# Signals for Life

e2s
warning signals

**E2S is the world's leading independent warning signals manufacturer with over 30 years of engineering expertise. Our worldwide approved products combine the latest technology with leading industrial design and build quality to deliver signals you can depend on.**

Working together with system integrators, engineers and end users we continuously innovate to develop the most comprehensive range of signaling products with substantial benefits such as ease of interface, quick installation, flexible customization and reliable performance. This is why our clients around the world trust E2S to protect their people and promote safety in their processes.

From our London UK based manufacturing facilities and our Houston, USA configuration and distribution centre, the E2S global network of distributors and partners, sustained by our efficient operations and logistics, provide fast product delivery and local support.

**The comprehensive E2S range of notification signals and initiation devices for fire alarm and mass notification use are approved for NEC and CEC Class Div and Zone applications, tested to UL38, UL1480, UL464, UL1638 and UL1971. Providing the ultimate in life safety solutions for applications across marine, industrial, hazardous location and explosion proof environments.**

Find out more at e2s.com

**General signaling applications**
The E2S ranges of products for fire alarm use are complimented by our extensive offering of audible and visual signals and initiation devices for general signaling applications, globally approved across all environments.

**Web product references**
To access full product data please use product web reference as per following example: www.e2s.com/1-21-222

# Explosion Proof Class I/II Division 1, Zone 1, 20, 21

# Hazardous Location Class I/II Division 2, Zone 2, 22

**The D1x range of audible and visual signals and pull stations feature robust enclosures employing corrosion proof marine grade aluminum and borosilicate glass, ensuring suitability for the harshest of environments requiring explosion or flameproof equipment.**

Certified for ambient temperatures from -67 F to +185 F and approved to UL, cUL, ULC for Class I Division 1, Zone 1, 20 and IECEx, ATEX for Zone 1, 21, the D1x range can be specified irrespective of the installation location. The D1xS alarm horn sounders employ D class amplifier technology to create sound level outputs of up to 127db(A). Select models can be combined with Xenon strobe lights to create the D1xC audio-visual signal.

A threaded enclosure joint enables quick installation and simplifies maintenance inspection whilst the innovative design arrangement maximizes wiring space. The ratchet adjustable 316 grade stainless steel mounting bracket allows the D1xS and D1xC to be positioned for maximum effectiveness.

The D1xB2 Xenon strobe beacon signals provide a range of light outputs up to 1,250 Candela and are available for both private and public mode fire applications. Lens color is generated via a UV stable PC filter that is field changeable, a 316 grade stainless steel lens guard is supplied as standard. All D1x signals feature low current consumption and E2S auto-synchronization technology.

**The D2x range also features marine grade aluminum enclosures, providing the a compact yet effective solution for hazardous location signaling in a series of compact enclosures.**

The alarm horn sounders, strobe and LED lights and combination audio-visual notification signals are globally certified by UL to Class I/II Division 2 and Class I Zone 2 & 22 as well as IECEx & ATEX Zone 2 & 22.

The D2xS1 alarm horn sounder features 64 alarm tones and 4 remotely activated stages/channels. The D2xB1LD3 and D2xB1LD2 LED provide the brightest solutions for auto-synchronized private and public model applications in hazardous location environments whilst the D2xB1 Xenon strobe lights also feature E2S auto-synchronization and in-rush limited circuitry.

For complete audio-visual signaling for your hazardous location the D2xC family of combined alarm horn sounders and beacons provide all the features offered as individual signals in an integrated and compact enclosure that reduces cabling and installation time and cost.

# Hazardous Location Class I/II Division 2, Zone 1, 2, 21, 22

# Marine, industrial and harsh environments

**The GNExCP7-PT Hazardous Location Manual Push Button and GNExCP7-BG Break Glass Fire Alarm Boxes are UL38 fire alarm initiators in robust, corrosion proof GRP (glass reinforced polyester) enclosures.**

The push button mechanism, manufactured from stainless steel, is protected from accidental activation by a latching lift flap. Globally approved by UL to NEC, CEC, ATEX and IECEx codes the SIL2 compliant GNExCP7 family of manual alarm call points can be installed in all Class I/II Div 2 hazardous location and Class I Zone 1 and Zone 21 applications..

