ROTRON / AMETEK®
AEROSPACE & DEFENSE

Rotron SAUCER®
Tubeaxial Fans

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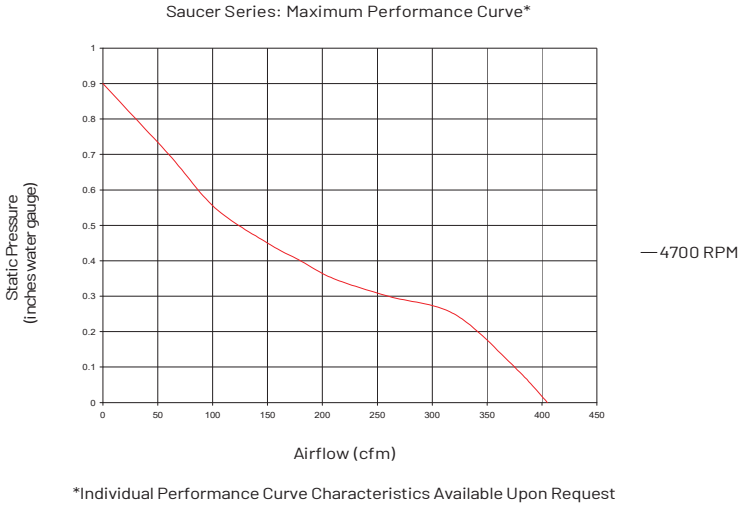
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General Tubeaxial Information

Tubeaxial Fans are integrated axial flow air moving devices in which the motor rotor is cast inside the impeller to achieve the smallest possible axial dimension. Higher aerodynamic performance and efficiencies can be achieved with these true airfoil blade designs. These fans typically operate near free delivery, but can achieve static pressures above those of Propeller Fans due to high speed operations.The Tubeaxial Fan is suitable for operation in severe environmental conditions in air, ground, and shipboard applications. They come in a variety of AC voltages and frequencies, as well as DC voltages. Hook up options include: lead wires, terminal blocks, or MS connectors. All Tubeaxial Fans are finely balanced to meet the requirements of MIL-B-23071. All units are available with an optional internal Fan Performance Sensor (FPS) and an external Low Speed Warning Device (LSWD). Some units are available with an internal Low Speed Warning Device (LSWD).

Rotron SAUCER®



*Individual Performance Curve Characteristics Available Upon Request



General

- Physical envelope: 7.04" Dia. x 2.50" L [1].
- Weight: approximately 1.76 lbs.
- Die cast aluminum Venturi and Rotorprop.
- Specially designed for electronics rack cooling in shipboard and submarine applications.
- Custom mounting configurations, such as flanges or servo rings and synclamps, are available [2]

[1] Note: See specific part-number drawing for complete product dimensions
[2] Please contact the Application Engineering Department for further information

Materials and Finishes

- All aluminum components finished with a chemical conversion coating per MIL-C-5541, top coat of lusterless black enamel, color #37038, per Federal Standard 595 conforming to TT-E-489 Type B.
- Corrosion-resistant stainless steel shaft and hardware.
- Impeller runs on two high-precision, double-shielded, stainless steel ball bearings (ABEC Class 5) with an integral lubricant reservoir for a long, maintenancefree life.
- Motors have stator winding insulation which is rated for continuous duty for either Class F or Class H.

Options/Accessories

- Helicoil Inserts
- Finger Guards
- Custom Paints Available
- LSWD (Low Speed Warning Device)
- FPS (Fan Performance Sensor)

AC Line Powered Units [1]

• 3-phase and 1-phase permanent-split capacitor motor designs.
• Fixed speeds (performance) based on input frequency.
• Meets or exceeds the requirements of MIL-B-23071 and other applicable U.S. military and commercial aerospace specifications [2].
• Available as a QPL product (MIL-B-23071/1-001).
• Max free delivery airflow of 280 CFM at 50 Hz, 280 CFM at 60 Hz, 400 CFM at 400 Hz.
• Ambient temperature range: -54 °C to 125 °C.
• Acoustic levels as low as 38 dBA.

