



Submittal Transmittal

Hoefel Welker | 11460 Tomahawk Creek Parkway, Suite 400 Leawood KS 66211 United States

PROJECT: 118091-Grain Valley Police 118091 DATE SENT: 3/13/2023

SUBJECT: CENTRIFUGAL HVAC FANS - Product Data SUBMITTAL ID: 233416-03

TYPE: Submittal TRANSMITTAL ID: 00227

PURPOSE: Approved as Corrected/Partial Resubmittal Required VIA: Procore

SPEC SECTION: 233416

FROM

NAME	COMPANY	EMAIL	PHONE
HW Construction Admin	Hoefel Welker	ca@hoefelwelker.com	(913) 307-3700

TO

NAME	COMPANY	EMAIL	PHONE
Connor Galloway	McCownGordon Construction	cgalloway@mccowngordon.com	

REMARKS:

CONTENTS

QUANTITY: 1 DATED: 3/13/2023 NUMBER:

DESCRIPTION:
233416-03-CentrifugalHVAC_Fans-ProductData - AACRR.pdf

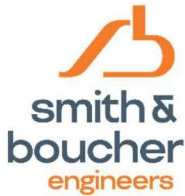
ACTION:
REMARKS:

EF-3 - SEE RESUBMITTAL APPROVED

EF-1 PAGE 4
EF-2 PAGE 7
EF-3 PAGE 10
EF-4 PAGE 13
EF-5 PAGE 16
EF-6 PAGE 19
EF-7 PAGE 28
EF-8 PAGE 31
VF-1 PAGE 22
VF-2 PAGE 25

Submittal #233416-03.0 - CENTRIFUGAL HVAC FANS - Product Data 233416 - CENTRIFUGAL HVAC FANS

Revision	0	Submittal Manager	Connor Galloway (McCownGordon Construction, LLC)
Status	Pending From Sub	Date Created	Feb 16, 2023
Issue Date		Spec Section	233416 - CENTRIFUGAL HVAC FANS
Responsible Contractor	Temp-Con, LLC	Received From	
Received Date		Submit By	
Final Due Date	Mar 31, 2023	Lead Time	
Sub Job		Cost Code	
Location		Type	Product Data
Approvers	Connor Galloway (McCownGordon Construction, LLC), Construction Admin (Hoefer Welker, LLC)		
Ball in Court	Connor Galloway (McCownGordon Construction, LLC)		



- Reviewed no exceptions.
- Make corrections noted; resubmittal not required.
- Make corrections noted; revise and resubmit indicated items only.
- Revise and resubmit entire submittal.
- Reviewed for coordination/information only; refer to comments if any.

ns, and accessories for each type of product indicated and include the

Review of this submittal is only for general conformance with the design concept of the project and-for general compliance with those portions of the Contract Documents prepared by Smith & Boucher. Notes, corrections or comments made on the submittals during this review do not relieve the Contractor from responsibility for: Compliance with the requirements of the plans and specifications; Dimensions to be confirmed and correlated at the jobsite; Information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction; Coordination of the Work with that of all other trades; Assemblies of which a specific reviewed item is a component; and performance of all work in a safe and satisfactory manner.

Received: 02/27/2023 11:51:32 AM

Returned: 03/13/2023 By: Kevin Pearson

Response	Attachments
Submitted	23.34.16 - Grain Valley Police Exhaust Fan Submittal.pdf (Current)
Pending	
Pending	

Project 07-1803 Submittal No. 233416-3.0

REVIEWED ONLY

Contractor's review is for general compliance with the information provided in the Contract Documents and for general conformance with the design concept of the project. Any action noted herein is subject to the requirements set forth in the Contract Documents. Subcontractor/Supplier is responsible for all dimensions which shall be confirmed at the jobsite; all fabrication processes and techniques of construction; the coordination of Subcontractor's work with that of all other trades, and the performance of Subcontractor's work in accordance with the Contract Documents

McCownGordon Construction

cgalloway 3:29:03 PM 02/24/2023



- Approved
- Rejected
- Approved as corrected
- Revise and resubmit
- Approved as corrected/ Partial resubmittal required (see attached comment sheet)
- Not reviewed/not a required submittal
- No action taken

This review is only for general conformance with the design concept of the project and general compliance with the information provided in the Contract Documents. Corrections or comments made on the shop drawings during this review do not relieve the contractor from compliance with the requirements of the plans, specifications, and other contract documents. Approval of a specific item shall not include approval of an assembly of which the items is a component. Contractor is responsible for the following: dimensions to be confirmed and correlated at the job site; information that pertains solely to the fabrication process or to the means, methods, techniques, sequences, and procedures of construction; coordination for the work with that of all other trades; and performing all work in a safe and satisfactory manner.

Submittal No: 233416-03

Date: 3-13-2023

By: AG



Jorban-Riscoe Associates

9808 Alden Street

Lenexa, KS 66215

(913)438-1244 Phone * (913)438-6548 Fax

www.jorban-riscoe.com

SUBMITTAL

Original

Grain Valley Police

JRA Job #: KJ - 33145

Temp Con

Engineer: Smith & Boucher, Inc

Architect:

Specification Section: 233416

Manufacturer: Greenheck

Equipment: Exhaust Fans

Comments:

Presented per our interpretation of the specified section by:

JRA Project Manager

Office Phone:

Mobile Phone:

Email Address:

Approval

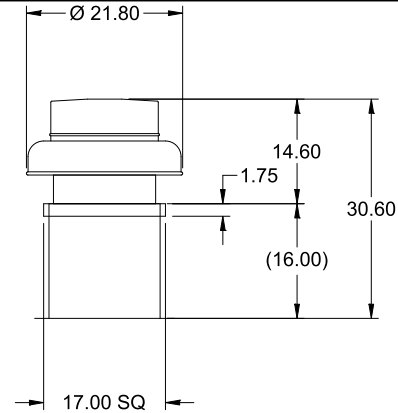
Please return one (1) set of submittals stamped or signed "Approved as Submitted", or "Approved as Noted" to Jorban-Riscoe.

All equipment submitted herein will be the basis for ordering and shipping of equipment to the customer's designated location. It is the CUSTOMER's responsibility to advise Jorban-Riscoe of any changes in quantities, sizes, performance requirements, etc. ALL CHANGES to these submittals will need to be communicated in writing to Jorban-Riscoe when returning these submittals.

Model: G-080-VG

Direct Drive Centrifugal Roof Exhaust Fan

Dimensional	
Quantity	1
Weight w/o Acc's (lb)	24
Weight w/ Acc's (lb)	34
Weight w/ Acc's and Curb (lb)	55
Standard Curb Cap Size (in.)	17 x 17
Optional Damper (in.)	10 x 10
Roof Opening (in.)	13.5 x 13.5

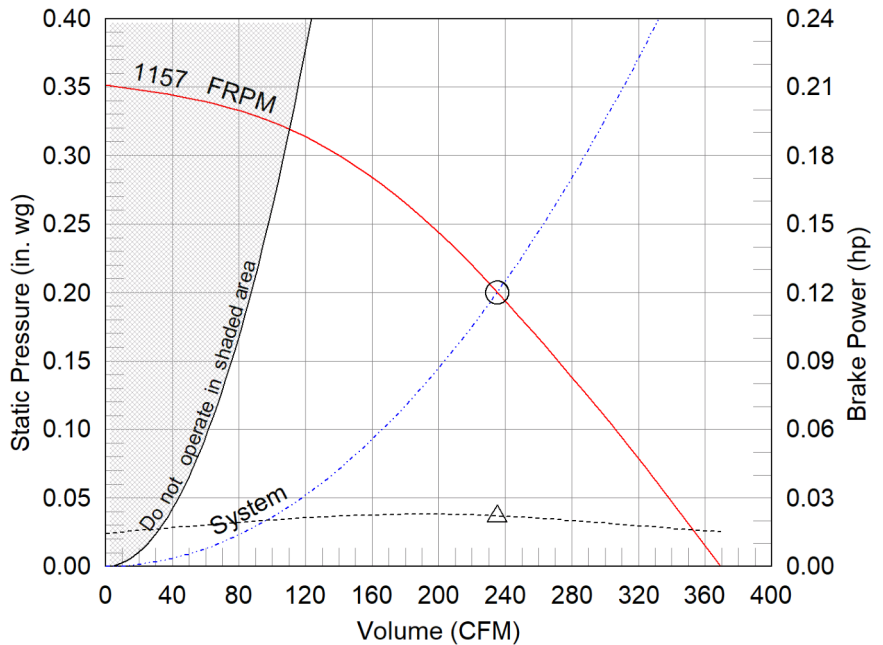


OVERALL HEIGHT MAY BE GREATER DEPENDING ON MOTOR, ADAPTER, AND/OR HINGE BASE.

