60/1
Enclosure	ODP



Notes:

All dimensions shown are in units of in.
*FLA is approximate and will vary slightly with the motor.
Sones - calculated using AMCA 301 at 5 ft
** Wattage is approximate and may vary between motors.

Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	61	60	63	57	54	47	40	32	59	45	3.5



Model: SP-A390

Ceiling Exhaust Fan

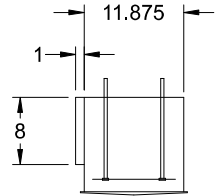
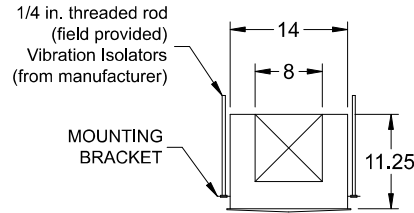
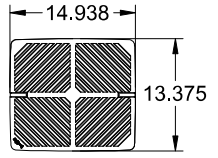
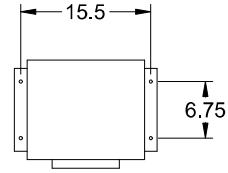
Tags: EF-4 EF-5 EF-6 EF-7 EF-8 EF-10

Standard Construction Features:

- Corrosion resistant galvanized steel scroll and housing - Sound absorbing insulation - White designer non-yellowing grille - Rectangular outlet duct collar with integral spring loaded backdraft damper - Double inlet forward curved wheel - Plug type disconnect - Adjustable mounting brackets - Field rotatable discharge

Selected Options & Accessories:

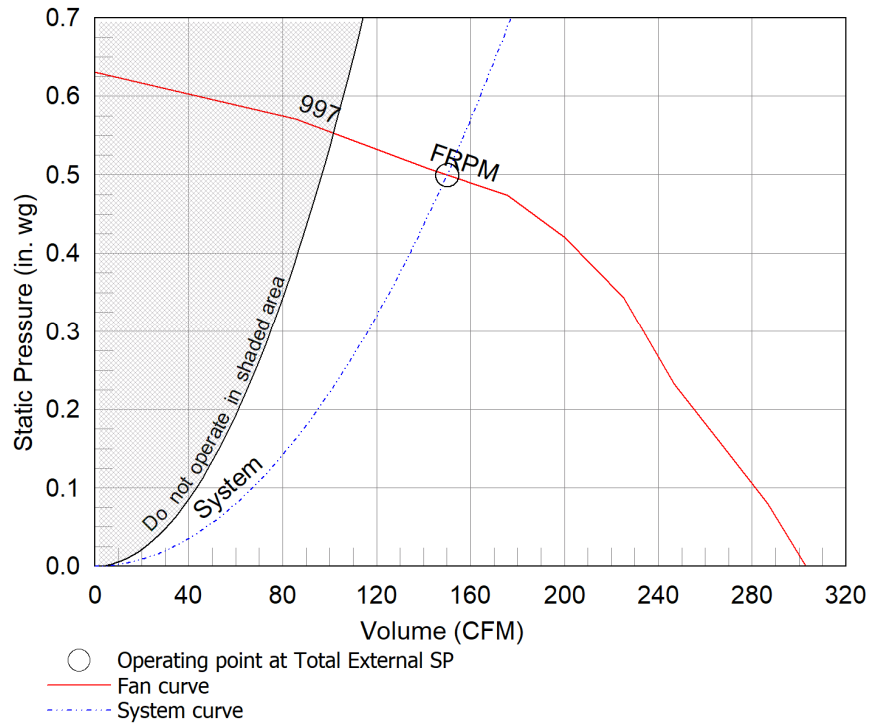
Motor rated for continuous use
Motor with Thermal Overload
Motor with CSA Approval
Motor with 40 Degree C Ambient Temperature
UL/cUL 507 Listed - Electric Fan
Solid State Speed Control, 6 Amp, Shipped Loose
Isolation Kit, (PN: VI KIT-SP/CSP), Shipped Loose
Adjustable easy installation mounting bracket
Standard Grille
Polypropylene Wheel Material



Dimensional	
Quantity	6
Weight w/o Acc's (lb)	24
Weight w/ Acc's (lb)	26

Performance	
Requested Volume (CFM)	150
Actual Volume (CFM)	150
Total External SP (in. wg)	0.5
Fan RPM	997
* FLA (A)	1.42
Elevation (ft)	568
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.073
Sones	2.5

Motor	
Motor Mounted	Yes
** Input Watts (W)	135
Voltage/Cycle/Phase	115/60/1
Enclosure	ODP



Notes:

All dimensions shown are in units of in.
*FLA is approximate and will vary slightly with the motor.
Sones - calculated using AMCA 301 at 5 ft
** Wattage is shown at free air.
** Wattage is approximate and may vary between motors.

Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	62	58	53	50	46	42	40	40	53	38	2.5



Model: SQ-97-VG

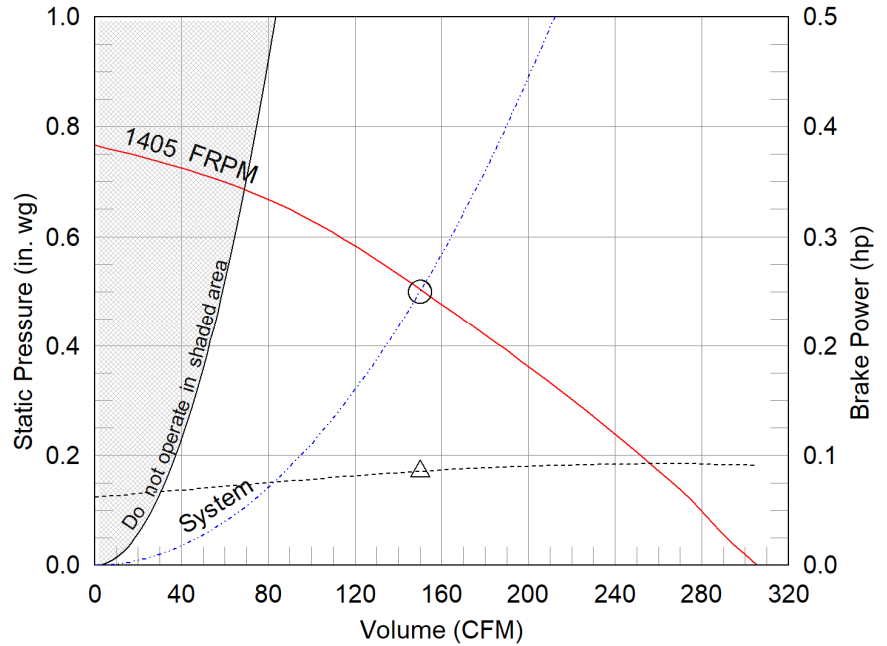
Direct Drive Centrifugal Inline Fan

Dimensional	
Quantity	1
Weight w/o Acc's (lb)	45
Weight w/ Acc's (lb)	56

Performance	
Requested Volume (CFM)	150
Actual Volume (CFM)	150
Total External SP (in. wg)	0.5
Fan RPM	1405
Operating Power (hp)	0.09
Elevation (ft)	568
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.073
Tip Speed (ft/min)	4,116
Static Eff. (%)	14

Misc Fan Data	
Fan Eff. Index (FEI)	-
Outlet Velocity (ft/min)	115

Motor	
Motor Mounted	Yes
Size (hp)	1/4
Voltage/Cycle/Phase	115/60/1
Enclosure	TENV
Motor RPM	1725
Windings	1
FLA (Amps)	2.85
Min. Circuit Ampacity (MCA)	4
Max. Overcurrent Protection (MOP)	15
Short Circuit Current Rtg (SCCR)	5 kA



- △ Operating Bhp point
- Operating point at Total External SP
- Fan curve
- - - System curve
- Brake horsepower curve

Nameplate Model: SQ-97-VG-X

Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	79	81	69	68	59	56	53	48	70	58	10.2
Radiated	78	76	59	58	48	37	34	35	63	51	6.0

Notes:

All dimensions shown are in units of in.
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LwA - A weighted sound power level, based on ANSI S1.4
dBA - A weighted sound pressure level, based on 11.5 dB attenuation per Octave band at 5 ft - dBA levels are not licensed by AMCA International
Sones - calculated using AMCA 301 at 5 ft



Model: SQ-97-VG

Direct Drive Centrifugal Inline Fan

Greenheck model SQ Mixed Flow meets or exceeds legacy centrifugal models SQ/BSQ in performance and features. SQ Mixed flow is an approved equal and can be considered a direct replacement for these models.

