

AV1-C1D2E

Hazardous Duty Alarm Station Class I, Division 2



Description

Model AV1-C1D2E audio visual alarm stations are designed for installation and use in heavy industrial environments. The complete unit is certified for Class I Div 2 hazardous area use by multiple global approval agencies including UL, ATEX and IECEx.

The alarm station consists of a beacon and alarm horn. The warning light comes in field interchangeable dome colors of amber, blue, clear, green, red, yellow and magenta. The beacon can be configured as a steady light for status indication use or alternatively with one of five flashing modes. Available with a choice of LED or 5 or 10 Joule Xenon lights. The high output alarm horn features 64 tones and DC voltage versions feature remotely selectable stages enabling multiple warnings to be signaled from one device.

The hazardous location combination AV1-C1D2E alarm horn sounder & beacon/status warning light is UL/ cULs/ULC approved for Class I Div 2, Class II Div 2, Class I Zone 2/22 as well as IECEx and ATEX certified for Zone 2 and 22 applications.

The 24 VDC version is UL and cUL approved to UL464 & UL1638 for private mode fire alarm use.



Specification

Alarm Horn Sounder

Maximum Output	116 dB(A) @ 1m [107 dB(A) @ 10ft/3m]
Nominal Output	112 dB(A) @ 1m ±3 dB - Tone 2 [103 dB(A)
	@ 10ft/3m]
No. of Tones	64 (UKOOA / PFEER Compliant)
No. of Stages	4
Volume Control	Adjustable - 12 dB(A) [Tone 2]
Effective Range	125m/410ft@1KHz
Synchronization	All alarm tones synchronize

General

Voltages DC:	24V dc, 48V dc
In Rush	2.3A for <9ms
Voltages AC:	115Vac, 230Vac
Ingress Protection	IP Rating per EN60529:IP66
	Type rating per UL50E/NEMA250:4/4/ 3R/13
Enclosure Material	Marine grade LM6 aluminum alloy
Enclosure Color	Red (RAL3000), Grey (RAL7038)
Lens Material	Borosilicate glass dome with PC prismatic
	lens cover
Guard	Stainless Steel dome guard as standard
Cable Entries	2 x 1/2" NPT
Stopping Plug	Stopping plug included Optional brass, nickel plated or stainless steel
Ground/Earth Stuc	IM5
Terminals	0.5 - 2.5 mm ² (20-14 AWG)
Line Monitoring	Blocking diode included EOL can be factory fitted
Operating Temp.	-40° to 50°C [-40° to 122°F]
Storage Temp.	-40° to 70°C [-40° to 158°F]
Relative Humidity	95%
Weight	DC: 4.00kg / 8.82lbs AC: 4.50kg / 9.92lbs

LED Beacon/Light

Source	Array of 4 x High Power Cree [®] LED's
Effective Intensity	73.4 cd UL1638 Private mode fire
Effective Intensity	180 cd UL1638 General signaling
Peak Intensity	300,000 cd
Effective Intensity	87 cd High power steady
Lens Colors	Amber, Blue, Clear, Green, Magenta, Red & Yellow
Synchronization	Synchronized 1Hz, 1.5Hz and 2Hz flash rates

Xenon Strobe Beacon/Light

Energy	5 Joules (5Ws)
Flash Rate	1Hz (60 fpm)
Peak Candela	500,000cd - calculated from energy (J)
Effective Intensity	250 cd - calculated from energy (J)
Peak Candela	33,410 cd* - measured ref. to I.E.S.
Effective Intensity	94.78 cd* - measured ref. to I.E.S.
Lens Colors	Amber, Blue, Clear, Green, Magenta, Red & Yellow
Synchronization	Synchronized 1Hz flash rate (DC voltage versions)

Xenon Strobe Beacon/Light

Energy	10 Joules (510Ws)
Flash Rate	1Hz (60 fpm)
Peak Candela	1,000,000 cd - calculated from energy (J)
Effective Intensity	500 cd - calculated from energy (J)
Peak Candela	101,784 cd* - measured ref. to I.E.S.
Effective Intensity	288.8 cd* - measured ref. to I.E.S.
Lens Colors	Amber, Blue, Clear, Green, Magenta, Red & Yellow
Synchronization	Synchronized 1Hz flash rate (DC voltage versions)

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