



AMK Commercial Series

## QT615-EFS-RVC

2x2 Self Amplified

6.5" Coaxial Loudspeaker Assembly



### Features

- \* Systems install quickly into suspended tile ceilings and are supported by the T-bar grid.
- \* Systems include a complete powered speaker with UL based plenum enclosure.
- \* Fine perforated grilles blend with ceiling tiles and provide excellent acoustic transparency.
- \* Self powered with 15 watt Class D amplifier

The **AMK QT615-EFS-RVC** powered speakers feature a 15 watt Class D digital design amplifier, with > 75% efficiency for the main speaker. The speaker includes 1 powered and 3 companion speakers for 4 speaker set installation.

The speaker combines high performance, power handling, and a very smooth response. **AMK QT Series** speaker assemblies provide quality performance, unobtrusive appearance, and easy installation in suspended ceiling applications. Systems include a choice of factory wired drivers and enclosures mounted to a fine perforated 2' X 2' grille.

The loudspeaker driver, CX602, is one of the few transducers in the commercial sound industry that produces and meets the standards of recording studio. Excellent dispersion, wide bandwidth, and a smooth frequency response make this the top choice for today's overhead commercial applications.

There are wide ranges of the application for this unit, especially in educational markets and corporate boardrooms where direct input of the signal from the processor is desired (i.e., projectors, laptops, or any line level device)

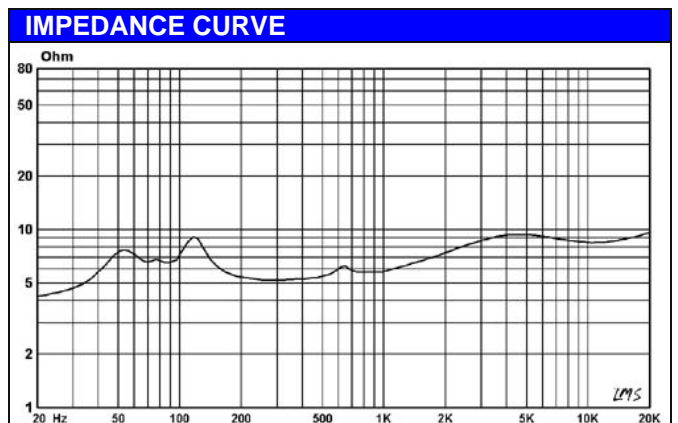
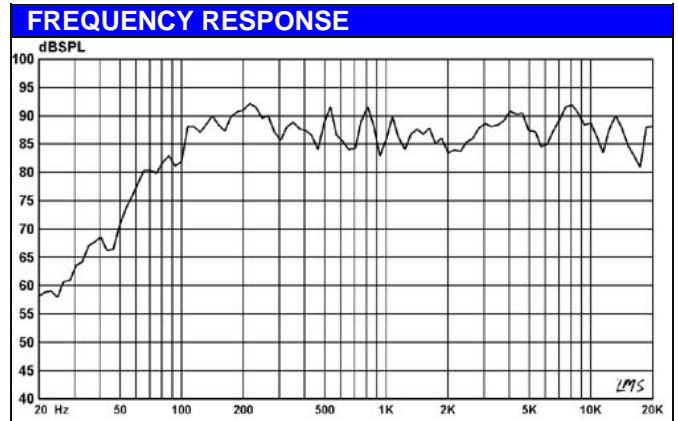
They are shipped ready to install and require no speaker cut-outs in the tile or time consuming assembly. 2' x 2' Systems are designed to replace a standard 2' x 2' tile and are supported by the T-bar grid.

Assemblies include a factory wired speaker mounted to a 2' x 2' subplate with a fine perforated grille and mounted AMK powered speaker enclosure. The backbox is offset to one side of the 2' x 2' grille allowing it to be rotated in the ceiling to install around plenum obstructions. Several options are available for the line level audio and power connections. Each is designed and manufactured to assure consistent performance with clear intelligibility and wide dispersion.

Architectural Grilles feature a fine perforated pattern for a clean unobtrusive appearance. Grilles are engineered to provide maximum free-air space for excellent speaker sound transmission while achieving virtually invisible presentation of the speaker in new or exiting tile ceilings. 2' x 2' grilles simply replace a 2' x 2' tile. All are formed from perforated steel and finished in white powder epoxy for long lasting appearance.

| Specifications            |                          |
|---------------------------|--------------------------|
| Frequency Response        | 65 Hz - 20 kHz           |
| Voice-coil diameter       | 1"                       |
| Average Beamwidth @ 2 kHz | 144 deg.                 |
| Magnet Weight             | 13 oz                    |
| Magnet Material           | Barium Ferrite           |
| Tweeter                   | 13mm Polyamide Soft Dome |
| Woofer Cone               | Polypropylene            |
| Surround Material         | Inverted Rubber          |
| Crossover Frequency       | 5.0 kHz                  |
| Depth of the Enclosure    | 7 in.                    |
| Dimension of Grille       | 2' x 2'                  |

| Amplifier Specifications  |  |
|---------------------------|--|
| Amplification             | 15 watt Class D design amplifier   |
| Amplifier Efficiency      | > 75%  |
| Total Harmonic Distortion | < 0.2%   |
| Signal to Noise Ratio     | >95dB  |
| Protection                | Protected as to short circuit to supply and ground, as well as minimum current |
| Controls                  | Input potentiometer level adjustment   |



# MODEL CONFIGURATION

3.81mm three position Phoenix type connectors for remote input level adjustment.



