



Quality People. Building Solutions.

Comfort Systems USA (Arkansas), Inc.
P.O. Box 16620
Little Rock, AR 72231
Phone 501-834-3320
Fax 501-834-5416

Date: 4/9/2024

Return Request: 4/19/2024

Project: LRAFB – Dorm 854 Renovation

Supplier: Airetech

Manufacturer: Greenheck

Submittal: Exhaust Fans

Submittal Number: 23 00 00-04

Drawing # and Installation: Mechanical Drawings

ARCHITECT

ENGINEER

EECI
10 Corporate Hill Dr. Suite 100
Little Rock, AR 72205
501-244-0511

GENERAL CONTRACTOR

HGL Construction
P.O. Box 1035
Jacksonville, AR 72099
501-983-1160

MECHANICAL SUBCONTRACTOR

Comfort Systems USA (Arkansas), Inc.
9924 Landers Rd.
N. Little Rock, AR 72117
501-834-3320

Notes:

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CSUSA PROJECT NO.

24-7031

joseph@comfortar.com

9924 Landers Rd.
No. Little Rock, AR 72117

SUBMITTAL

Job Name: **LRAFB B854 Fan**

Architect: Clements and Associates

Engineer: EECI

Consultant: Noah Kinder - EECI

Contractor: Comfort Systems USA

Elevation: (ft) 338

Date: 3/21/2024

Submitted By: Forrest Moseley

AIRETECH CORPORATION - 2364

7631 NORTHSORE PL

NORTH LITTLE ROCK, AR 72118

US

Phone: (501)280-0404

Fax:

Email Address: forrest@airetechcorp.com



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

Model: SQ-140

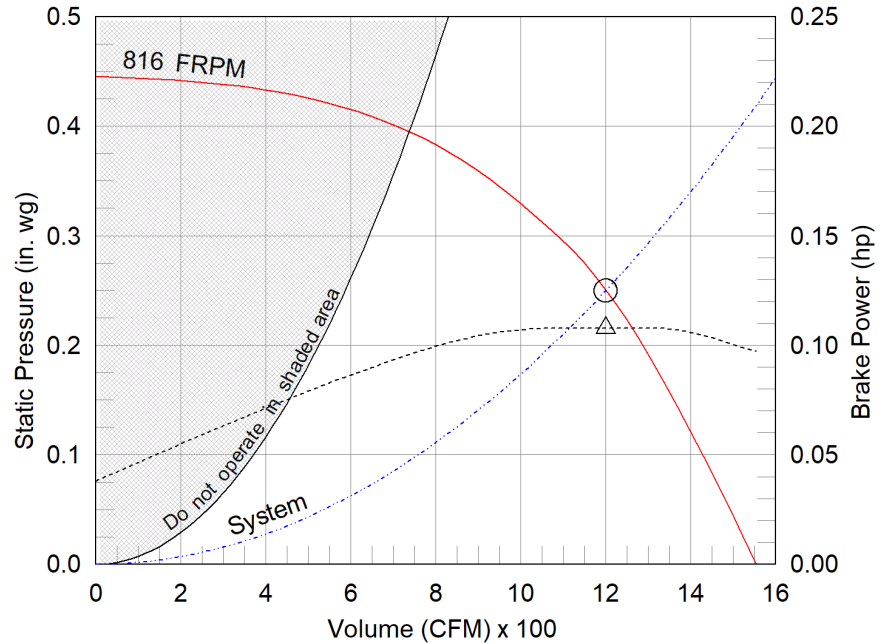
Direct Drive Centrifugal Inline Fan

Dimensional	
Quantity	1
Weight w/o Acc's (lb)	87
Weight w/ Acc's (lb)	106
Max T Motor Frame Size	145

Performance	
Requested Volume (CFM)	1,200
Actual Volume (CFM)	1,200
Total External SP (in. wg)	0.25
Fan RPM	816
Operating Power (hp)	0.11
Elevation (ft)	338
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.074
Tip Speed (ft/min)	3,112
Static Eff. (%)	44

Misc Fan Data	
Fan Eff. Index (FEI)	-
Outlet Velocity (ft/min)	443

Motor	
Motor Mounted	Yes
Size (hp)	1/8
Voltage/Cycle/Phase	115/60/1
Enclosure	ODP
Motor RPM	860
Windings	1
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-140-X

Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	64	66	64	60	55	52	44	39	62	50	5.4
Radiated	67	70	61	56	49	39	27	24	59	47	4.2

Notes:

All dimensions shown are in units of in.
 *Please consult factory for actual motor amp draw
 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-140

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:

PSC Motor

UL/cUL 705 Listed - "Power Ventilators"