Performance	
Requested Volume (CFM)	235
Actual Volume (CFM)	235
Total External SP (in. wg)	0.2
Fan RPM	1157
Operating Power (hp)	0.02
Elevation (ft)	1,096
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.072
Tip Speed (ft/min)	3,293
Static Eff. (%)	34

Misc Fan Data	
Fan Eff. Index (FEI)	-
Outlet Velocity (ft/min)	588

Motor	
Motor Mounted	Yes
Size (hp)	1/10
Voltage/Cycle/Phase	115/60/1
Enclosure	TENV
Motor RPM	1725
Efficiency Rating	High
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

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 ANSI/AMCA 301 at 5 ft

Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	66	68	60	54	51	49	41	35	58	47	4.5



Model: G-080-VG

Direct Drive Centrifugal Roof Exhaust Fan

Standard Construction Features:

- Aluminum housing - Backward inclined composite (sizes 60-95) or aluminum (sizes 97-300) wheel - Aluminum curb cap with prepunched mounting holes - Birdscreen - Ball bearing motors (sizes 85-300 and all Vari Green), sleeve bearing motors (sizes 60-80) - Motor isolated on shock mounts - Corrosion resistant fasteners

Selected Options & Accessories:

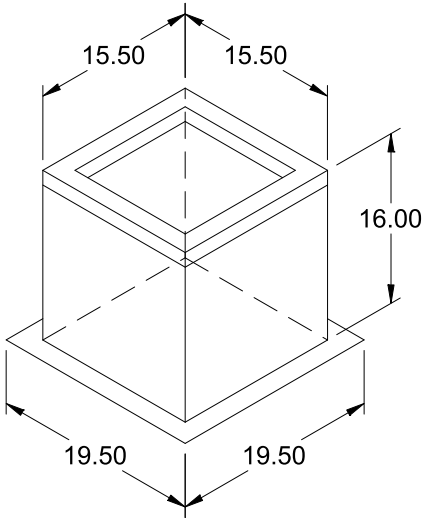
Motor - Vari-Green EC motor
Control - Vari-Green Constant Pressure, Integral Transducer, Room Tap Qty 1
Control - Dial for balancing
Control - Vari-Green Transformer 85-277VAC to 24 VDC, Mounted & Wired
Additional Duct Static Probe
Standard Curb Cap Size - 17 Square
UL/cUL 705 Listed - "Power Ventilators"
Switch, NEMA-1, Toggle, Shipped with Unit
Junction Box Mounted & Wired
Birdscreen: Galvanized, nom. 84% Free Area
Composite Wheel Material
Unit Warranty: 1 Yr (Standard)
Damper Shipped Loose, BD-100-PB-10X10, Gravity Operated, Not Coated

Selected Sub Marks

See individual submittals for full details
GPI-17-G16

The Vari-Green Motor included in this order has a 'Multi-Voltage' ability. The red wire on the motor is called a 'Voltage Doubler', and when it is connected the motor can be powered by 115V.

If the Red wire is disconnected, then the motor can be powered with 208-230/277V. The motor will leave the factory with the voltage doubler wired per the order.



Model: GPI

Roof Curb

Standard Construction Features:

- Roof Curb fits between the building roof and the fan mounted directly to the roof support structure - Constructed of either 18 ga galvanized steel or 0.064 in. aluminum - Straight Sided without a cant - 2 in. mounting flange - 3 lb density insulation - Height - Available from 12 in. to 42 in. as specified in 0.5 in. increments. Notes: - The maximum roof opening dimension should not be greater than the "Actual" top outside dimension minus 2 in.. - The minimum roof opening dimension should be at least 2.5 in. more than the damper dimension or recommended duct size. - The Roof Opening Dimension may or may not be the same as the Structural Opening Dimension. - Damper Tray is optional and must be specified. Tray size is same as damper size. - Security bars are optional and must be specified. Frames and gridwork are all 12 ga steel. Gridwork is welded to the frame and the frame is welded to the curb.

General

Tag	Qty	Model	Sizing Method	Undersizing (in.)	Weight (lb)	Shipped Assembled	Union Label
	1	GPI-17	Nominal	1.5	21	Yes	No Preference

Dimensions

Curb Height (in.)	Nominal Outside Width (in.)	Nominal Outside Length (in.)	Actual Outside Width (in.)	Actual Outside Length (in.)	Actual Inside Width (in.)	Actual Inside Length (in.)	Flange Width (in.)	Flange Length (in.)	Hinge Base Width* (in.)	Hinge Base Length* (in.)
16	17	17	15.5	15.5	12	12	19.5	19.5	16	16

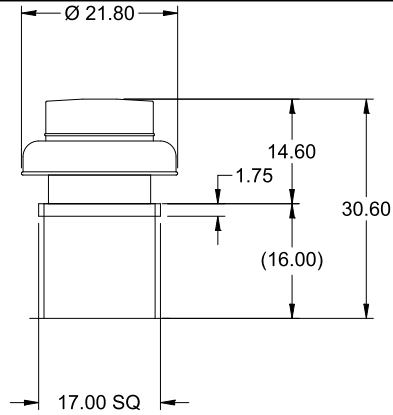
*May not be applicable

Accessories

Material	Security Bars	Liner	Insulation (in.)	Insulation R Value
Galvanized	No	No	1	R4.3

Model: G-080-VG

Direct Drive Centrifugal Roof Exhaust Fan



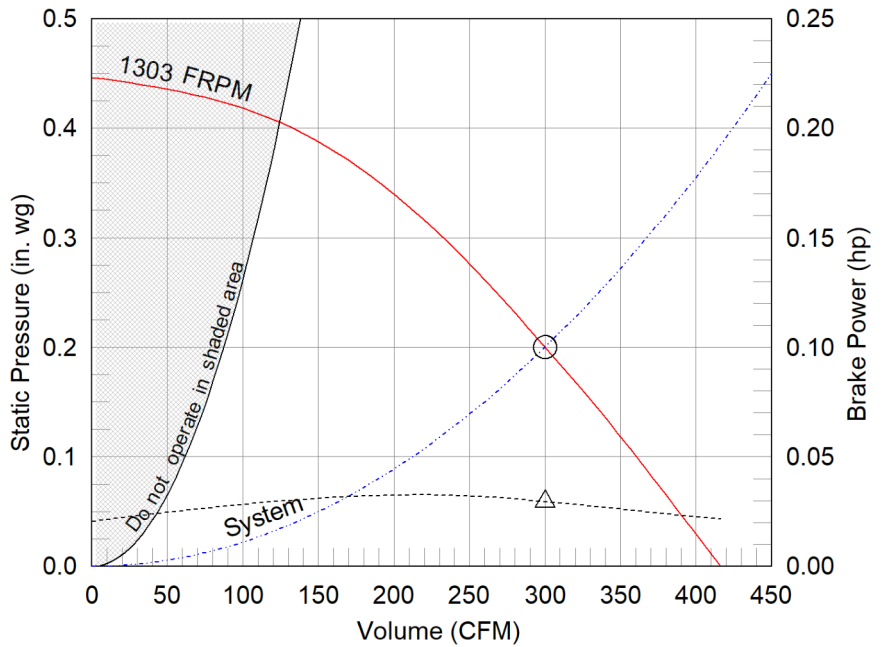
OVERALL HEIGHT MAY BE GREATER DEPENDING ON MOTOR, ADAPTER, AND/OR HINGE BASE.

Dimensional	
Quantity	1
Weight w/o Acc's (lb)	24
Weight w/ Acc's (lb)	30
Weight w/ Acc's and Curb (lb)	51
Standard Curb Cap Size (in.)	17 x 17
Optional Damper (in.)	10 x 10
Roof Opening (in.)	13.5 x 13.5

Performance	
Requested Volume (CFM)	300
Actual Volume (CFM)	300
Total External SP (in. wg)	0.2
Fan RPM	1303
Operating Power (hp)	0.03
Elevation (ft)	1,096
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.072
Tip Speed (ft/min)	3,711
Static Eff. (%)	32

Misc Fan Data	
Fan Eff. Index (FEI)	-
Outlet Velocity (ft/min)	750

Motor	
Motor Mounted	Yes
Size (hp)	1/10
Voltage/Cycle/Phase	115/60/1
Enclosure	TENV
Motor RPM	1725
Efficiency Rating	High
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

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 ANSI/AMCA 301 at 5 ft

Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	63	70	64	56	55	53	47	40	62	50	5.4



Model: G-080-VG

Direct Drive Centrifugal Roof Exhaust Fan

Standard Construction Features:

- Aluminum housing - Backward inclined composite (sizes 60-95) or aluminum (sizes 97-300) wheel - Aluminum curb cap with prepunched mounting holes - Birdscreen - Ball bearing motors (sizes 85-300 and all Vari Green), sleeve bearing motors (sizes 60-80) - Motor isolated on shock mounts - Corrosion resistant fasteners

Selected Options & Accessories:

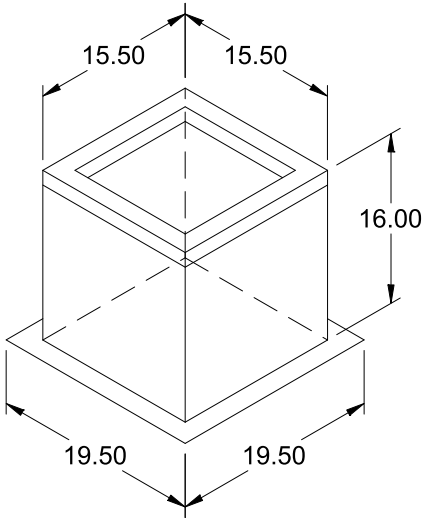
Motor - Vari-Green EC motor
Control - 0-10VDC Input
Control - Dial for balancing
Control - Vari-Green Transformer 85-277VAC to 24 VDC, Mounted & Wired
Standard Curb Cap Size - 17 Square
UL/cUL 705 Listed - "Power Ventilators"
Switch, NEMA-1, Toggle, Shipped with Unit
Junction Box Mounted & Wired
Birdscreen: Galvanized, nom. 84% Free Area
Composite Wheel Material
Unit Warranty: 1 Yr (Standard)
Damper Shipped Loose, BD-100-PB-10X10, Gravity Operated, Not Coated

Selected Sub Marks

See individual submittals for full details
GPI-17-G16

The Vari-Green Motor included in this order has a 'Multi-Voltage' ability. The red wire on the motor is called a 'Voltage Doubler', and when it is connected the motor can be powered by 115V.