[1] Airflow, maximum ambient and acoustic levels will vary depending on design parameters
[2] Please call for further information concerning applicable U.S. military and commercial aerospace specifications

C Line Powered Units – E.C.D.C.® [1]

• Brushless permanent magnet design (Electronically Commutated DC).
• Speed (performance) fixed by input voltage.
• Meets or exceeds the requirements of MIL-B-28873 and other applicable U.S. military and commercial aerospace specifications 2.
• Max free delivery airflow of 400 CFM.
• Ambient temperature range: -40 °C to 100 °C.
• Acoustic levels as low as 60 dBA.

Optional DC-AC Inverters and AC-AC Converters for AC Powered Models [1]

BATAC® Inverter Driven Units

• AC square wave fans driven from a DC power source through a BATAC® Inverter.
• Low cost alternative when multiple fans are used in a single application or area.
• Allows for greater than 100 VDC input voltage.

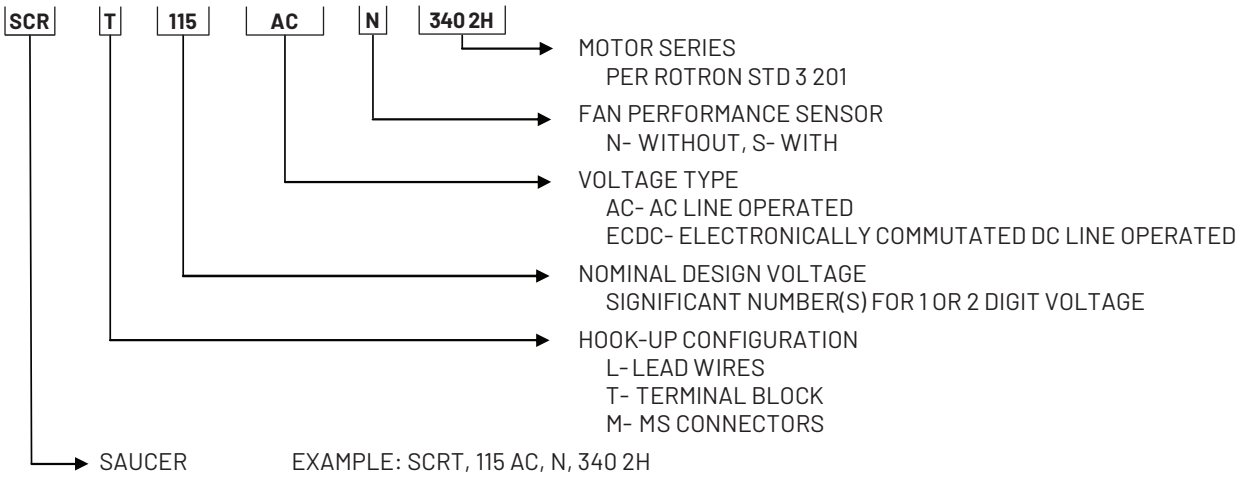
[1] See Accessories: Power Conversion

DELTAC® Converter Driven Units

• DELTAC® converters allow high frequency (typically 400 Hz) fans to be driven by variable frequency (typically 360-800 Hz) power or low frequency 50/60 Hz power to obtain the higher frequency performance.

Unit Description Key

The unit description key is for reference only and should not be confused with a part number. While most units are custom configurations, not all variations of the key shown below are possible. Please contact the Application Engineering department for more information regarding possible custom configurations.



* "X" IN ANY POSITION DENOTES SPECIAL FOR THAT FEATURE

Ordering Information

When ordering, please specify the specific Rotron part number listed on the following model table. Further ordering information, based on the configuration and motor series,may be obtained by contacting customer service. Please refer to the Unit Description Key explanation above.