Standard Construction Features:

- Galvanized steel housing - Backward inclined composite (sizes 60-95) or aluminum (sizes 97-160) wheel - Two bolted access panels - Integral duct connection flanges - Ball bearing motors (sizes 97-160 and all vari-green motors), sleeve bearing motors (sizes 60-95) - Corrosion resistant fasteners

Selected Options & Accessories:

Motor - Vari-Green EC motor

Control - Vari-Green Dial on Exterior of Fan Housing, Mounted and Wired

Provided motor meets the motor efficiency requirements set forth in 2024 Title 24/California

UL/cUL 705 Listed - "Power Ventilators"

Junction Box Mounted and Wired

Switch, NEMA-1, Toggle, Shipped Separate

Aluminum Centrifugal Wheel

Insulated Housing - 1 in. Thick: Fan Housing

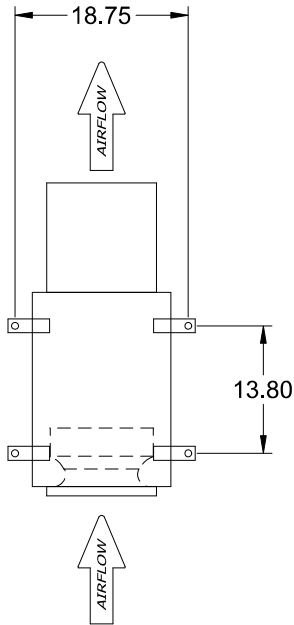
Fan: Spring, Hanging, 1 Inch Isolator PN: 850343, Incl. 4 isolators and 4 brackets

Wheel Baffle

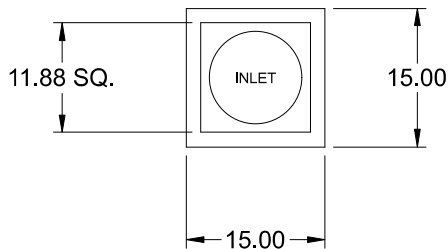
Unit Warranty: 1 Yr (Standard)