If the Red wire is disconnected, then the motor can be powered with 208-230/277V. The motor will leave the factory with the voltage doubler wired per the order.



Model: GPI

Roof Curb

Standard Construction Features:

- Roof Curb fits between the building roof and the fan mounted directly to the roof support structure - Constructed of either 18 ga galvanized steel or 0.064 in. aluminum - Straight Sided without a cant - 2 in. mounting flange - 3 lb density insulation - Height - Available from 12 in. to 42 in. as specified in 0.5 in. increments. Notes: - The maximum roof opening dimension should not be greater than the "Actual" top outside dimension minus 2 in.. - The minimum roof opening dimension should be at least 2.5 in. more than the damper dimension or recommended duct size. - The Roof Opening Dimension may or may not be the same as the Structural Opening Dimension. - Damper Tray is optional and must be specified. Tray size is same as damper size. - Security bars are optional and must be specified. Frames and gridwork are all 12 ga steel. Gridwork is welded to the frame and the frame is welded to the curb.

General

Tag	Qty	Model	Sizing Method	Undersizing (in.)	Weight (lb)	Shipped Assembled	Union Label
	1	GPI-17	Nominal	1.5	21	Yes	No Preference

Dimensions

Curb Height (in.)	Nominal Outside Width (in.)	Nominal Outside Length (in.)	Actual Outside Width (in.)	Actual Outside Length (in.)	Actual Inside Width (in.)	Actual Inside Length (in.)	Flange Width (in.)	Flange Length (in.)	Hinge Base Width* (in.)	Hinge Base Length* (in.)
16	17	17	15.5	15.5	12	12	19.5	19.5	16	16

*May not be applicable

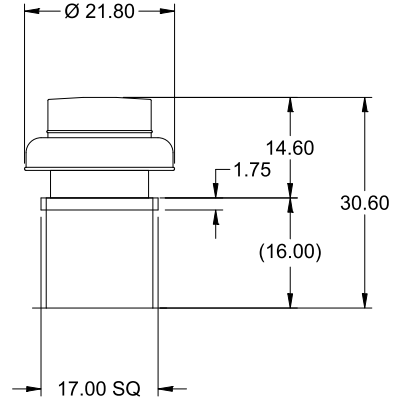
Accessories

Material	Security Bars	Liner	Insulation (in.)	Insulation R Value
Galvanized	No	No	1	R4.3

Model: G-095-VG

Direct Drive Centrifugal Roof Exhaust Fan

Dimensional	
Quantity	1
Weight w/o Acc's (lb)	28
Weight w/ Acc's (lb)	34
Weight w/ Acc's and Curb (lb)	55
Standard Curb Cap Size (in.)	17 x 17
Optional Damper (in.)	10 x 10
Roof Opening (in.)	13.5 x 13.5



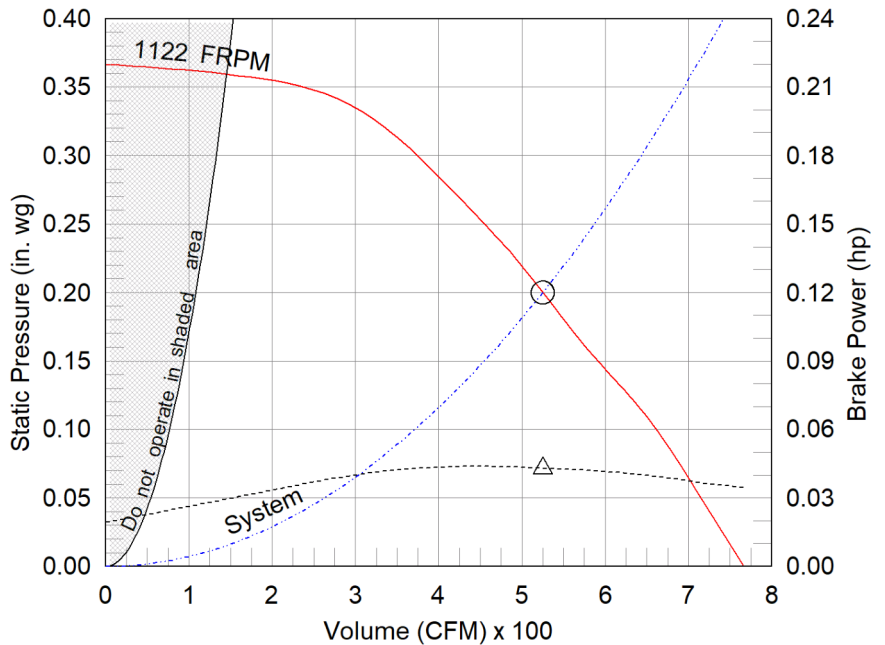
OVERALL HEIGHT MAY BE GREATER DEPENDING ON MOTOR, ADAPTER, AND/OR HINGE BASE.

Performance	
Requested Volume (CFM)	525
Actual Volume (CFM)	525
Total External SP (in. wg)	0.2
Fan RPM	1122
Operating Power (hp)	0.04
Elevation (ft)	1,096
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.072
Tip Speed (ft/min)	3,195
Static Eff. (%)	38

should be 625 per schedule.

Misc Fan Data	
Fan Eff. Index (FEI)	-
Outlet Velocity (ft/min)	453

Motor	
Motor Mounted	Yes
Size (hp)	1/6
Voltage/Cycle/Phase	115/60/1
Enclosure	TENV
Motor RPM	1725
Efficiency Rating	High
Windings	1
FLA (Amps)	2.2
Min. Circuit Ampacity (MCA)	3
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

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 ANSI/AMCA 301 at 5 ft

Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	74	68	62	54	49	50	43	36	59	48	4.9



Model: G-095-VG

Direct Drive Centrifugal Roof Exhaust Fan

Standard Construction Features:

- Aluminum housing - Backward inclined composite (sizes 60-95) or aluminum (sizes 97-300) wheel - Aluminum curb cap with prepunched mounting holes - Birdscreen - Ball bearing motors (sizes 85-300 and all Vari Green), sleeve bearing motors (sizes 60-80) - Motor isolated on shock mounts - Corrosion resistant fasteners

Selected Options & Accessories:

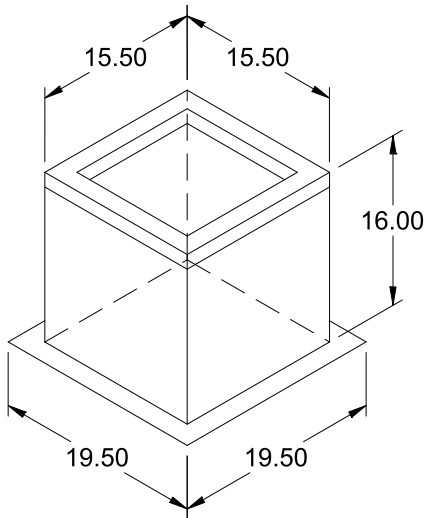
Motor - Vari-Green EC motor
Control - 0-10VDC Input
Control - Dial for balancing
Control - Vari-Green Transformer 85-277VAC to 24 VDC, Mounted & Wired
Standard Curb Cap Size - 17 Square
UL/cUL 705 Listed - "Power Ventilators"
Switch, NEMA-1, Toggle, Shipped with Unit
Junction Box Mounted & Wired
Birdscreen: Galvanized, nom. 84% Free Area
Composite Wheel Material
Unit Warranty: 1 Yr (Standard)
Damper Shipped Loose, BD-100-PB-10X10, Gravity Operated, Not Coated

Selected Sub Marks

See individual submittals for full details
GPI-17-G16

The Vari-Green Motor included in this order has a 'Multi-Voltage' ability. The red wire on the motor is called a 'Voltage Doubler', and when it is connected the motor can be powered by 115V.

If the Red wire is disconnected, then the motor can be powered with 208-230/277V. The motor will leave the factory with the voltage doubler wired per the order.



Model: GPI

Roof Curb

Standard Construction Features:

- Roof Curb fits between the building roof and the fan mounted directly to the roof support structure - Constructed of either 18 ga galvanized steel or 0.064 in. aluminum - Straight Sided without a cant - 2 in. mounting flange - 3 lb density insulation - Height - Available from 12 in. to 42 in. as specified in 0.5 in. increments. Notes: - The maximum roof opening dimension should not be greater than the "Actual" top outside dimension minus 2 in.. - The minimum roof opening dimension should be at least 2.5 in. more than the damper dimension or recommended duct size. - The Roof Opening Dimension may or may not be the same as the Structural Opening Dimension. - Damper Tray is optional and must be specified. Tray size is same as damper size. - Security bars are optional and must be specified. Frames and gridwork are all 12 ga steel. Gridwork is welded to the frame and the frame is welded to the curb.