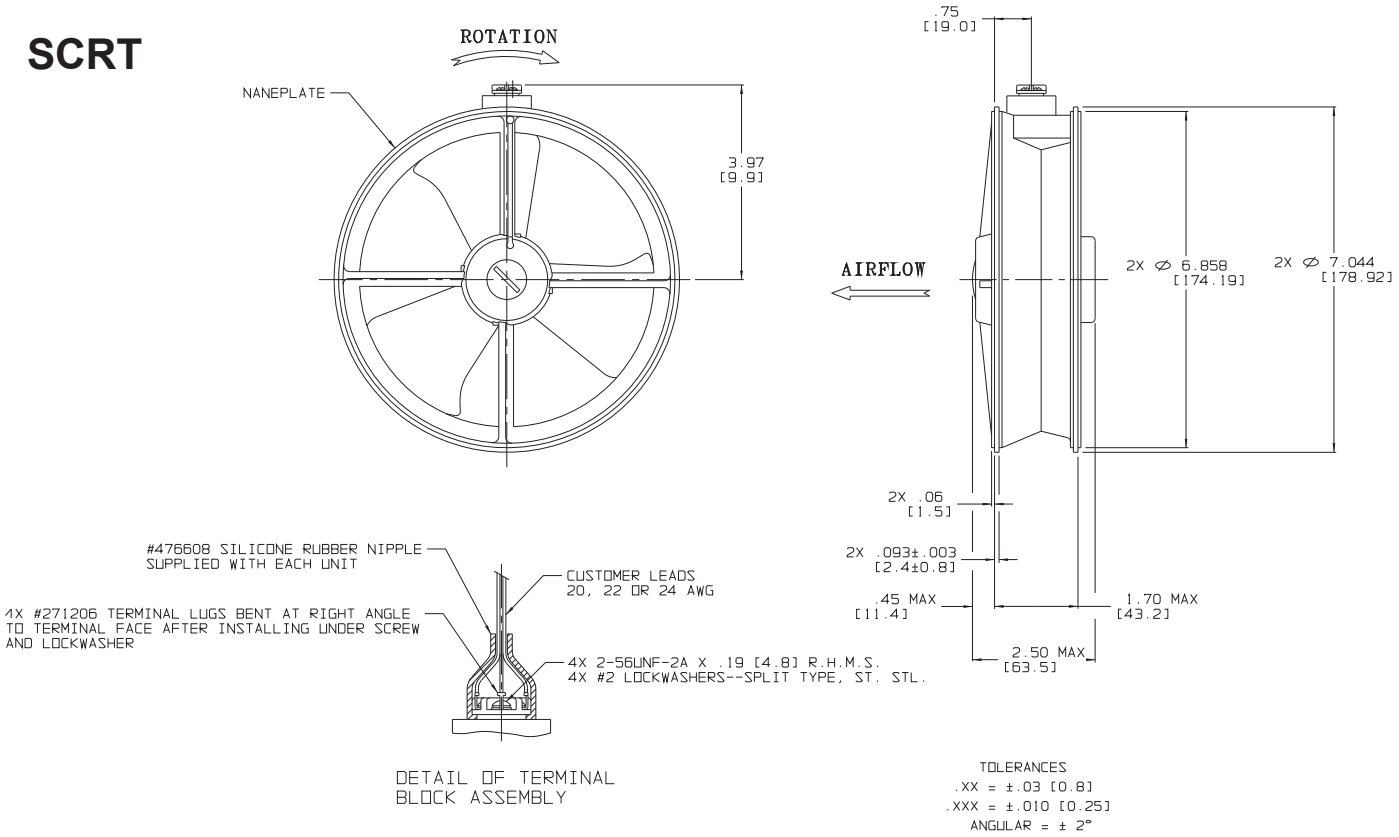
Standard Product Offering of AC Line Powered Models