Junction Box Mounted and Wired

Switch, NEMA-1, Toggle, Shipped Separate,

Aluminum Wheel Material

Motor Cover

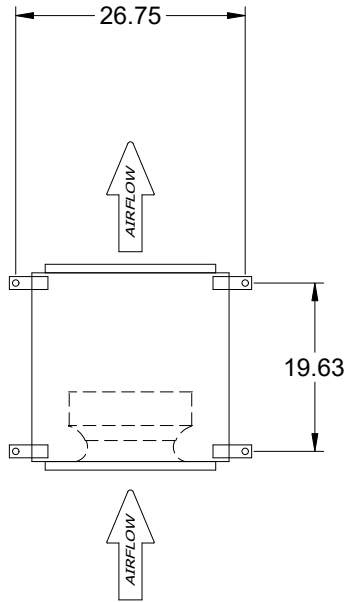
Fan: Spring, Hanging, 1 Inch Isolator PN: 850343, Incl. 4 isolators and 4 brackets

Solid State Speed Control, 6 Amp, Shipped Loose

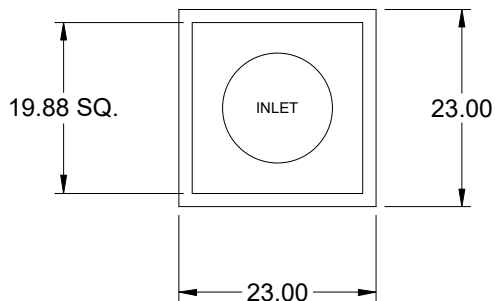
Unit Warranty: 1 Yr (Standard)

SQ-140

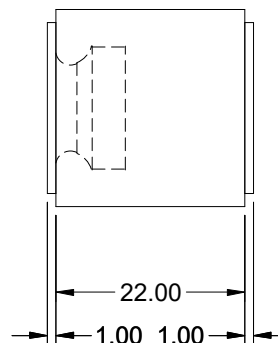
Direct Drive Centrifugal Inline Fan



TOP VIEW



END VIEW



SIDE VIEW

Notes: All dimensions shown are in units of in.

Disconnect Switch

Enclosure Rating: NEMA-1

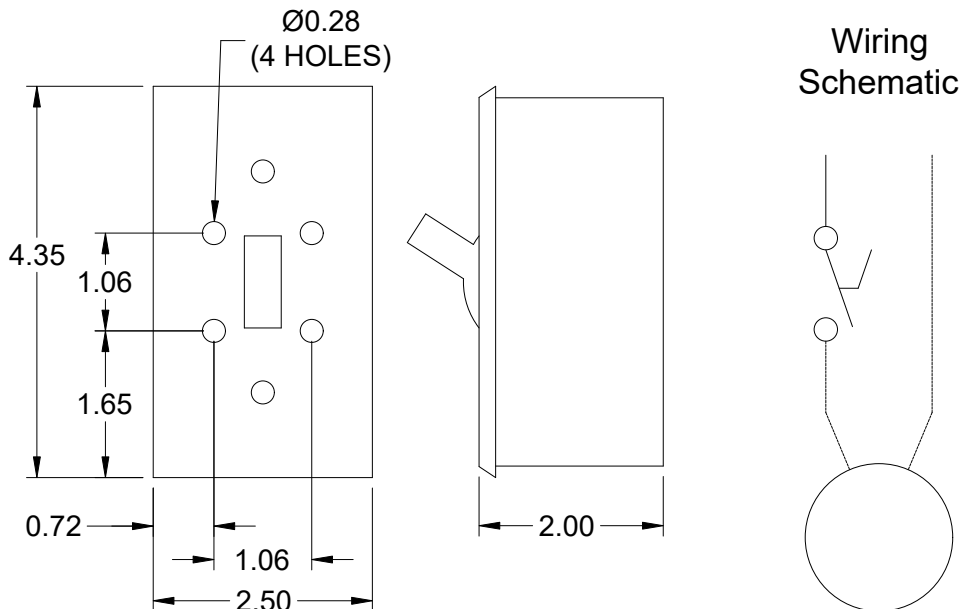
Standard Construction Features:

Enclosure constructed for indoor use to provide a degree of protection to personnel against incidental contact with the enclosed equipment and to provide a degree of protection against falling dust. This enclosure meets the rod entry and the indoor corrosion protection design tests. The rod entry test is intended to simulate incidental contact with enclosure equipment. Enclosure is equipped with provision to lockout in the off position with customer supplied lock.

Disconnect Switch Configuration

Type:	Toggle	Motor Size:	1/8 hp	Voltage:	115	UL Listed:	Yes
Manufacturer:	Pass and Seymour	Cycle:	60	Amperage:	15	CSA Approved:	Yes
Overload Protection:	None	Phase:	1	Switch Pole(s):	1	Rating:	1/2 hp
Junction Box Mtg.:	Ship Separate	RPM:	860	Exp. Resist. Wiring:	None		
Switch Mounting:	Shipped Separate						

Electrical Drawing Details



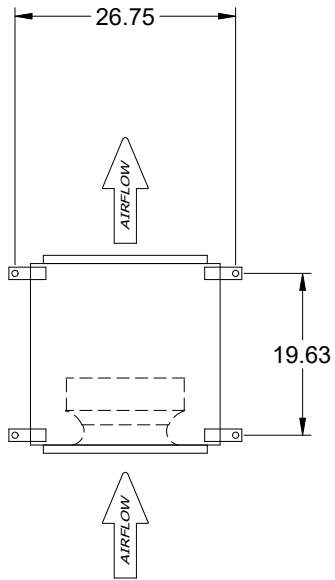
Notes: All dimensions shown are in units of in.