General

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Dimensions

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16	17	17	15.5	15.5	12	12	19.5	19.5	16	16

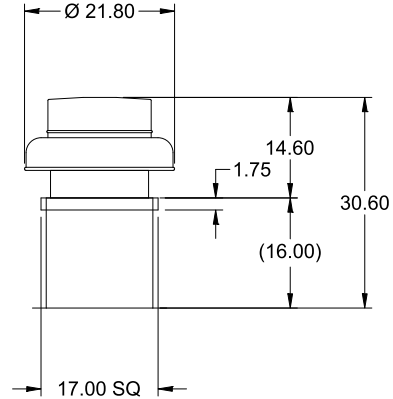
*May not be applicable

Accessories

Material	Security Bars	Liner	Insulation (in.)	Insulation R Value
Galvanized	No	No	1	R4.3

Model: G-095-VG
Direct Drive Centrifugal Roof Exhaust Fan

Dimensional	
Quantity	1
Weight w/o Acc's (lb)	28
Weight w/ Acc's (lb)	38
Weight w/ Acc's and Curb (lb)	59
Standard Curb Cap Size (in.)	17 x 17
Optional Damper (in.)	10 x 10
Roof Opening (in.)	13.5 x 13.5



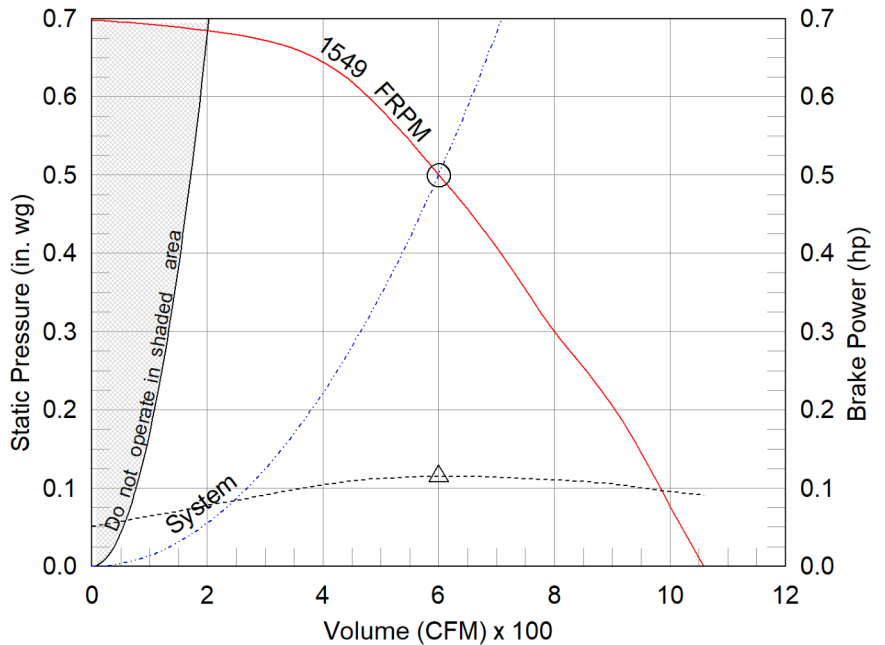
OVERALL HEIGHT MAY BE GREATER DEPENDING ON MOTOR, ADAPTER, AND/OR HINGE BASE.

Performance	
Requested Volume (CFM)	600
Actual Volume (CFM)	600
Total External SP (in. wg)	0.5
Fan RPM	1549
Operating Power (hp)	0.11
Elevation (ft)	1,096
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.072
Tip Speed (ft/min)	4,410
Static Eff. (%)	41

should be 700 per plans

Misc Fan Data	
Fan Eff. Index (FEI)	-
Outlet Velocity (ft/min)	517

Motor	
Motor Mounted	Yes
Size (hp)	1/6
Voltage/Cycle/Phase	115/60/1
Enclosure	TENV
Motor RPM	1725
Efficiency Rating	High
Windings	1
FLA (Amps)	2.2
Min. Circuit Ampacity (MCA)	3
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

Notes:

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Sones - calculated using ANSI/AMCA 301 at 5 ft

Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	82	79	70	64	62	57	45	47	69	57	9.3



Model: G-095-VG

Direct Drive Centrifugal Roof Exhaust Fan

Standard Construction Features:

- Aluminum housing - Backward inclined composite (sizes 60-95) or aluminum (sizes 97-300) wheel - Aluminum curb cap with prepunched mounting holes - Birdscreen - Ball bearing motors (sizes 85-300 and all Vari Green), sleeve bearing motors (sizes 60-80) - Motor isolated on shock mounts - Corrosion resistant fasteners

Selected Options & Accessories:

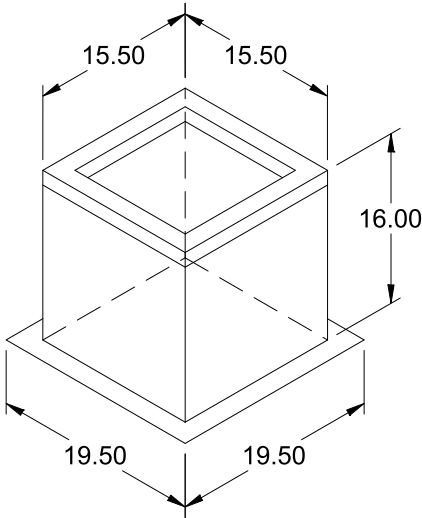
Motor - Vari-Green EC motor
Control - Vari-Green Constant Pressure, Integral Transducer, Duct Tap Qty 1
Control - Dial for balancing
Control - Vari-Green Transformer 85-277VAC to 24 VDC, Mounted & Wired
Additional Duct Static Probe
Standard Curb Cap Size - 17 Square
UL/cUL 705 Listed - "Power Ventilators"
Switch, NEMA-1, Toggle, Shipped with Unit
Junction Box Mounted & Wired
Birdscreen: Galvanized, nom. 84% Free Area
Composite Wheel Material
Unit Warranty: 1 Yr (Standard)
Damper Shipped Loose, BD-100-PB-10X10, Gravity Operated, Not Coated

Selected Sub Marks

See individual submittals for full details
GPI-17-G16

The Vari-Green Motor included in this order has a 'Multi-Voltage' ability. The red wire on the motor is called a 'Voltage Doubler', and when it is connected the motor can be powered by 115V.

If the Red wire is disconnected, then the motor can be powered with 208-230/277V. The motor will leave the factory with the voltage doubler wired per the order.



Model: GPI

Roof Curb

Standard Construction Features:

- Roof Curb fits between the building roof and the fan mounted directly to the roof support structure - Constructed of either 18 ga galvanized steel or 0.064 in. aluminum - Straight Sided without a cant - 2 in. mounting flange - 3 lb density insulation - Height - Available from 12 in. to 42 in. as specified in 0.5 in. increments. Notes: - The maximum roof opening dimension should not be greater than the "Actual" top outside dimension minus 2 in.. - The minimum roof opening dimension should be at least 2.5 in. more than the damper dimension or recommended duct size. - The Roof Opening Dimension may or may not be the same as the Structural Opening Dimension. - Damper Tray is optional and must be specified. Tray size is same as damper size. - Security bars are optional and must be specified. Frames and gridwork are all 12 ga steel. Gridwork is welded to the frame and the frame is welded to the curb.

General

Tag	Qty	Model	Sizing Method	Undersizing (in.)	Weight (lb)	Shipped Assembled	Union Label
	1	GPI-17	Nominal	1.5	21	Yes	No Preference

Dimensions

Curb Height (in.)	Nominal Outside Width (in.)	Nominal Outside Length (in.)	Actual Outside Width (in.)	Actual Outside Length (in.)	Actual Inside Width (in.)	Actual Inside Length (in.)	Flange Width (in.)	Flange Length (in.)	Hinge Base Width* (in.)	Hinge Base Length* (in.)
16	17	17	15.5	15.5	12	12	19.5	19.5	16	16

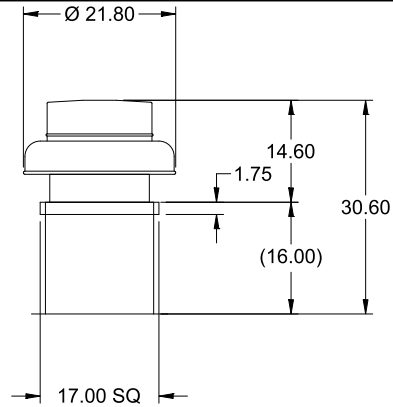
*May not be applicable

Accessories

Material	Security Bars	Liner	Insulation (in.)	Insulation R Value
Galvanized	No	No	1	R4.3

Model: G-090-VG

Direct Drive Centrifugal Roof Exhaust Fan



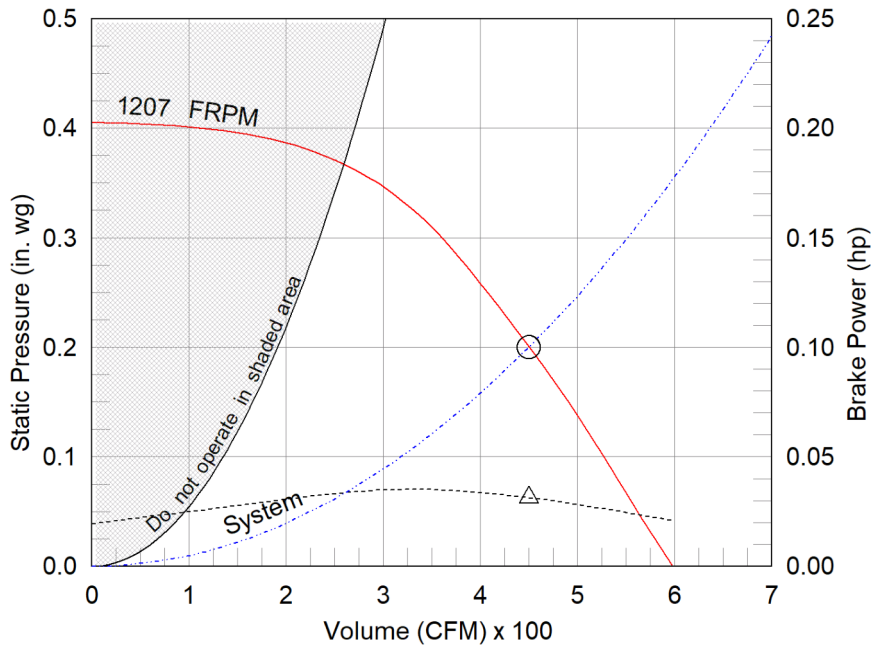
OVERALL HEIGHT MAY BE GREATER DEPENDING ON MOTOR, ADAPTER, AND/OR HINGE BASE.