Part #	Product Description	Flow (CFM)	Max Pressure (IWG)	Nom. RPM	Nom. Watts	Line Amps (A)	Max Amb (C)	Weight	Volts	Phase	Hz	Capaciotr	Airflow Source Data	Features
035053000	SCRT 2938H	400	0.8	4800	46	0.3	125	1.6	200	3	400	N/A	A395-8	TERMINALS
026993000	SCRT 654DH	334	0.4	3780	33	0.4	125	1.6	115	1	400	1.0/110	A579-5A	TERMINALS
034641000	SCRL 656JH	330	0.5	3800	34	0.3	125	1.6	115	3	400	N/A	A499-7	LEADS, FPS
026991000	SCRT 650JH	330	0.5	3970	35	0.2	125	1.6	200	3	400	N/A	A497-13	TERMINALS
034092000	SCRL 736JH	285	0.6	3300	21	0.2	125	1.6	115	3	60	N/A	A497-11	LEADS, FPS
024764000	SCRT 544JH	280	0.7	3300	29	0.2	125	1.6	230	3	60	N/A	A497-19	TERMINALS
026372000	SCRT 640ZH	280	0.5	3280	20	0.1	125	1.6	230	1	60	0.5/330	A216-15	TERMINALS
026990000	SCRT 340ZH	278	0.4	3300	23	0.2	125	1.6	115	1	60	2.0/220	A473-19	TERMINALS
021854000	SCRT 827NH	226	0.3	2750	23	0.1	125	1.6	230	1	50	1.5/220	A499-8	TERMINALS
033765000	SCRT 1447ZH	226	0.2	2700	24	0.2	100	1.6	115	1	60	0.25/220	A238-28	TERMINALS
025281000	SCRT 559DH	142	0.2	1680	11	0.1	125	1.6	115	1	60	2.0/220	A497-1	TERMINALS
033765000	SCRT 1447ZH	105	0.1	1250	25	0.3	100	1.6	115	1	400	2.5/220	A238-28B	TERMINALS

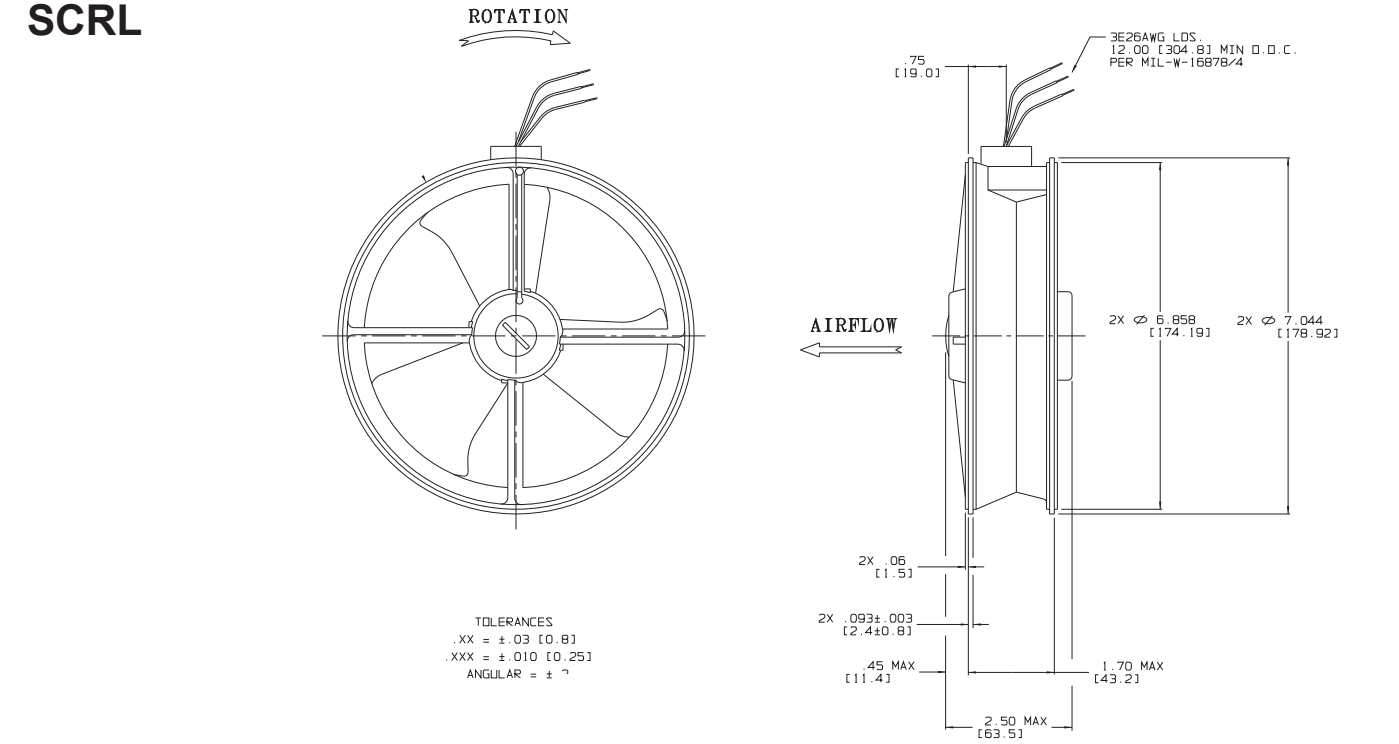
Standard Product Offering of DC Line Powered Models