SQ-97-VG

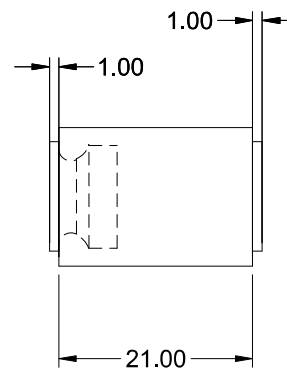
Direct Drive Centrifugal Inline Fan



TOP VIEW



END VIEW



SIDE VIEW

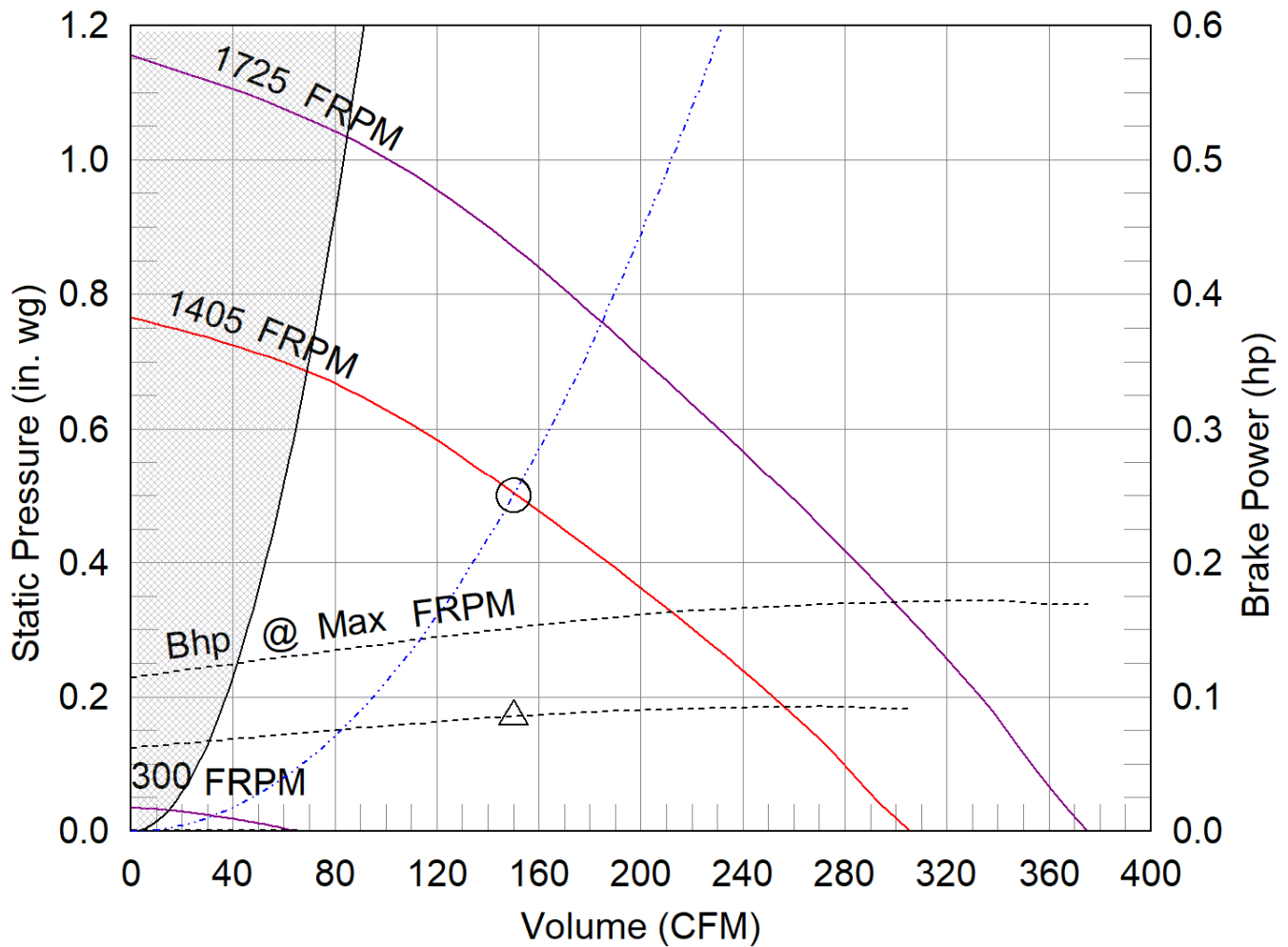
Notes: All dimensions shown are in units of in.

SQ-97-VG

Min/Max Fan Curve

Performance

Requested Volume (CFM)	Actual Volume (CFM)	Total External SP (in. wg)	Fan RPM	Operating Power (hp)
150	150	0.5	1405	0.09



- △ Operating Bhp point
- Operating point at Total External SP
- Construction Limit
- Fan curve
- Min FRPM
- System curve
- Brake horsepower curve