Dimensional	
Quantity	1
Weight w/o Acc's (lb)	25
Weight w/ Acc's (lb)	35
Weight w/ Acc's and Curb (lb)	56
Standard Curb Cap Size (in.)	17 x 17
Optional Damper (in.)	10 x 10
Roof Opening (in.)	13.5 x 13.5

Performance	
Requested Volume (CFM)	450
Actual Volume (CFM)	450
Total External SP (in. wg)	0.2
Fan RPM	1207
Operating Power (hp)	0.03
Elevation (ft)	1,096
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.072
Tip Speed (ft/min)	3,437
Static Eff. (%)	45

Misc Fan Data	
Fan Eff. Index (FEI)	-
Outlet Velocity (ft/min)	643

Motor	
Motor Mounted	Yes
Size (hp)	1/10
Voltage/Cycle/Phase	115/60/1
Enclosure	TENV
Motor RPM	1725
Efficiency Rating	High
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

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 ANSI/AMCA 301 at 5 ft

Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	66	66	62	55	52	51	47	40	59	48	4.9



Model: G-090-VG

Direct Drive Centrifugal Roof Exhaust Fan

Standard Construction Features:

- Aluminum housing - Backward inclined composite (sizes 60-95) or aluminum (sizes 97-300) wheel - Aluminum curb cap with prepunched mounting holes - Birdscreen - Ball bearing motors (sizes 85-300 and all Vari Green), sleeve bearing motors (sizes 60-80) - Motor isolated on shock mounts - Corrosion resistant fasteners

Selected Options & Accessories:

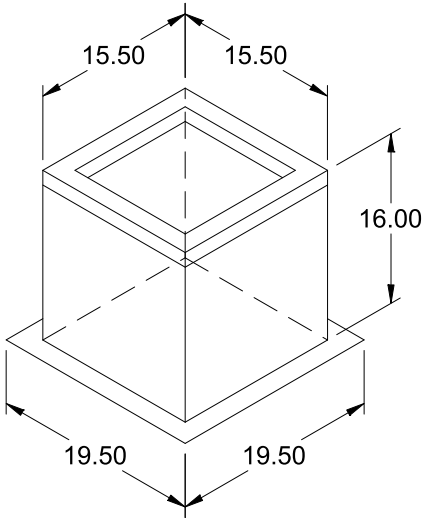
Motor - Vari-Green EC motor
Control - Vari-Green Constant Pressure, Integral Transducer, Room Tap Qty 1
Control - Dial for balancing
Control - Vari-Green Transformer 85-277VAC to 24 VDC, Mounted & Wired
Additional Duct Static Probe
Standard Curb Cap Size - 17 Square
UL/cUL 705 Listed - "Power Ventilators"
Switch, NEMA-1, Toggle, Shipped with Unit
Junction Box Mounted & Wired
Birdscreen: Galvanized, nom. 84% Free Area
Composite Wheel Material
Unit Warranty: 1 Yr (Standard)
Damper Shipped Loose, BD-100-PB-10X10, Gravity Operated, Not Coated

Selected Sub Marks

See individual submittals for full details
GPI-17-G16

The Vari-Green Motor included in this order has a 'Multi-Voltage' ability. The red wire on the motor is called a 'Voltage Doubler', and when it is connected the motor can be powered by 115V.

If the Red wire is disconnected, then the motor can be powered with 208-230/277V. The motor will leave the factory with the voltage doubler wired per the order.



Model: GPI

Roof Curb

Standard Construction Features:

- Roof Curb fits between the building roof and the fan mounted directly to the roof support structure - Constructed of either 18 ga galvanized steel or 0.064 in. aluminum - Straight Sided without a cant - 2 in. mounting flange - 3 lb density insulation - Height - Available from 12 in. to 42 in. as specified in 0.5 in. increments. Notes: - The maximum roof opening dimension should not be greater than the "Actual" top outside dimension minus 2 in.. - The minimum roof opening dimension should be at least 2.5 in. more than the damper dimension or recommended duct size. - The Roof Opening Dimension may or may not be the same as the Structural Opening Dimension. - Damper Tray is optional and must be specified. Tray size is same as damper size. - Security bars are optional and must be specified. Frames and gridwork are all 12 ga steel. Gridwork is welded to the frame and the frame is welded to the curb.

General

Tag	Qty	Model	Sizing Method	Undersizing (in.)	Weight (lb)	Shipped Assembled	Union Label
	1	GPI-17	Nominal	1.5	21	Yes	No Preference

Dimensions

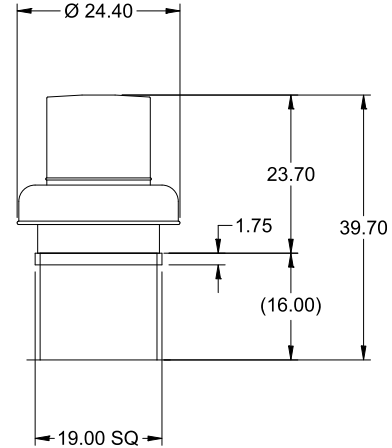
Curb Height (in.)	Nominal Outside Width (in.)	Nominal Outside Length (in.)	Actual Outside Width (in.)	Actual Outside Length (in.)	Actual Inside Width (in.)	Actual Inside Length (in.)	Flange Width (in.)	Flange Length (in.)	Hinge Base Width* (in.)	Hinge Base Length* (in.)
16	17	17	15.5	15.5	12	12	19.5	19.5	16	16

*May not be applicable

Accessories

Material	Security Bars	Liner	Insulation (in.)	Insulation R Value
Galvanized	No	No	1	R4.3

Model: G-097-VG
Direct Drive Centrifugal Roof Exhaust Fan



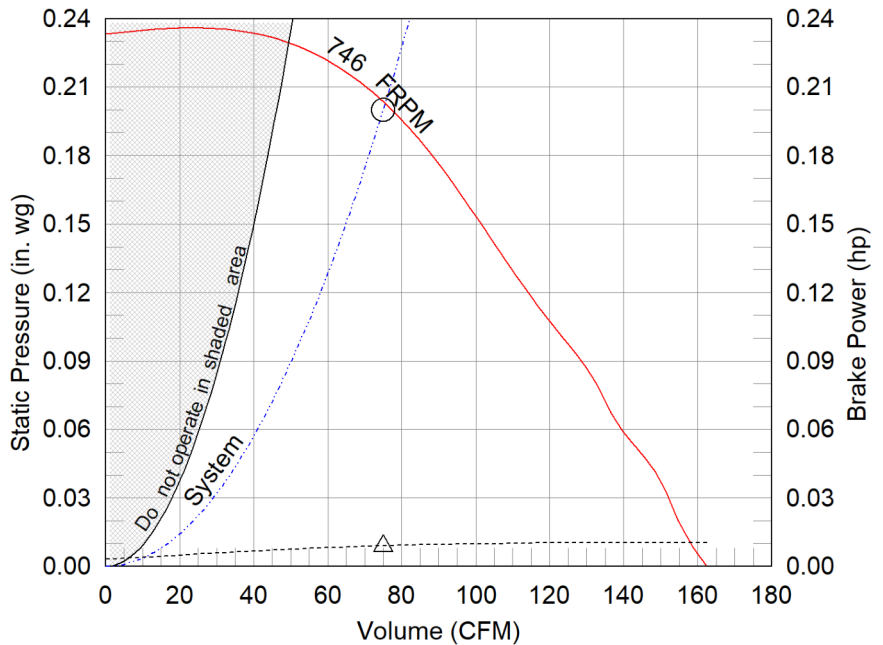
Dimensional	
Quantity	1
Weight w/o Acc's (lb)	36
Weight w/ Acc's (lb)	47
Weight w/ Acc's and Curb (lb)	71
Standard Curb Cap Size (in.)	19 x 19
Optional Damper (in.)	12 x 12
Roof Opening (in.)	15.5 x 15.5

Performance	
Requested Volume (CFM)	75
Actual Volume (CFM)	75
Total External SP (in. wg)	0.2
Fan RPM	746
Operating Power (hp)	0.01
Elevation (ft)	1,096
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.072
Tip Speed (ft/min)	2,184
Static Eff. (%)	26

Misc Fan Data	
Fan Eff. Index (FEI)	-
Outlet Velocity (ft/min)	78

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

OVERALL HEIGHT MAY BE GREATER DEPENDING ON MOTOR, ADAPTER, AND/OR HINGE BASE.



