



# PRODUCT INFORMATION

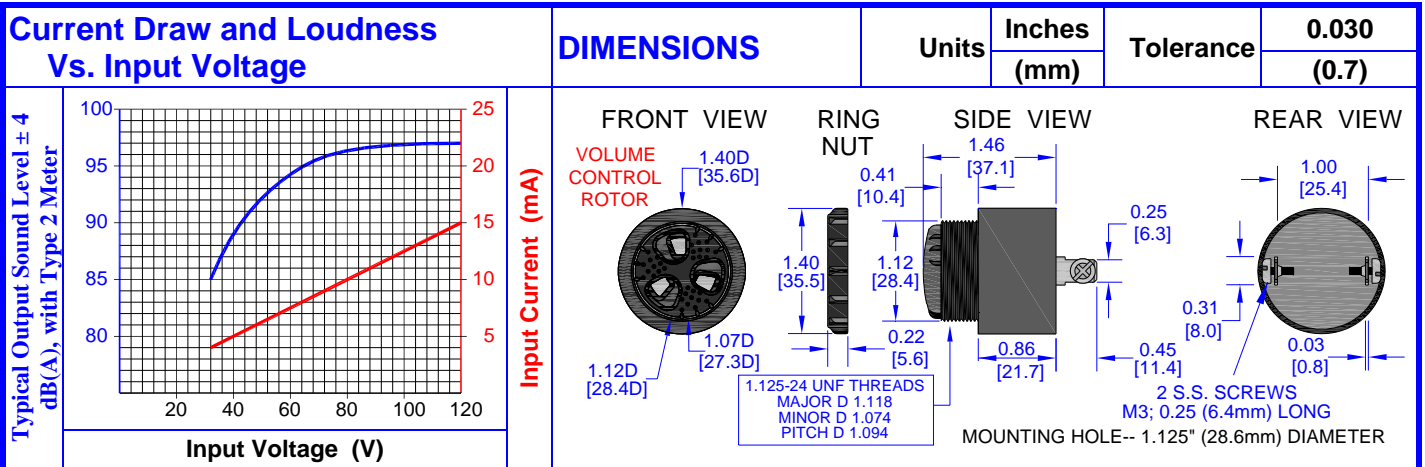
Part #: **CE-CM170AVS**

Revision: 3-2012



| DESCRIPTION  |  | FEATURES   |                           |                  |                 |
|--|--|--|---------------------------|------------------|-----------------|
| <b>Challenge Electronics CONTINUOUS Tone, MEDIUM Loud, 40 to 120 Vac/dc, A style back panel mounted case, Sound Pressure Level of 97 dB(A) at 120 Vac at 61 cm, 2,900 Hz. Output Frequency, S two 0.25" (6.4 mm) Blades with M3 0.25" (6.4 mm) long Stainless Steel Screws termination, Piezoelectric Alarm with a mechanical Volume Control, RoHS Compliant</b> |  | <ul style="list-style-type: none"> <li>◆ Reliable Solid State Piezoelectric Technology</li> <li>◆ Corrosion resistant Stainless Steel Diaphragm</li> <li>◆ Flame Retardant Plastic</li> <li>◆ Extended storage temperature</li> <li>◆ Hermetically Sealed Alarm</li> <li>◆ Water Proof, NEMA 3R, 4X, or 12 with Gasket (not supplied)</li> <li>◆ RoHS, Lead Free Compliance</li> <li>◆ ISO 9001 Certified</li> </ul> |                           |                  |                 |
| SPECIFICATIONS   |  |  |                           |                  |                 |
| Operating Mode   | Medium Loud, Continuous Tones  |  | Pulse Rate                |                  |                 |
| Operating Voltage  | 40 to 120 Vac/dc   |  | Nominal Operating Voltage | 120 Vac          |                 |
| Operating Frequency  | 2,900 ± 250 Hz.  |  |                           |                  |                 |
| Typical Loudness   | At Minimum Voltage   | 85 ± 5 dB(A), at 40 Vac, 24 inches (61 cm), 25°C   |                           |                  |                 |
|  | At Maximum Voltage   | 97 ± 3 dB(A), at 120 Vac, 24 inches (61 cm), 25°C  |                           |                  |                 |
| Volume Control   | Maximum Sound Pressure Level can be restricted up to 20 dB from maximum output. (Note, The Volume Control Rotor may reduce maximum loudness)<br>To install, simply, push the ROTOR onto the front of alarm until it snapped in place<br>To attenuate sound, while alarm is turned on, rotate the ROTOR until maximum desired sound is achieved |  |                           |                  |                 |
| Typical Operating Current  | At Minimum Voltage   | 5 mA at 40 Vac   | At Maximum Voltage        | 20 mA at 120 Vac |                 |
| Operating Temperature  | -30°C to +65°C   |  | Storage Temperature       | -40°C to +105°C  |                 |
| Surge Voltage  | 20% over maximum Operating Voltage for less than 5 minutes   |  |                           |                  |                 |
| Materials  | Alarm Case   | Plastic, "A" Case, NORYL™, PX9406 or equal, flame retardant UL 94-V0, Black  |                           |                  |                 |
|  | Diaphragm  | Stainless Steel 304  |                           |                  |                 |
|  | Encapsulation  | Two parts epoxy resin or silicone potting, Black   |                           |                  |                 |
|  | Termination  | Two, 0.25 (6.4 mm) Quick Connect Blades, 0.032 Ø (0.8 Ø mm) Wide, Brass, Electro-Tin plated With M3, 0.25" (6.4 mm) long Stainless Steel Screws.   |                           |                  |                 |