Part #	Product Description	Flow (CFM)	Max Pressure (IWG)	Nom. RPM	Nom. Watts	Line Amps (A)	Max Amb (C)	Weight	Volts	Airflow Source Data	Features
011043000	M L8L 1936SF	70	0 7	6,400	11	0.45	100	0.7	26	A582-3A	LEADS, FPS
012105000	ML8L 1984SF	63	0.6	6,300	14	0.31	100	0.7	48	A759-20	LEADS, FPS
011040000	ML8L 1933SF	63	0.6	6,000	8	0.73	75	0.7	12	A552-17	LEADS, FPS
011042000	ML8L 1935SF	42	0.3	4,035	4	0.15	100	0.7	26	A554-11A	LEADS, FPS
011184000	ML8M 1959SF	41	0.3	4,099	8	0.19	100	0.7	48	A554-3	CO NNECTOR, FPS
011073000	ML8T 1959SF	41	0.3	4,099	8	0.19	100	0.7	48	A554-3	TERMINALS, FPS
011067000	Mil8T 1930SF	40	0.3	4,000	3	0.27	100	0.7	12	A554-7	TERMINALS, FPS
011070000	ML8T 1934SF	37	0.2	3,450	3	0.13	100	0.7	26	A582-5A	TERMINALS, FPS
011038000	ML8L 1929SF	32	0.2	3,200	2	0.16	100	0.7	12	A552-9B	LEADS, FPS