**The AlertAlarm range of alarm horn sounders are the next generation of audible signals for fire alarm notification in industrial and harsh environments.**

The robust thermoplastic or aluminum enclosures are rated Type 4/4X and capable of alarm tone sound output of up to 124dB(A). The compact Xenon strobe and LED multifunction beacons can be installed as standalone visual signals or combined with an audible alarm device.

UL, cUL, ULC and DNV approved for industrial or marine fire applications, the range is also MED and CPR compliant (EN54-3 & EN54-23). All signals feature low current consumption and E2S auto-synchronization technology.

The ML15F 15W and ML25F 25W horns are rated up to 121dB with an integrated 70V line transformer. They feature a lightweight fire retardant thermoplastic enclosure rated to Type 4/4X, IP66/67. The 316 grade stainless steel mounting bracket permits optimum orientation during installation.

| Model | NEC / CEC Class I/II Division 1 Class I Zone 1 & 21 | NEC / CEC Class I/II Division 2 Class I Zone 2 & 22 | Ordinary Locations | CSFM | UL1971 Effective cd | UL1638 Effective cd | I.E.S Effective cd | Peak cd | Flash energy Joules | Current: mA @ 24Vdc | Temperature range: °F | UL50E/NEMA 250 EN/IEC 60529 | Web link reference |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D1xB2XH2 | ● | | | ● | 190.6 | | 1,250.66 | 2,100,000 | 21 | 1165 | - 67 +176 | 4/4X/3R/13 IP66/67 | 1-21-201 |
| D1xB2XH1 | ● | | | ● | 86.37 | | 645.21 | 1,000,000 | 10 | 635 | - 67 +176 | 4/4X/3R/13 IP66/67 | 1-21-200 |
| D1xB2X21 | ● | | | ● | | 215.85 | 1,250.66 | 2,100,000 | 21 | 1130 | - 67 +176 | 4/4X/3R/13 IP66/67 | 1-21-205 |
| D1xB2X15 | ● | | | ● | | 98.61 | 731.71 | 1,500,000 | 15 | 853 | - 67 +176 | 4/4X/3R/13 IP66/67 | 1-21-204 |
| D1xB2X10 | ● | | | ● | | 69.81 | 645.21 | 1,000,000 | 10 | 605 | - 67 +176 | 4/4X/3R/13 IP66/67 | 1-21-203 |
| D1xB2X05 | ● | | | ● | | 20.44 | 156.65 | 500,000 | 5 | 295 | - 67 +176 | 4/4X/3R/13 IP66/67 | 1-21-202 |
| D2xB1LD3 | | ● | | ● | 82.1 | 112.5 | 252.00 | | LED | 153 | - 40 +122 | 4/4X/3R/13 IP66 | 1-31-061 |
| D2xB1XH2 | | ● | | ● | 70.29 | | 288.80 | 1,000,000 | 10 | 609 | - 40 +122 | 4/4X/3R/13 IP66 | 1-31-080 |
| D2xB1XH1 | | ● | | ● | 18.18 | | 94.78 | 500,000 | 5 | 296 | - 40 +122 | 4/4X/3R/13 IP66 | 1-31-070 |
| D2xB1LD2 | | ● | | ● | | 73.40 | 180.00 | | LED | 99.5 | - 40 +122 | 4/4X/3R/13 IP66 | 1-31-065 |
| D2xB1X10 | | ● | | ● | | 53.40 | 288.88 | 1,000,000 | 10 | 609 | - 40 +122 | 4/4X/3R/13 IP66 | 1-31-050 |
| D2xB1X05 | | ● | | ● | | 17.40 | 94.78 | 500,000 | 5 | 296 | - 40 +122 | 4/4X/3R/13 IP66 | 1-31-040 |
| L101X | | | ● | ● | | 86.50 | 200.00 | 500,000 | 5 | 250 | - 40 +151 | 4/4X/3R/13 IP66/67 | 2-13-010 |
| L101H | | | ● | ● | | 11.65 | 113.00 | | LED | 87 | - 40 +151 | 4/4X/3R/13 IP66/67 | 2-14-010 |

