ROUND METAL CEILING LED STROBE FLASHER SPEAKERS

RCS 5FTSQL

The ATEÏS RCS 5FTSQL with strobe flasher is the latest technology in Voice Evacuation application where high quality sound is complemented with an LED strobe flasher to meet both audio and visual requirements. The speaker is delivered with 5" driver loudspeaker system, finished in two-part, torsion-mount, and grille baffle with a steel mesh grille to present a stylish hardware-free look. Easy to install terminal block connection and spadelug transformer taps allow fast, easy installation and/or wattage change. This speaker package combines the wide dispersion of a 5" cone loudspeaker with aesthetic excellence, installation advantages and a versatile 6-watt, 100V transformer for the 'FT' model.

APPLICATION

The RCS 5FTSQL sets new standards in life safety for speaker manufacturing. The RCS 5FTSQL speaker is excellent for in-ceiling installations combined with a high intensity flashing strobe, complying with the new DDA (Disability Discrimination Act 1995) legislation, assisting those with hearing difficulties. The hardware-free speaker installation, with low profile strobe flasher, enhances the installation appearance without compromise on sound or intelligibility.

The RCS 5FTSQL is a uniquely perfect fit for all in-ceiling installations, such as hotels, schools, malls, airports, theaters and all public spaces where audio and visual requirements of Voice Evacuation are needed.

PHYSICAL CONSTRUCTION

The speakers come in a stylish metal chassis, finished in RAL 9016 color, although the speakers can be shipped to match different color requirements based on request. A low current LED Strobe Flasher is installed to provide high light intensity of 15 candelas with no compromise on audio quality. The LED technology shall utilize low current consumption as well as long life time for continuous operation, hence many of the speaker strobe flashers can be installed on one line. The two-part system with simple torsion installation makes it an easy aesthetic choice for many designers. The 'FTQL' version is fitted with 150˚C thermal fuse, ceramic terminals and steel fire dome that incorporate a removable cable glands plate capable of withstanding 600˚C in accordance with BS5839 part 8.

ACOUSTIC MODELING

The RCS 5FTSQL speakers support EASE, CATT and ULYSSES models for acoustical studies. That means the acoustic models can be created to simulate the sound quality and distribution prior to installation. As per BS5839 part 8, EN60849 and NFPA72 a minimum of 0.5 RaSTI is required to achieve the required intelligibility.

APPROVALS & STANDARDS

All ATEÏS loudspeakers have have undergone testing procedures to ensure that all products can operate at their rated power in compliance with IEC60268 part 5. In addition, all the fire-rated products have undergone actual fire tests to ensure compliance with BS5839 part 8.
The RCS 5FTSQL speaker package is tested in accordance with IEC60268 Part 5 for high quality intelligibility; the strobe is tested to provide more than 6,000 hours of continuous operation and complies with DDA 1995 legislation. The 'FTSQL' version complies with BS5839 part 8, and is hence fitted with ceramic terminal and thermal fuse.

ARCHITECT & ENGINEERING SPECIFICATION

This unit shall be the ATEÏS models RCS 5FTSQL equal and approved. Assembly shall comprise of a twin cone loudspeaker and shall be fitted with a 6Watt 100V for RCS 5FTSQL line factory mounted transformer.The loudspeaker baffle shall be a round two-part bezel comprising an inner metal mesh grille and chassis, with integral loudspeaker having no visible fixings. Installation shall be by pre-mounted torsion-springs and cabling via ceramic terminals and 150˚C thermal fuse. The unit for voice alarm application (FTSQL) must be supplied with a steel fire dome that incorporates a removable cable gland plate capable of withstanding 600˚C. This loudspeaker must be compliant with BS5839 part 8. The loudspeaker shall have wide angle dispersion and the cone shall be a damped, high-compliance type with a smooth extended frequency response as follows:

Model	Frequency Response	Sensitivity @ 1m/1w	Dispersion
RCS 5FTSQL	100Hz~17.5KHz	92dB	180 ˚ Cone

The speaker shall be fitted with high intensity strobe flasher comprising of a high power red LED to provide 15 candela output.