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

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 ANSI/AMCA 301 at 5 ft

Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	59	53	53	46	43	34	28	26	49	38	1.9



Model: G-097-VG

Direct Drive Centrifugal Roof Exhaust Fan

Standard Construction Features:

- Aluminum housing - Backward inclined composite (sizes 60-95) or aluminum (sizes 97-300) wheel - Aluminum curb cap with prepunched mounting holes - Birdscreen - Ball bearing motors (sizes 85-300 and all Vari Green), sleeve bearing motors (sizes 60-80) - Motor isolated on shock mounts - Corrosion resistant fasteners

Selected Options & Accessories:

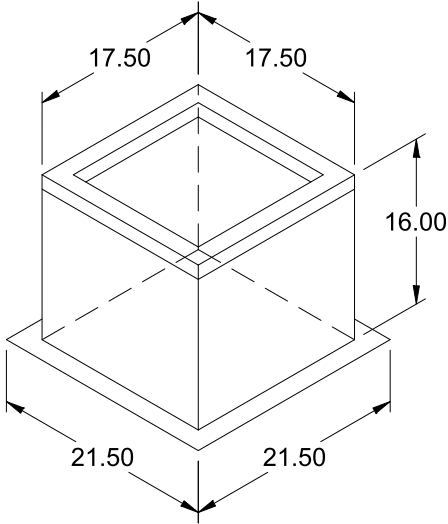
Motor - Vari-Green EC motor
Control - Vari-Green Constant Pressure, Integral Transducer, Room Tap Qty 1
Control - Dial for balancing
Control - Vari-Green Transformer 85-277VAC to 24 VDC, Mounted & Wired
Additional Duct Static Probe
Standard Curb Cap Size - 19 Square
UL/cUL 705 Listed - "Power Ventilators"
Switch, NEMA-1, Toggle, Shipped with Unit
Junction Box Mounted & Wired
Birdscreen: Galvanized, nom. 84% Free Area
Unit Warranty: 1 Yr (Standard)
Damper Shipped Loose, BD-100-PB-12X12, Gravity Operated, Not Coated

Selected Sub Marks

See individual submittals for full details
GPI-19-G16

The Vari-Green Motor included in this order has a 'Multi-Voltage' ability. The red wire on the motor is called a 'Voltage Doubler', and when it is connected the motor can be powered by 115V.

If the Red wire is disconnected, then the motor can be powered with 208-230/277V. The motor will leave the factory with the voltage doubler wired per the order.



Model: GPI

Roof Curb

Standard Construction Features:

- Roof Curb fits between the building roof and the fan mounted directly to the roof support structure - Constructed of either 18 ga galvanized steel or 0.064 in. aluminum - Straight Sided without a cant - 2 in. mounting flange - 3 lb density insulation - Height - Available from 12 in. to 42 in. as specified in 0.5 in. increments. Notes: - The maximum roof opening dimension should not be greater than the "Actual" top outside dimension minus 2 in.. - The minimum roof opening dimension should be at least 2.5 in. more than the damper dimension or recommended duct size. - The Roof Opening Dimension may or may not be the same as the Structural Opening Dimension. - Damper Tray is optional and must be specified. Tray size is same as damper size. - Security bars are optional and must be specified. Frames and gridwork are all 12 ga steel. Gridwork is welded to the frame and the frame is welded to the curb.

General

Tag	Qty	Model	Sizing Method	Undersizing (in.)	Weight (lb)	Shipped Assembled	Union Label
	1	GPI-19	Nominal	1.5	24	Yes	No Preference

Dimensions

Curb Height (in.)	Nominal Outside Width (in.)	Nominal Outside Length (in.)	Actual Outside Width (in.)	Actual Outside Length (in.)	Actual Inside Width (in.)	Actual Inside Length (in.)	Flange Width (in.)	Flange Length (in.)	Hinge Base Width* (in.)	Hinge Base Length* (in.)
16	19	19	17.5	17.5	14	14	21.5	21.5	18	18

*May not be applicable

Accessories

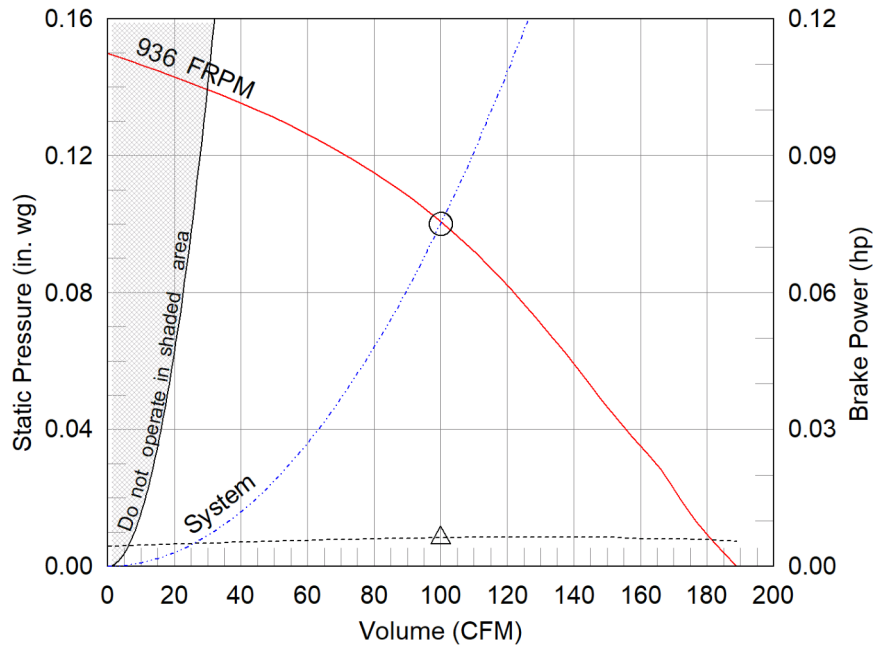
Material	Security Bars	Liner	Insulation (in.)	Insulation R Value
Galvanized	No	No	1	R4.3

Model: SQ-70-VG
Direct Drive Centrifugal Inline Fan

Dimensional	
Quantity	1
Weight w/o Acc's (lb)	30
Weight w/ Acc's (lb)	42
Optional Damper (in.)	9 x 9

Performance	
Requested Volume (CFM)	100
Actual Volume (CFM)	100
Total External SP (in. wg)	0.1
Fan RPM	936
Operating Power (hp)	0.01
Elevation (ft)	1,096
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.072
Tip Speed (ft/min)	1,991
Static Eff. (%)	25

Misc Fan Data	
Fan Eff. Index (FEI)	-
Outlet Velocity (ft/min)	179



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

Motor	
Motor Mounted	Yes
Size (hp)	1/15
Voltage/Cycle/Phase	115/60/1
Enclosure	TENV
Motor RPM	1725
Windings	1
FLA (Amps)	1.3
Min. Circuit Ampacity (MCA)	2
Max. Overcurrent Protection (MOP)	15
Short Circuit Current Rtg (SCCR)	5 kA

Nameplate Model: SQ-70-VG

Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	57	52	43	35	31	27	21	19	41	30	0.8
Radiated	61	57	38	30	29	23	15	17	43	32	0.9

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-70-VG

Direct Drive Centrifugal Inline Fan

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 with Dial ONLY (Not capable for field conversion to 0-10)

Control - Vari-Green Dial on Exterior of Fan Housing, Mounted and Wired
UL/cUL 705 Listed - "Power Ventilators"

Junction Box Mounted and Wired

Switch, NEMA-1, Toggle, Shipped Separate

Composite Wheel Material

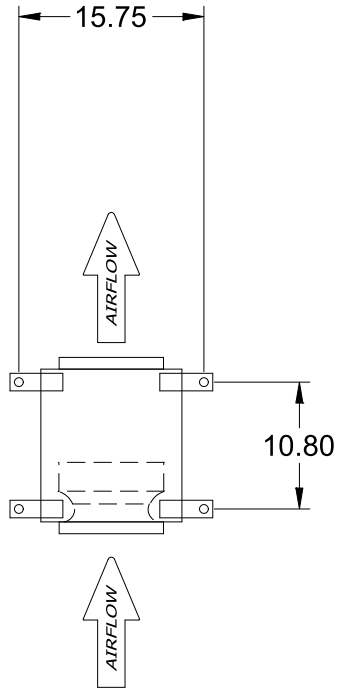
Fan: Spring, Hanging, 1 Inch Isolator PN: 850343, Incl. 4 isolators and 4 brackets

Unit Warranty: 1 Yr (Standard)

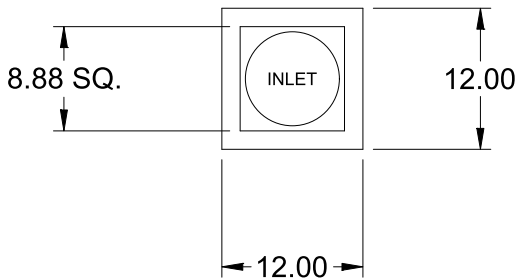
Damper Shipped Loose, Inline, BD-330-PB-9X9, Gravity Operated, Not Coated

SQ-70-VG

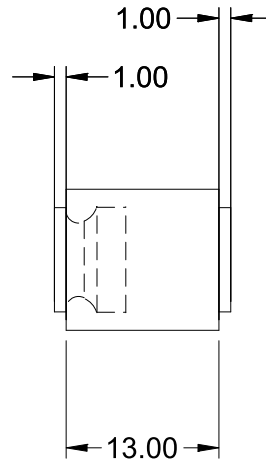
Direct Drive Centrifugal Inline Fan



TOP VIEW



END VIEW



SIDE VIEW

Notes: All dimensions shown are in units of in.