| Model | NEC / CEC Class I/II Division 1 Class I Zone 1 & 21 | NEC / CEC Class I/II Division 2 Class I Zone 2 & 22 | Ordinary Locations | USCG | CSFM | UL464 dB(A) @ 1m/10' | Current mA @ 24Vdc | Temperature range: °F | UL50E/NEMA 250 EN/IEC 60529 | Web link reference |
|---|---|---|---|---|---|---|---|---|---|---|
| D1xS1F | ● | | | | ● | 115 /106 | 185 | - 67 +185 | 4/4X/3R/13 IP66/67 | 1-22-140 |
| D1xS1R | ● | | | | ● | 110 /101 | 185 | - 67 +185 | 4/4X/3R/13 IP66/67 | 1-22-145 |
| D1xS2F | ● | | | | ● | 120 /111 123 /114 | 324 740 | - 67 +185 | 4/4X/3R/13 IP66/67 | 1-22-150 |
| D1xS2H | ● | | | | ● | 125 /118 128 /119 | 324 740 | - 67 +185 | 4/4X/3R/13 IP66/67 | 1-22-155 |
| D2xS1 | | ● | | | ● | 116 /107 | 313 | - 67 +185 | 4/4X/3R/13 IP66/67 | 1-32-025 |
| D2xS2F | | ● | | | ● | 120 /111 123 /114 | 324 740 | - 67 +185 | 4/4X/3R/13 IP66/67 | 1-32-027 |
| D2xS2H | | ● | | | | 126/117 129 /120 | 324 740 | - 67 +185 | 4/4X/3R/13 IP66/67 | 1-32-029 |
| A121 | | | ● | ● | ● | 121/112 124 /115 | 430 930 | - 40 +151 | 4/4X/3R/13 IP66/67 | 2-21-090 |
| A112N | | | ● | ● | ● | 117/108 120 /111 | 224 391 | - 40 +151 | 4/4X/3R/13 IP66/67 | 2-21-080 |
| A105N | | | ● | ● | ● | 113/104 | 33.5 | - 40 +151 | 4/4X/3R/13 IP66/67 | 2-21-060 |
| A100 | | | ● | ● | ● | 110/101 | 33.5 | - 40 +151 | 4/4X/3R/13 IP66/67 | 2-21-040 |

| Model | NEC / CEC Class I/II Division 1 Class I Zone 1 & 21 | CSFM | UL464 dB(A) @ 1m/10' | UL1638 Effective cd | I.E.S Effective cd | Flash energy Joules | Combined mA @ 24Vdc | Temperature range: °F | UL50E/NEMA 250 EN/IEC 60529 | Web link reference |
|---|---|---|---|---|---|---|---|---|---|---|
| D1xC1X05R | ● | ● | 110 /101 | 12.00 | 143.00 | 5 | 508 | - 67 +185 | 4/4X/3R/13 IP66/67 | 1-23-075 |
| D1xC1X05F | ● | ● | 115 /106 | 12.00 | 143.00 | 5 | 508 | - 67 +185 | 4/4X/3R/13 IP66/67 | 1-23-055 |
| D1xC1X10R | ● | ● | 110 /101 | 20.00 | 260.00 | 10 | 858 | - 67 +185 | 4/4X/3R/13 IP66/67 | 1-23-065 |
| D1xC1X10F | ● | ● | 115 /106 | 20.00 | 260.00 | 10 | 858 | - 67 +185 | 4/4X/3R/13 IP66/67 | 1-23-060 |
| D1xC2X05R | ● | ● | 112 /103 114 /105 | 12.00 | 143.00 | 5 | 647 1063 | - 67 +185 | 4/4X/3R/13 IP66/67 | 1-23-075 |
| D1xC2X05F | ● | ● | 120 /111 123 /114 | 12.00 | 143.00 | 5 | 647 1063 | - 67 +185 | 4/4X/3R/13 IP66/67 | 1-23-070 |
| D1xC2X10R | ● | ● | 112 /103 114 /105 | 20.00 | 260.00 | 10 | 997 1413 | - 67 +185 | 4/4X/3R/13 IP66/67 | 1-23-085 |
| D1xC2X10F | ● | ● | 120 /111 123 /114 | 20.00 | 260.00 | 10 | 997 1413 | - 67 +185 | 4/4X/3R/13 IP66/67 | 1-23-080 |