The strobe flasher must comply to DDA Act 1995 legislation and shall consume low energy of 0.144 watts rated at 24V DC only. The total RMS current shall be as low as 6mA.

The transformer shall be 100V line with 3dB power taps to be clearly marked on the assembly.The speakers can be shipped with different colors to match the aesthetic requirements based on request. All units shall be tested in accordance with IEC 60268 Part 5 (former BS6840 part 5).

ATEÏS

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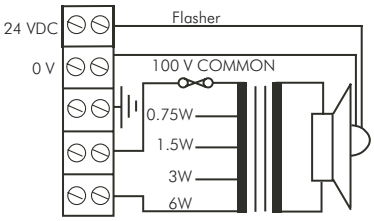
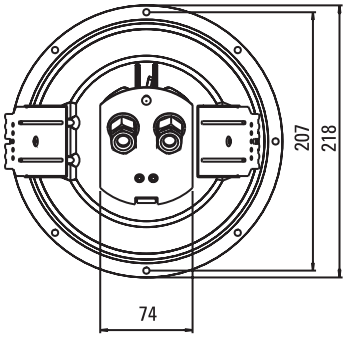
RCS 5FTSQL

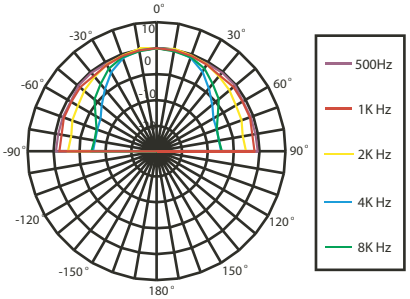
CIRCUIT DIAGRAM



RCS 5FTSQL Top View



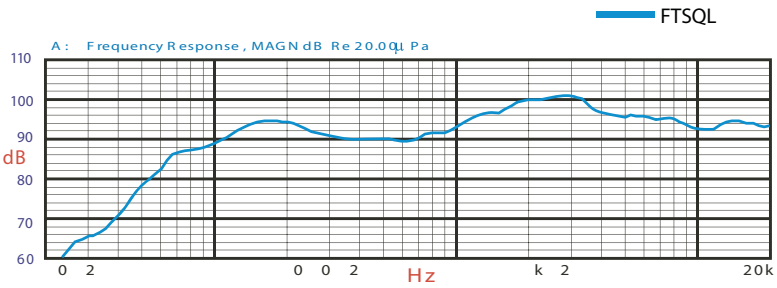
POLAR DIAGRAM (FTSQL)



Polar Pattern

3D EXPLODED VIEW

FREQUENCY RESPONSE FTSQL



Frequency Response

Technical Specification

	RCS5 FTSQL
Rated power, Watts	6
Tappings 100 volt line, Watts	6/3/1.5/0.75/0.25
Transformer Impedance, Ohms, 100V	1.67k/3.33k/6.66k/13.3k/39.9k
Tappings 70.7 volt line, Watts	3/1.5/0.75/0.375/0.125
Driver impedance, Ohms	8
Effective frequency range, Hz (BS6840)	100-17,500
S.P.L. @ 1m, 1 watt, dB, Test Signal Bandwidth 100Hz-10 kHz	92
S.P.L. @ Full power Octave Bandwidth, dB	95
Acoustic Power (dB-PWL@1 watt) 1 k/2kHz, dB	92/93
Dispersion at 1k/2kHz, Degrees	180/160
Directivity Axial Q factor, 1k/2kHz	2.3/4.6
Dimensions, diameter, mm	Ø189
Net weight, Kgs	1.0
Colour/Finish	White RAL9016
Steel	Steel
Mounting	Torsion Springs
Cut out, (mm)	Ø160

Flasher Technical Specification

Flasher	LED Technology
LED	1 High power/energy LED
Power	24VDC polarized
Lens	Special ABS, high quality / directive Lens
Light Intensity	15 Candela
Power Consumption	0.144Watt @ 24VDC
Pulse Time	As per NFPA72 standards
Current Consumption	6mA @ 24VDC Polarized

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