(Front and back side of remote input level adjustment wall plate switch.)

Seismic metal strap

3.81mm 4 position Phoenix type connector (Stereo to Mono Unbalanced)

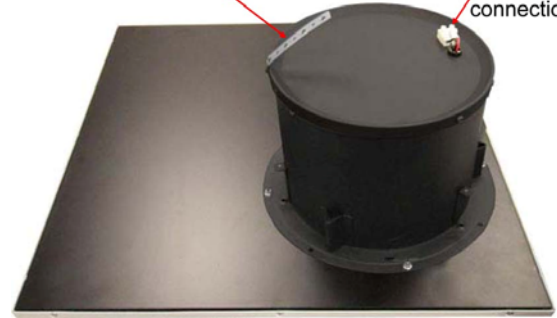
Screw terminal block connectors for companion speaker connection

3.81mm two position Phoenix type connector for 12volt 1.5A power input

The speaker comes WITHOUT a power supply. User has an option for power source.

Seismic metal strap

Screw terminal block connectors for companion speaker connection

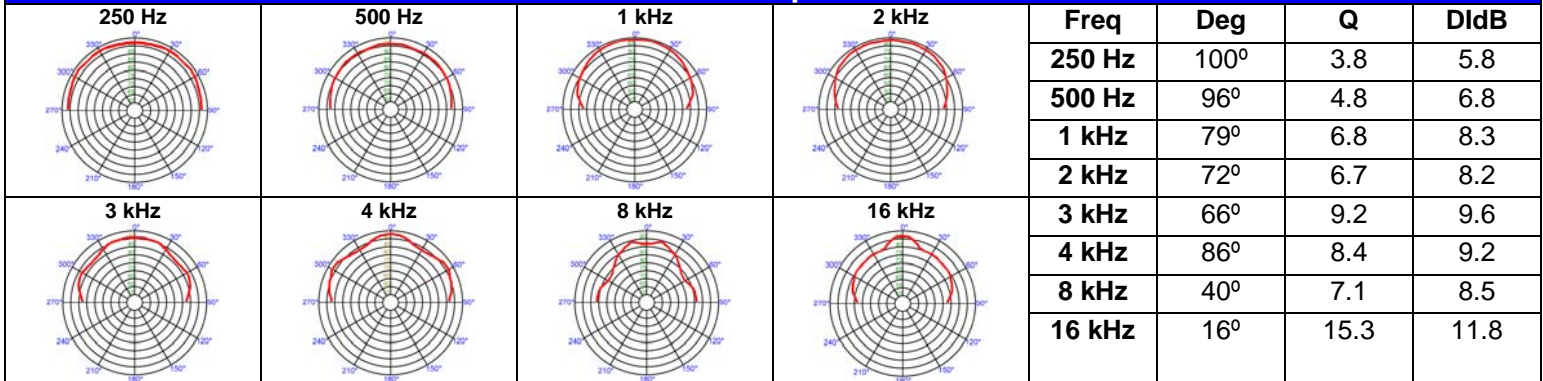


**Companion Speaker**  
(3) units are included

**Powered Speaker**

|                         |   |   |  |
|-------------------------|---|---|--|
| <b>Power Supply</b>     | 12 Volt for external higher amperage multi unit supply (User option for power source) | <b>Signal Input</b>                               | Stereo to Mono unbalanced                                  |
| <b>Power Connection</b> | 3.81mm two position Phoenix type connector  | <b>Companion speaker input/output connections</b> | Screw terminal block connectors                            |
| <b>Input Connection</b> | 3.81mm four position Phoenix type connector   | <b>Input Level Adjustment</b>                     | External with 3.81mm three position Phoenix type connector |

## Polar Responses



## Architect's & Engineer's Specifications

The self amplified speaker system for suspended tile ceilings shall be AMK QT Series **Model QT615-EFS-RVC** with grille size of 2' x 2'. The speaker shall feature a 15watt Class D design amplifier, with >75% efficiency for the speaker.

The loudspeaker unit in the system shall be of the coaxial type with an 6.5" woofer of polypropylene, an inverted rubber surround, and a 1" polyamide soft dome tweeter mounted on a post. The transducer in the loudspeaker system shall be AMK CX 601 coaxial loudspeaker. The woofer shall have a 13 oz. (369g) Barium Ferrite magnet. The two reproducer sections shall be coupled through a built-in capacitor bypass crossover.

The crossover frequency shall be at 5.0 kHz. The low frequency reproducer shall have 1" (25.4mm) voice coil and the high frequency reproducer shall have 0.51" (13mm) voice coil. The system shall have a frequency response of 65 Hz- 20 kHz (+/- 5dB). The power handling shall be 25watts at 8 ohm impedance. The sensitivity shall be 91dB at 1watt / 1meter.

The system shall be on 2' x 2' metal perforated grille and 7" deep powered speaker enclosure attached on the back of the grille.

The loudspeaker system shall be AMK Innovations model **QT 615-EFS-RVC**

**Conforms to EIA Standards: RS-276-A, RS-278-B, RS-426-A**