| Model | NEC / CEC Class I/II Division 1 Class I Zone 1 & 21 | CSFM | UL464 dB(A) @ 1m/10' | UL1971 Effective cd | UL1638 Effective cd | I.E.S Effective cd | Flash energy Joules | Combined mA @ 24Vdc | Temperature range: °F | UL50E/NEMA 250 EN/IEC 60529 | Web link reference |
|---|---|---|---|---|---|---|---|---|---|---|---|
| D2xC2LD3 | ● | ● | 116 /107 | 79.30 | 107.50 | 252.00 | LED | 403 | - 40 +122 | 4/4X/3R/13 IP66/67 | 1-34-041 |
| D2xC2XH2 | ● | ● | 116 /107 | 63.73 | | 288.80 | 10 | 759 | - 40 +122 | 4/4X/3R/13 IP66/67 | 1-34-060 |
| D2xC2XH1 | ● | ● | 116 /107 | 18.18 | | 94.78 | 5 | 405 | - 40 +122 | 4/4X/3R/13 IP66/67 | 1-34-050 |
| D2xC2LD2 | ● | ● | 116 /107 | | 73.40 | 180.00 | LED | 413 | - 40 +122 | 4/4X/3R/13 IP66/67 | 1-34-045 |
| D2xC2X10 | ● | ● | 116 /107 | | 53.40 | 288.80 | 10 | 922 | - 40 +122 | 4/4X/3R/13 IP66/67 | 1-34-080 |
| D2xC2X05 | ● | ● | 116 /107 | | 17.40 | 94.78 | 5 | 609 | - 40 +122 | 4/4X/3R/13 IP66/67 | 1-34-070 |
| D2xC1X10 | ● | ● | 116 /107 | | 64.20 | 288.80 | 10 | 876 | - 40 +122 | 4/4X/3R/13 IP66/67 | 1-34-030 |
| D2xC1X05 | ● | ● | 116 /107 | | 15.60 | 94.78 | 5 | 513 | - 40 +122 | 4/4X/3R/13 IP66/67 | 1-34-020 |

| Model | Ordinary Locations | USCG | CSFM | UL464 dB(A) @ 1m/10' | UL1638 Effective cd | I.E.S Effective cd | Flash energy Joules | Combined mA @ 24Vdc | Temperature range: °F | UL50E/NEMA 250 EN/IEC 60529 | Web link reference |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AL121X | ● | ● | ● | 121 /112 124 /115 | 86.50 | 200.00 | 5 | 680 1180 | - 40 +151 | 4/4X/3R/13 IP66/67 | 2-31-230 |
| AL121H | ● | | ● | 121 /112 124 /115 | 11.65 | 113.00 | LED | 517 1017 | - 40 +151 | 4/4X/3R/13 IP66/67 | 2-31-240 |
| AL112NX | ● | ● | ● | 117 /108 120 /111 | 86.50 | 200.00 | 5 | 475 680 | - 40 +151 | 4/4X/3R/13 IP66/67 | 2-31-180 |
| AL112NH | ● | | ● | 117 /108 120 /111 | 11.65 | 113.00 | LED | 475 680 | - 40 +151 | 4/4X/3R/13 IP66/67 | 2-31-190 |
| AL105NX | ● | ● | ● | 113 /104 | 86.50 | 200.00 | 5 | 283.5 | - 40 +151 | 4/4X/3R/13 IP66/67 | 2-31-120 |
| AL105NH | ● | | ● | 113 /104 | 11.65 | 113.00 | LED | 120.5 | - 40 +151 | 4/4X/3R/13 IP66/67 | 2-31-130 |
| AL100X | ● | | ● | 110 /101 | 86.50 | 200.00 | 5 | 283.5 | - 40 +151 | 4/4X/3R/13 IP66/67 | 2-31-090 |
| AL100H | ● | | ● | 110 /101 | 11.65 | 113.00 | LED | 120.5 | - 40 +151 | 4/4X/3R/13 IP66/67 | 2-31-100 |