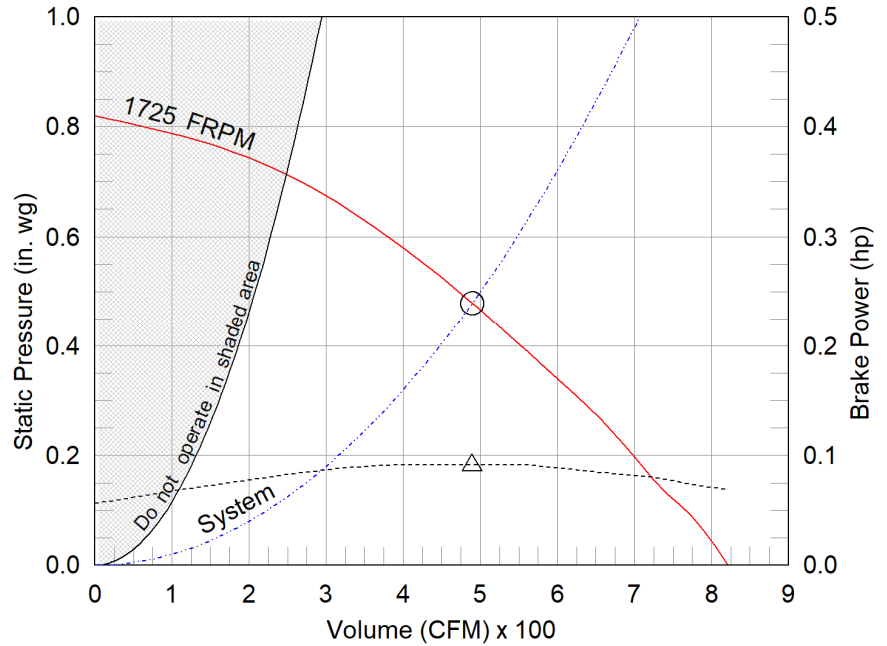
Model: SQ-90-VG

Direct Drive Centrifugal Inline Fan

Dimensional	
Quantity	1
Weight w/o Acc's (lb)	34
Weight w/ Acc's (lb)	51

Performance	
Requested Volume (CFM)	500
Actual Volume (CFM)	489
Total External SP (in. wg)	0.479
Fan RPM	1725
Operating Power (hp)	0.09
Elevation (ft)	568
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.073
Tip Speed (ft/min)	4,911
Static Eff. (%)	40

Misc Fan Data	
Fan Eff. Index (FEI)	-
Outlet Velocity (ft/min)	489



Motor	
Motor Mounted	Yes
Size (hp)	1/10
Voltage/Cycle/Phase	115/60/1
Enclosure	TENV
Motor RPM	1725
Windings	1
FLA (Amps)	1.38
Min. Circuit Ampacity (MCA)	2
Max. Overcurrent Protection (MOP)	15
Short Circuit Current Rtg (SCCR)	5 kA

- △ Operating Bhp point
- Operating point at Total External SP
- Fan curve
- - - System curve
- Brake horsepower curve

Static Pressure Calculations

External SP	0.5 in. wg
Direct Drive RPM Adjustment	-0.021 in. wg
Total External SP	0.479 in. wg

Nameplate Model: SQ-90-VG-X

Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	75	75	72	65	61	58	55	48	68	57	8.8
Radiated	74	70	62	55	50	39	36	35	59	48	4.7

Notes:

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Direct Drive Centrifugal Inline Fan

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Selected Options & Accessories:

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Control - Vari-Green Dial on Exterior of Fan Housing, Mounted and Wired

Provided motor meets the motor efficiency requirements set forth in 2024 Title 24/California

UL/cUL 705 Listed - "Power Ventilators"

Junction Box Mounted and Wired

Switch, NEMA-1, Toggle, Shipped Separate

Composite Centrifugal Wheel

Insulated Housing - 1 in. Thick: Fan Housing

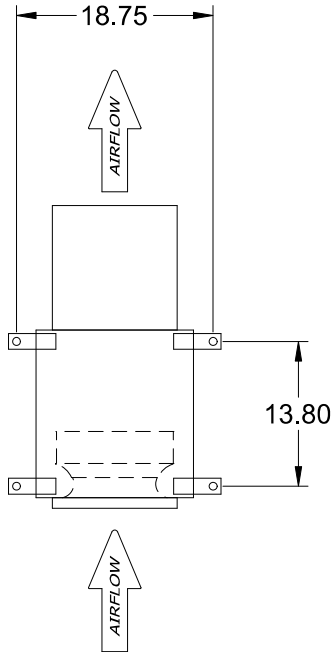
Motor Cover

Fan: Spring, Hanging, 1 Inch Isolator PN: 850343, Incl. 4 isolators and 4 brackets

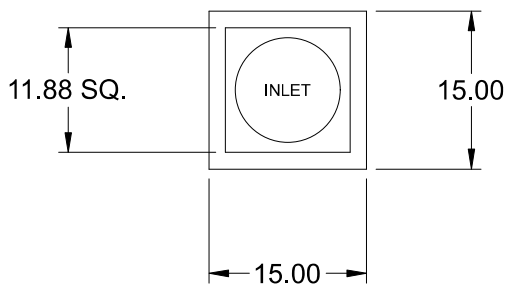
Unit Warranty: 1 Yr (Standard)