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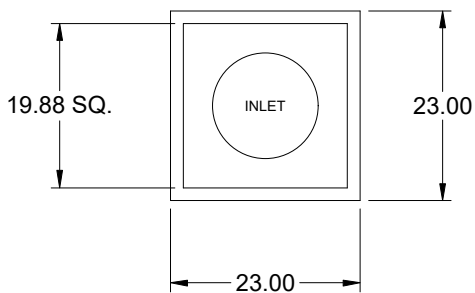
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Assembly Drawing

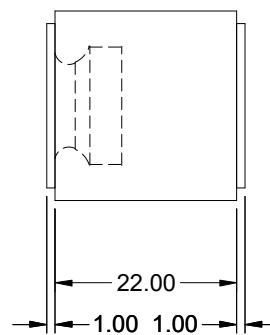
Type: Direct Drive Centrifugal Inline Fan



TOP VIEW



END VIEW



SIDE VIEW

Notes: All dimensions shown are in units of in..

Fan Isolator

Type: Spring, Hanging, 1 Inch

Standard Construction Features:

The spring hanging isolator is designed to reduce the transmission of vibration and noise produced by suspended equipment and piping. To assure stability, the spring element has a minimum lateral stiffness of 1.0 times the rated vertical stiffness. The hanger will allow a support rod misalignment through a 30 degree arc and the isolation brackets will carry a 500% overload without failure. The isolator has an epoxy powder coated bracket and spring coil which is color coded according to the load capacity and has a noise isolation pad, all which is assembled into a stamped or welded hanger bracket.

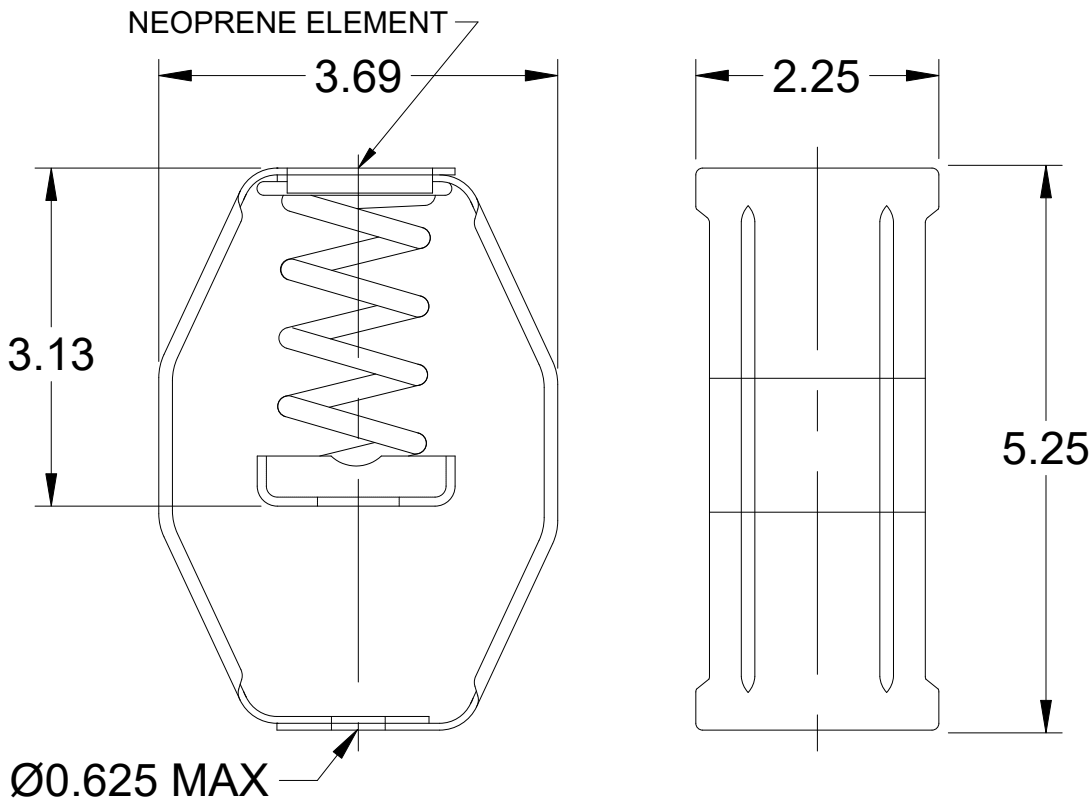
This part number includes 4 isolators.

Isolator Configuration

Description: SH-1-35
Manufacturer: Kinetics Noise Control
Load Capacity: 35 lb
Deflection at Full Load: 1.52

Color: Blue
Mounting: Hanging
Kit Part Number: 850343
Selection Deflection (in.): 0.42

Spring, Hanging, 1 Inch Deflection - Vibration Isolator



Notes: All dimensions shown are in units of in.