| MAILORY/ Mallory Sonalert Products,Inc. ${ }^{\text {Part\#i }}$ | ZA120LAFP1 |  |
| :---: | :---: | :---: |
| Sales Outline Drawing | Revisio: | C |

Specifications:

| Sound Level Category | Loud |
| :--- | :---: |
| Mode of Operation | Fast Pulse @ 10 PPS |
| Voltage Rating | 48 to $120 \mathrm{VAC} / \mathrm{DC}$ |
| Frequency | $3300 \pm 500 \mathrm{~Hz}$ |
| Loudness @ 2 FT | 85 to $95 \mathrm{~dB}(\mathrm{~A}) \mathrm{Typ}$. |
| Current Draw | 40 mA MAX |
| Housing Material | $6 / 6$ Nylon, Color: Black |
| Storage Temperature | $-40^{\circ}$ to +55 ${ }^{\circ} \mathrm{C}$ |
| Operating Temperature | $-30^{\circ}$ to +50 C |
| Panel Mounting | Recommended hole size is 22.5 mm. Thread front will fit standard 22.5mm hole. |
| Knurled Nut | Used to attach part to panel. The max recommended torque is 10 in-lbs. |
| Weight (Typical) | 28 g |
| NEMA 3R,4X, \& 12 | Approved with use of included gasket. |
| cUL Recognition | Supply voltage shall employ Transient Voltage Surge Suppression. |
| Options | Please contact factory. |
| Dimensions: Inches (mm) |  |



## Mounting Instructions:



## Panel Hole Cut Out



- Panel Hole Size: 22.5 mm with Keyway
- Maximum Panel Thickness: 12.7 mm (0.5 in)
- Maximum Nut Torque: 10 in-Ibs (1.13 n-m)


## Electrical Connection:



- Wire Strip Length: 6.5 mm ( 0.256 in )
- Wire Size: 30 to 16 AWG
- Maximum Screw Torque: 2 in-Ibs ( $0.226 \mathrm{n}-\mathrm{m}$ )


## Certifications:

- RoHS; cUL; NEMA 3R/4X/12; IP-66; CSA 22.2 No. 94

O Included gasket must be used to maintain NEMA 3R/4X/12 ratings.

## cUL Yellow Card:

# UL Online Certifications Directory 

UCST8.S1290
Audible Signal Appliances, General Signal Certified for Canada - Component

Audible-signal Appliances, General Signal Certified for Canada - Component<br>MALLORY SONALERT PRODUCTS INC<br>4411 S HIGH SCHOOL RD<br>INDIANAPOLIS, IN 46241 USA

Audible tone generators, ZA aaa bcddd (f9)
(f9) - Must be used with neoprene gasket type 4216-S to maintain enclosure NEMA Type Ratings 3R, 4X and 12.
aaa - Indicates voltage rating. May be $016,028,048$ or 120 .
b-Indicates sound level. May be L, M or S.
c - Indicates voltage type. May be A or D.
ddd - Indicates Sound Function. May be any combination of letters A through Z and/or numbers 0 through 9.
Marking: Company name or tradename "Mallory", "Sonalert" , model designation and Recognized Component Mark for
Canada, C
Last Updated on 2012-02-03
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## Sound Level vs Distance:

| Various <br> Measurement Distances | ZA Series Sound Level Category |  |  |
| :---: | :---: | :---: | :---: |
|  | Loud $85-95 \mathrm{~dB} @ 2 \mathrm{ft}$ | Medium <br> 75-85dB @ 2 ft | $\begin{gathered} \text { Soft } \\ 65-85 \mathrm{~dB} @ 2 \mathrm{ft} \end{gathered}$ |
| 10 cm (4 in) | 100 to 110 dB | 90 to 100 dB | 80 to 90 dB |
| 30 cm (1 ft) | 91 to 101 dB | 81 to 91 dB | 71 to 81 dB |
| 1 Meter | 82 to 92 dB | 72 to 82 dB | 62 to 72 dB |
| 10 ft | 71 to 81 dB | 61 to 71 dB | 51 to 61 dB |

The ZA Series of 22 mm alarms measures sound level at 2 feet. Since sound level drops over distance, the above chart lists the equivalent sound levels at various distances.

For example, if the Mallory part is in the LOUD sound level category, it has a sound level of 85 to 95 dB at 2 feet. At 10 cm , the sound level would measure 100 to 110 dB .

## Packaging:

- Standard orders are bulk packed.
- For individual box packaging, add one of the following part numbers to order:

| Part Number | Description |
| :--- | :--- |
| BOX | Individual box- no label |
| BOXLABEL | Individual box with label |

## Accessories:

| Part Number | Description | Notes |
| :--- | :--- | :--- |
| ACC06 | Replacement NEMA Gasket | Gasket comes with part |
| BOX | Individual box- no label | Must be ordered with part |
| BOXLABEL | Individual box with label | Must be ordered with part |
| KNT1-01 | Replacement Nut | Nut comes with part |