SQ-90-VG

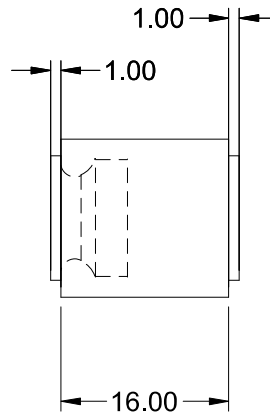
Direct Drive Centrifugal Inline Fan



TOP VIEW



END VIEW



SIDE VIEW

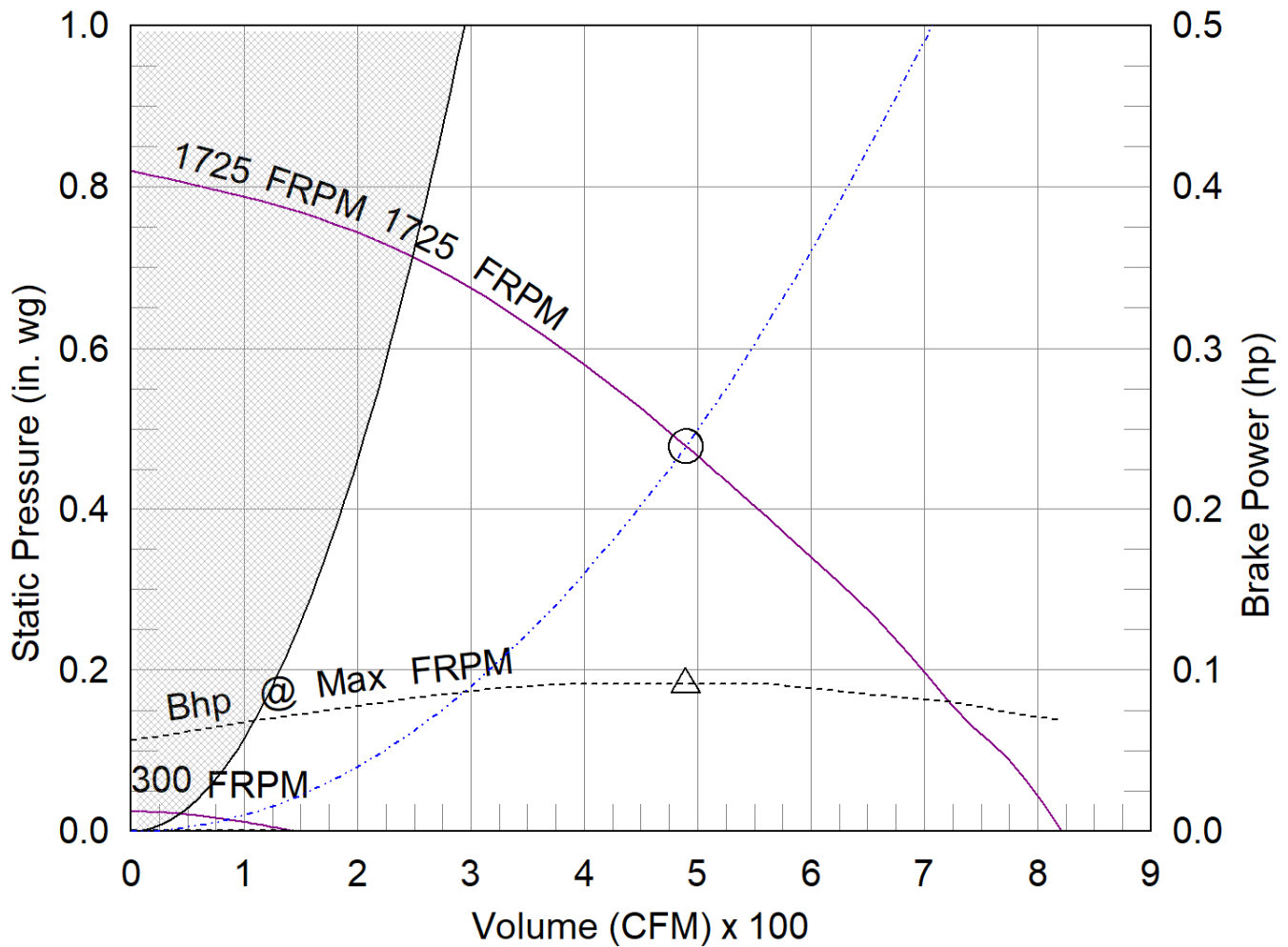
Notes: All dimensions shown are in units of in.

SQ-90-VG

Min/Max Fan Curve

Performance

Requested Volume (CFM)	Actual Volume (CFM)	Total External SP (in. wg)	Fan RPM	Operating Power (hp)
500	489	0.479	1725	0.09



- △ Operating Bhp point
- Operating point at Total External SP
- Construction Limit
- Fan curve
- Min FRPM
- System curve
- Brake horsepower curve