| Model | Type | NEC / CEC Class I/II Division 1 Class I Zone 1 & 21 | NEC / CEC Class I/II Division 2 Class I Zone 2 & 22 | CSFM | UL38 CAN/ULC-S528 | UL60947 | UL521 ULC-S530 | Marine Grade Aluminium | Stainless Steel 316L | Glass Reinforced Polyester GRP | Temperature range: °F | UL50E/NEMA 250 EN/IEC 60529 | Web link reference |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D1xCP1-PS | Pull Station | ● | | ● | ● | | | | ● | | - 40 +150 | 4X IP66 | 1-24-110 |
| GNExCP7-PT | Tool Reset Push Button | | ● | ● | ● | ● | | | | ● | - 67 +158 | 4/4X/3R/13 IP66/67/68 | 1-24-160 |
| GNExCP7-BG | Break Glass MCP | | ● | ● | ● | | | | | ● | - 67 +158 | 4/4X/3R/13 IP66/67/68 | 1-24-150 |
| D1xH1 | Heat Detector | ● | | | | | ● | ● | | | - 67 +176 | 4/4X/3R/13 IP66/67 | 1-27-010 |
| GNExH1 | Heat Detector | | ● | | | | ● | | | ● | - 67 +158 | 4/4X/3R/13 IP66/67 | 1-27-020 |
| STExH1 | Heat Detector | | ● | | | | ● | | ● | | - 67 +158 | 4/4X/3R/13 IP66/67 | 1-27-030 |
| D2xH1 | Heat Detector | | ● | | | | ● | ● | | | - 40 +122 | 4/4X/3R/13 IP66/67 | 1-27-010 |

Speakers

| Model | Type | NEC / CEC Class I/II Division 1 Class I Zone 1 & 21 | CSFM NEC / CEC Class I/II Division 2 Class I Zone 2 & 22 | Ordinary Locations | CSFM | Pink: dB(A)/10 | UL1480 dB(A) @ 1m/10' | Maximum: dB(A) @ 1m/10' | Temperature range: °F | UL50E/NEMA 250 EN/IEC 60529 | Web link reference |
|---|---|---|---|---|---|---|---|---|---|---|---|
| D1xL1F | 15W speaker 25/70V | ● | | | ● | 101 / 92 | 113 /104 | 117 /108 | - 67 +185 | 4/4X/3R/13 IP66/67 | 1-22-160 |
| D1xL2F | 25W speaker 25/70V | ● | | | ● | 104 / 95 | 119 /110 | 123 /114 | - 67 +185 | 4/4X/3R/13 IP66/67 | 1-22-170 |
| D1xL2H | 25W speaker 25/70V | ● | | | ● | 106 / 97 | 120 /111 | 126 / 117 | - 67 +185 | 4/4X/3R/13 IP66/67 | 1-22-175 |
| D2xL1F | 15W speaker 25/70V | | ● | | | 101 / 92 | 113 /104 | 120 / 111 | - 67 +185 | 4/4X/3R/13 IP66/67 | 1-32-050 |
| D2xL2F | 25W speaker 25/70V | | ● | | | 104 / 95 | 119 /110 | 124 /115 | - 67 +185 | 4/4X/3R/13 IP66/67 | 1-32-052 |
| D2xL2H | 25W speaker 25/70V | | ● | | | 106 / 97 | 120 /111 | 129 /120 | - 67 +185 | 4/4X/3R/13 IP66/67 | 1-32-054 |
| ML15F | 15W speaker 25/70V | | | ● | | 101 / 92 | 113 /104 | 120 /111 | - 40 +151 | 4/4X/3R/13 IP66/67 | 2-24-010 |
| ML25F | 25W speaker 25/70V | | | ● | | 104 / 95 | 119 /110 | 124 /115 | - 40 +151 | 4/4X/3R/13 IP66/67 | 2-24-020 |
| ML25H | 25W speaker 25 /70W | | | ● | | 106/ 97 | 120 /111 | 129 /120 | - 40 +151 | 4/4X/3R/13 IP66/67 | 2-24-030 |

# 10 YEAR WARRANTY

## e2S warning signals