Model: SQ-90-VG

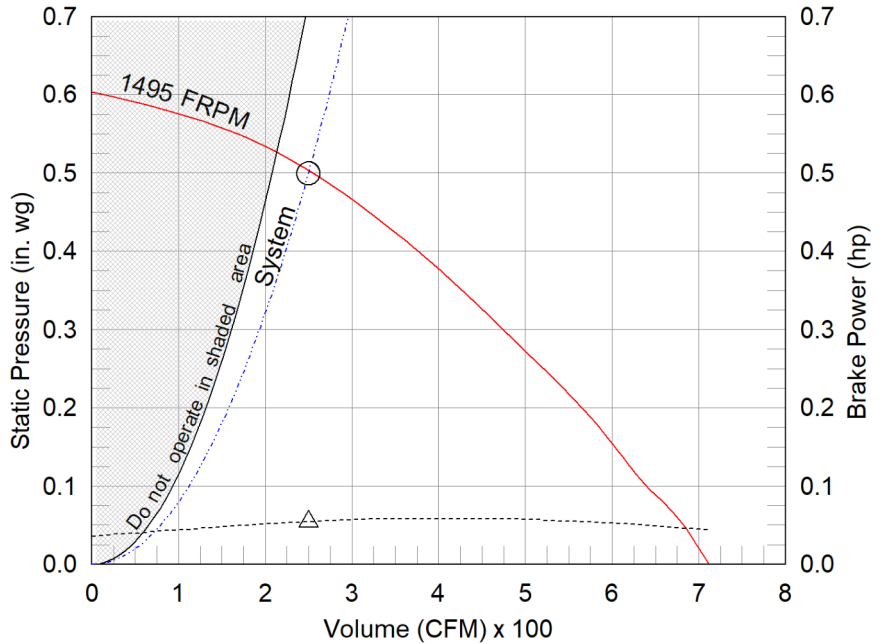
Direct Drive Centrifugal Inline Fan

Dimensional	
Quantity	1
Weight w/o Acc's (lb)	48
Weight w/ Acc's (lb)	66
Optional Damper (in.)	12 x 12

Performance	
Requested Volume (CFM)	250
Actual Volume (CFM)	250
Total External SP (in. wg)	0.5
Fan RPM	1495
Operating Power (hp)	0.05
Elevation (ft)	1,096
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.072
Tip Speed (ft/min)	4,256
Static Eff. (%)	36

Misc Fan Data	
Fan Eff. Index (FEI)	-
Outlet Velocity (ft/min)	250

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

Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	75	73	67	61	57	54	50	43	65	53	6.9
Radiated	76	75	61	55	52	48	44	39	62	50	6.2

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

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

UL/cUL 705 Listed - "Power Ventilators"

Junction Box Mounted and Wired

Switch, NEMA-1, Toggle, Shipped Separate

Composite Wheel Material

Motor Cover

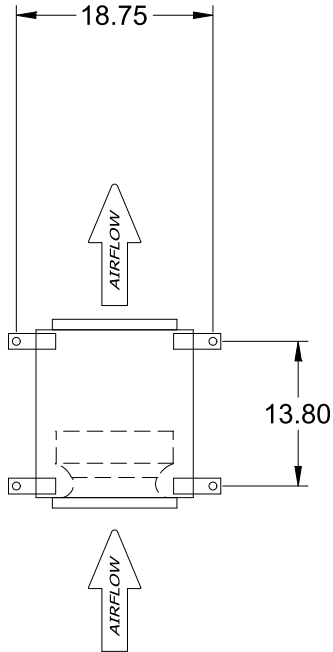
Fan: Spring, Hanging, 1 Inch Isolator PN: 850343, Incl. 4 isolators and 4 brackets

Unit Warranty: 1 Yr (Standard)

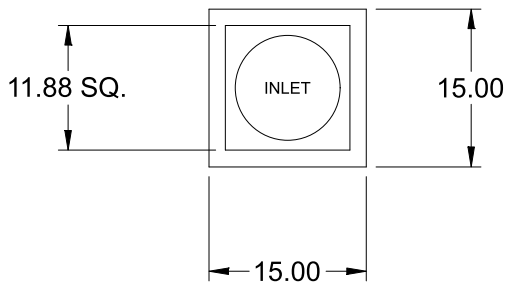
Damper Shipped Loose, Inline, BD-330-PB-12X12, Gravity Operated, Not Coated

SQ-90-VG

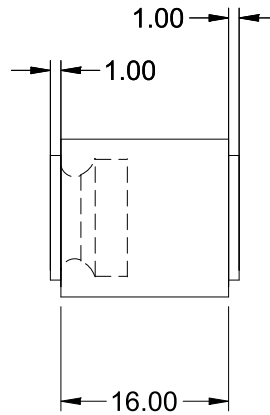
Direct Drive Centrifugal Inline Fan



TOP VIEW



END VIEW



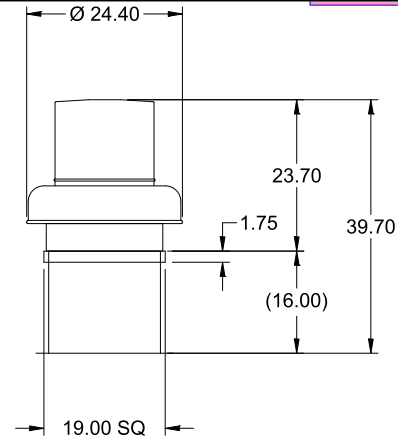
SIDE VIEW

Notes: All dimensions shown are in units of in.

Model: G-120-VG

Direct Drive Centrifugal Roof Exhaust Fan

Previously: G-123-VG



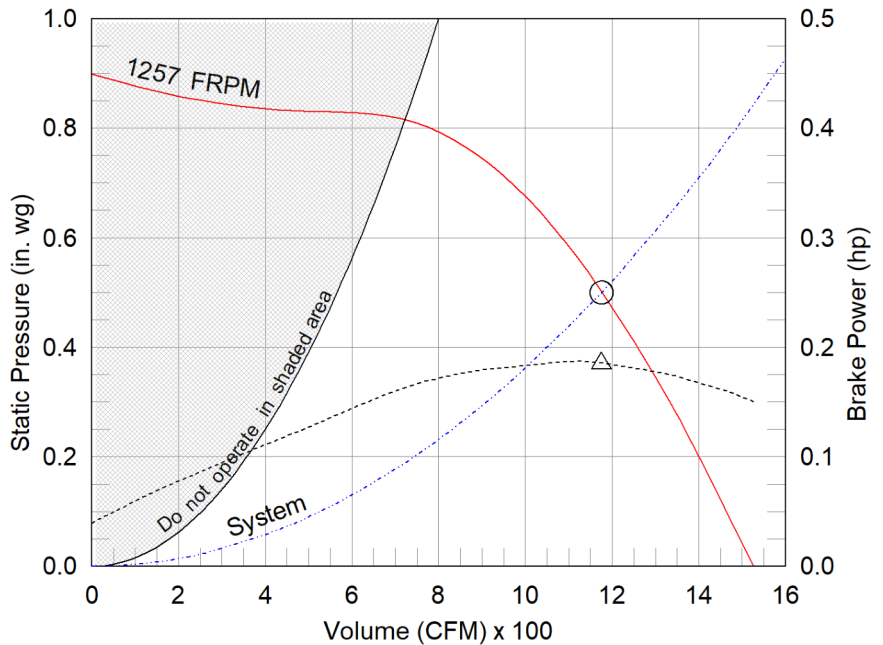
OVERALL HEIGHT MAY BE GREATER DEPENDING ON MOTOR, ADAPTER, AND/OR HINGE BASE.