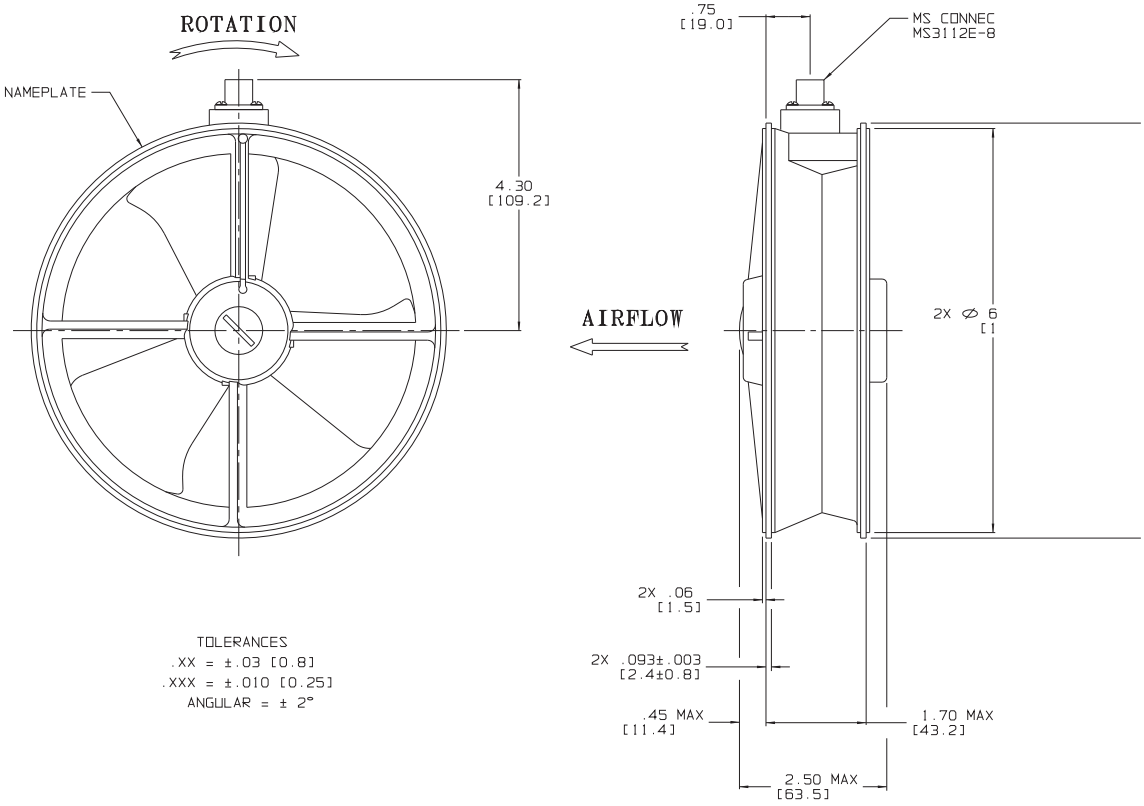
SCRT


ROTATION
NANEPLATE
3.97
[9.9]
.75
[19.0]
AIRFLOW
2X ⌀ 6.858
[174.19]
2X ⌀ 7.044
[178.92]
2X .06
[1.5]
2X .093±.003
[2.4±0.8]
.45 MAX
[11.4]
1.70 MAX
[43.2]
2.50 MAX
[63.5]
#476608 SILICONE RUBBER NIPPLE
SUPPLIED WITH EACH UNIT
CUSTOMER LEADS
20, 22 OR 24 AWG
1X #271206 TERMINAL LUGS BENT AT RIGHT ANGLE
TO TERMINAL FACE AFTER INSTALLING UNDER SCREW
AND LOCKWASHER
4X 2-56UNF-2A X .19 [4.8] R.H.M.S.
4X #2 LOCKWASHERS--SPLIT TYPE, ST. STL.
DETAIL OF TERMINAL
BLOCK ASSEMBLY
TOLERANCES
.XX = ±.03 [0.8]
.XXX = ±.010 [0.25]
ANGULAR = ± 2°

SCRL


ROTATION
.75
[19.0]
3E26AWG LDS.
12.00 [304.8] MIN O.D.C.
PER MIL-W-16878/4
AIRFLOW
2X ⌀ 6.858
[174.19]
2X ⌀ 7.044
[178.92]
2X .06
[1.5]
2X .093±.003
[2.4±0.8]
.45 MAX
[11.4]
1.70 MAX
[43.2]
2.50 MAX
[63.5]
TOLERANCES
.XX = ±.03 [0.8]
.XXX = ±.010 [0.25]
ANGULAR = ± 2°

SCRM



*Part Number Specific Drawings Available Upon Request

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Specifications subject to change without notice