| Physical Dimensions  | Length or Diameter (L/D)   | 1.4" (35.6 mm) Ø   | Width (W)                 | Height (H)       | 1.46" (37.1 mm) |
| Approximate Weight   | 39 grams   | Removable Washing Label  | No                        | Compliance       | RoHS            |
| Available Options  |  |  |                           |                  |                 |
| RELIABILITY  |  |  |                           |                  |                 |
| Thermal Operating Temperature Test   | 240 hours continuous operation at Rated Power, at Maximum Rated Operating Temperature *  |  |                           |                  |                 |
|  | 240 hours continuous operation at Rated Power, at Minimum Rated Operating Temperature *  |  |                           |                  |                 |
| Thermal Storage Temperature Test   | 96 hours storage at Maximum Rated Storage Temperatures *   |  |                           |                  |                 |
|  | 96 hours storage at Minimum Rated Storage Temperatures *   |  |                           |                  |                 |
| Thermal Shock Test   | 5 cycles of Minimum and Maximum Operating Temperature<br>Each cycle shall be set per diagram below and is 3 hours long *   |  |                           |                  |                 |
| Humidity Test  | 120 Hours at +60°C±2°C, 90-95% RH *  |  |                           |                  |                 |
| Salt Spray   | Withstand exposure to salt spray per ASTM B117 for a period of 300 hours *   |  |                           |                  |                 |
| Water & Dust Exposure  | Withstands water submergence and dust exposure per IP-68 *   |  |                           |                  |                 |
| Vibration Test   | 2 Hours at 1.5 mm with 10 to 55 Hz. of vibration frequency to each of 3 perpendicular direction *  |  |                           |                  |                 |
| Drop Test  | Dropped naturally from 1 meter height onto the surface of 10mm wooden board, 2 directions upper and side of the part are applied *   |  |                           |                  |                 |
| Termination Strength   | Maximum of 15 pounds (6.8 Kg) load pull test and of 4 lb. per inch driving torque on screw   |  |                           |                  |                 |
| * Reliability Test Performance   | Parts should conform to original performance within ±3dB, after 3 hours of recovery and dry period   |  |                           |                  |                 |
| Life Test  | Intermittent   | 1,000 hours of a 1 minute on 4 minutes off cycle at room temperature and Maximum Rated Voltage   |                           |                  |                 |
|  | Continuous   | 250 hours continuous operation at Maximum Rated Voltage and maximum Operating Temperatures   |                           |                  |                 |
| Warranty   | For a period of one (1) year from date of shipping under normal operations conditions<br>This warranty does not apply to products damaged through misuse, abuse, improper installation, alteration, rework, or attempt to repair   |  |                           |                  |                 |

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**PACKAGING**