Dimensional	
Quantity	1
Weight w/o Acc's (lb)	44
Weight w/ Acc's (lb)	55
Weight w/ Acc's and Curb (lb)	79
Standard Curb Cap Size (in.)	19 x 19
Optional Damper (in.)	12 x 12
Roof Opening (in.)	15.5 x 15.5

Performance	
Requested Volume (CFM)	1,175
Actual Volume (CFM)	1,175
Total External SP (in. wg)	0.5
Fan RPM	1257
Operating Power (hp)	0.19
Elevation (ft)	1,096
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.072
Tip Speed (ft/min)	4,299
Static Eff. (%)	50

Misc Fan Data	
Fan Eff. Index (FEI)	-
Outlet Velocity (ft/min)	1,263

Motor	
Motor Mounted	Yes
Size (hp)	1/2
Voltage/Cycle/Phase	115/60/1
Enclosure	ODP
Motor RPM	1725
Efficiency Rating	High
Windings	1
FLA (Amps)	6.4
Min. Circuit Ampacity (MCA)	8
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

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 ANSI/AMCA 301 at 5 ft

Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	69	74	75	68	61	60	55	53	71	59	9.6



Model: G-120-VG

Direct Drive Centrifugal Roof Exhaust Fan

Standard Construction Features:

- Aluminum housing - Backward inclined composite (sizes 60-95) or aluminum (sizes 97-300) wheel - Aluminum curb cap with prepunched mounting holes - Birdscreen - Ball bearing motors (sizes 85-300 and all Vari Green), sleeve bearing motors (sizes 60-80) - Motor isolated on shock mounts - Corrosion resistant fasteners

Selected Options & Accessories:

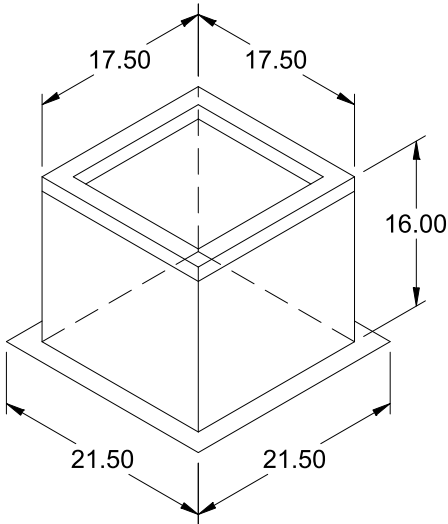
Motor - Vari-Green EC motor
Control - Vari-Green Constant Pressure, Integral Transducer, Room Tap Qty 1
Control - Dial for balancing
Control - Vari-Green Transformer 85-277VAC to 24 VDC, Mounted & Wired
Additional Duct Static Probe
Standard Curb Cap Size - 19 Square
UL/cUL 705 Listed - "Power Ventilators"
Switch, NEMA-1, Toggle, Shipped with Unit
Junction Box Mounted & Wired
Birdscreen: Galvanized, nom. 84% Free Area
Unit Warranty: 1 Yr (Standard)
Damper Shipped Loose, BD-100-PB-12X12, Gravity Operated, Not Coated

Selected Sub Marks

See individual submittals for full details
GPI-19-G16

The Vari-Green Motor included in this order has a 'Multi-Voltage' ability. The red wire on the motor is called a 'Voltage Doubler', and when it is connected the motor can be powered by 115V.

If the Red wire is disconnected, then the motor can be powered with 208-230/277V. The motor will leave the factory with the voltage doubler wired per the order.



Model: GPI

Roof Curb

Standard Construction Features:

- Roof Curb fits between the building roof and the fan mounted directly to the roof support structure - Constructed of either 18 ga galvanized steel or 0.064 in. aluminum - Straight Sided without a cant - 2 in. mounting flange - 3 lb density insulation - Height - Available from 12 in. to 42 in. as specified in 0.5 in. increments. Notes: - The maximum roof opening dimension should not be greater than the "Actual" top outside dimension minus 2 in.. - The minimum roof opening dimension should be at least 2.5 in. more than the damper dimension or recommended duct size. - The Roof Opening Dimension may or may not be the same as the Structural Opening Dimension. - Damper Tray is optional and must be specified. Tray size is same as damper size. - Security bars are optional and must be specified. Frames and gridwork are all 12 ga steel. Gridwork is welded to the frame and the frame is welded to the curb.

General

Tag	Qty	Model	Sizing Method	Undersizing (in.)	Weight (lb)	Shipped Assembled	Union Label
	1	GPI-19	Nominal	1.5	24	Yes	No Preference

Dimensions

Curb Height (in.)	Nominal Outside Width (in.)	Nominal Outside Length (in.)	Actual Outside Width (in.)	Actual Outside Length (in.)	Actual Inside Width (in.)	Actual Inside Length (in.)	Flange Width (in.)	Flange Length (in.)	Hinge Base Width* (in.)	Hinge Base Length* (in.)
16	19	19	17.5	17.5	14	14	21.5	21.5	18	18

*May not be applicable

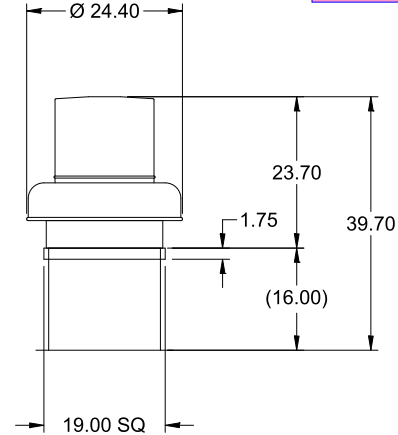
Accessories

Material	Security Bars	Liner	Insulation (in.)	Insulation R Value
Galvanized	No	No	1	R4.3

Model: G-120-VG

Direct Drive Centrifugal Roof Exhaust Fan

Previously: G-123-VG



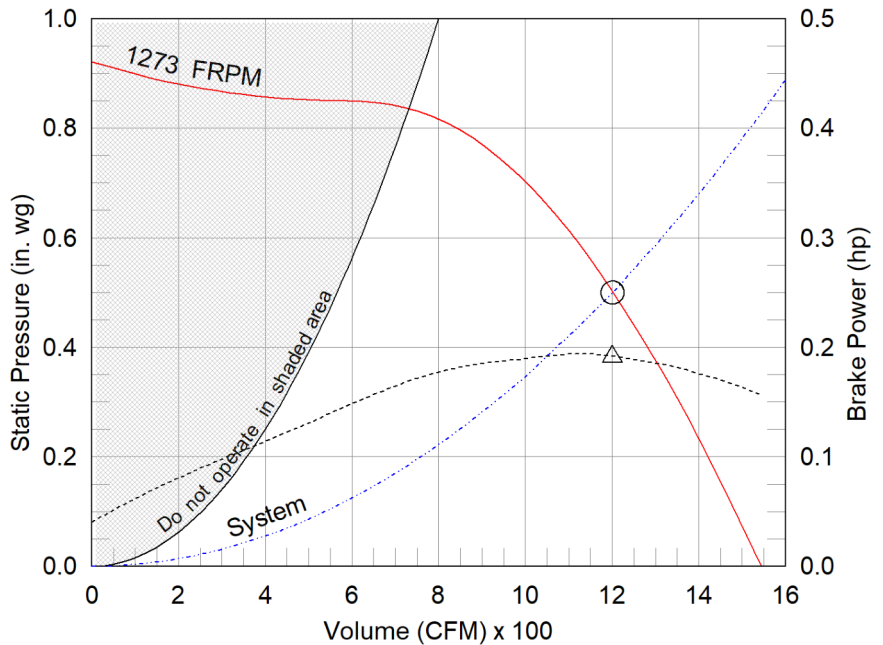
OVERALL HEIGHT MAY BE GREATER DEPENDING ON MOTOR, ADAPTER, AND/OR HINGE BASE.

Dimensional	
Quantity	1
Weight w/o Acc's (lb)	44
Weight w/ Acc's (lb)	55
Weight w/ Acc's and Curb (lb)	79
Standard Curb Cap Size (in.)	19 x 19
Optional Damper (in.)	12 x 12
Roof Opening (in.)	15.5 x 15.5

Performance	
Requested Volume (CFM)	1,200
Actual Volume (CFM)	1,200
Total External SP (in. wg)	0.5
Fan RPM	1273
Operating Power (hp)	0.19
Elevation (ft)	1,096
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.072
Tip Speed (ft/min)	4,353
Static Eff. (%)	49

Misc Fan Data	
Fan Eff. Index (FEI)	-
Outlet Velocity (ft/min)	1,290

Motor	
Motor Mounted	Yes
Size (hp)	1/2
Voltage/Cycle/Phase	115/60/1
Enclosure	ODP
Motor RPM	1725
Efficiency Rating	High
Windings	1
FLA (Amps)	6.4
Min. Circuit Ampacity (MCA)	8
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

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 ANSI/AMCA 301 at 5 ft

Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	69	74	75	69	62	60	55	53	71	60	9.9



Model: G-120-VG

Direct Drive Centrifugal Roof Exhaust Fan

Standard Construction Features:

- Aluminum housing - Backward inclined composite (sizes 60-95) or aluminum (sizes 97-300) wheel - Aluminum curb cap with prepunched mounting holes - Birdscreen - Ball bearing motors (sizes 85-300 and all Vari Green), sleeve bearing motors (sizes 60-80) - Motor isolated on shock mounts - Corrosion resistant fasteners

Selected Options & Accessories:

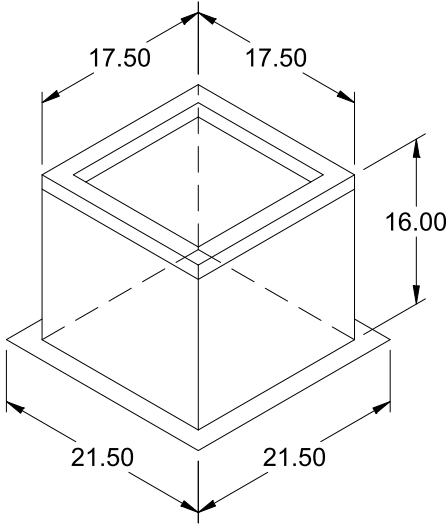
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