

TrueAlert LED Addressable Notification Appliances

Visible Notification Appliances, Wall Mount Multi-Candela Strobes, Model Series 59VO

Features

Individually addressed and controlled multi-candela TrueAlert ES visible only notification appliances

- Multi candela LED strobe available in low (15, 30, and 75 cd) and high (110, 135 and 185 cd) range candela models
- Small compact design and low current draw due to energy efficient strobe LEDs
- Advanced addressable notification controlled by IDNAC SLCs providing regulated 29 VDC allows strobes to operate with lower current even under battery backup
- Wiring supervision to each appliance allowing "T tapped" connections for Class B circuits to simplify wiring (Class A circuits require in/out wiring)
- Self-Test Mode allows on-board sensors to detect the LED strobe output and then report their status to the control panel
- TrueAlert Device Reports at the control panel detailing appliance point ID, custom label, type, and candela setting
- $\boldsymbol{\cdot}$ Magnet Test diagnostics to assist checkout and testing of appliances and wiring
- Compatibility with ADA requirements
- Strobe operation is listed to UL Standard 1971 and ULC Standard S526
- Synchronized LED strobe operation on the same IDNAC channel

LED Indicator and Magnet Test

- Indicator LED indicates magnet test acknowledgment, 3-digit IDNAC address, and candela rating
- Indicator LED can be configured to blink each polling cycle to indicate appliance supervision
- When the controller is in diagnostic mode, the magnet test pulses the LED to indicate appliance address and can also briefly flash the strobe

Mechanical design

- Rugged, high impact, flame retardant thermoplastic housing in red and white colors
- Various covers options are available red with white letters or white with red letters
- Available with English/Arabic FIRE lettering
- Covers can be easily removed without disturbing the connected housing and avoiding trouble conditions
- In/out wiring terminals for 18 AWG to 12 AWG wiring
- Mounts to single gang US electrical boxes
- · Optional mounting adapter plate to adapt to European electrical boxes

Description

TrueAlert ES LED Addressable Strobes

TrueAlert ES LED Addressable Strobes are individually addressed visible notification appliances that receive power, supervision, and control signals from an Autocall fire alarm control unit providing IDNAC Signaling Line Circuits. LED and xenon tube strobes require operation on separate IDNAC channels.

Strobe Application Reference

Proper selection of visible notification is dependent on occupancy, location, local codes, and proper applications of: the National Fire Alarm Code (NFPA 72), ANSI A117.1; the appropriate model building code: BOCA, ICBO, or SBCCI; and the application guidelines of the Americans with Disabilities Act (ADA).



Figure 1: TrueAlert ES A59VO Series LED Addressable Strobes are Available in Red with White Lettering and White with Red Lettering

TrueAlert ES Operation Increased circuit integrity

TrueAlert ES Visual Only LED addressable appliances on IDNAC SLCs provide visible notification using a single two-wire circuit that also confirms connection to the individual notification appliance's electronic circuit. This provides supervision that extends beyond the appliance wiring connections.

Reduced current usage on IDNAC SLCs

A constant 29 VDC source voltage is maintained, even during battery standby. This allows strobes to operate at higher voltage with lower current and ensuring a consistent current draw and voltage drop margin under both primary power and secondary battery standby.

Reduced installation and testing time

Installation time and expense for retrofit or new construction can be significantly reduced with separate controls on the same two-wire SLC. When Class B wiring is used, wiring can be "T" tapped, allowing more savings in distance, wire, conduit (size and utilization), and overall installation efficiency. Use of Self-Test and Magnet Test features improves installation efficiency. TrueAlert device reports conveniently identify information about each connected appliance.



TrueAlert ES Diagnostics

Self-Test and Magnet Test diagnostic features provide individual appliance testing for IDNAC SLCs. With the Self-Test feature, appliance operation can be confirmed without leaving the control panel. Additionally, each appliance's indicator LED can be selected to pulse when it receives a supervision poll during normal operation.

Self-Test allows on-board sensors to detect strobe output on the device and report the strobe status to the control panel. Operation is by selected VNAC appliance groups and is either automatic (all briefly simultaneously activated) or individually activated by applying a magnet. Refer to control panel unit sheet for more Self-Test information, see list inTable 3.

Silent Appliance Magnet Test pulses the indicator LED sequentially in response to the application of a magnet to conveniently indicate the appliance's address.

Operational Appliance Magnet Test briefly flashes the strobe to indicate proper operation after the address is indicated by pulsing the indicator LED.

TrueStart Instrument Two (TSIT) helps with testing of IDNAC SLC wiring and TrueAlert ES appliances. Use it to test IDCs, NACs, and IDNet communications before connection to the control unit. Please contact your local Autocall representative for additional information.

TrueAlert Addressable Wiring Isolator

Isolator Model A4905-9929 is available for remote mounting on TrueAlert addressable circuits to isolate short circuited wiring from functioning wiring. See data sheet *AC4905-0001* for more information.

Product Selection

TrueAlert ES LED Wall Mount Addressable Strobe Appliances

Table 1: Appliance only

| SKU | Color | Candela rating | SKU | Color | Candela rating |
|--------------|-------|----------------|---------------|-------|----------------|
| A59VO-APPLWR | Red | Low | A59VO-APPLWRH | Red | High |
| A59VO-APPLWW | White | | A59VO-APPLWWH | White | 1.161 |

Table 2: Separate cover

| SKU | Color | Wording | SKU | Color | Wording | |
|--------------|-------|------------|--------------|-------|---------------|--|
| A59VOC-WRF | Red | FIRF | A59VOC-WWFAB | White | جريق / FIRE | |
| A59VOC-WWF | White | | A59VOC-WRAAB | Red | | |
| A59VOC-WRA | Red | ALERT | A59VOC-WWAAB | White | ALERT / إنذار | |
| A59VOC-WWA | White | ALERI | A59VOC-WRS | Red | | |
| A59VOC-WRFAB | Red | حريق/ FIRE | A59VOC-WWS | White | Logos only | |



Visible Notification Appliances, Wall Mount Multi-Candela Strobes, Model Series 59VO

Installation



IDNAC SLC Controller Compatibility Reference

Table 3: IDNAC SLC Controller Compatibility Reference

| Compatible Controllers | Data Sheet | Controller Output | IDNAC SLC Output Voltage | Appliance Voltage |
|--|-------------|-------------------|-----------------------------|-------------------|
| 4100ES with EPS+ or EPS Power Supply | AC4100-0100 | | | |
| 4009 IDNAC Repeater | AC4009-0004 | IDNAC SLC | 29 VDC (regulated) | 23 VDC |
| 4007ES with IDNAC Notification | AC4007-0002 | | | (with 6 VDC drop) |
| 4010ES with ESS Enhanced System Supply | AC4010-0011 | - | | |



TrueAlert ES Strobe Specifications

Table 4: Electrical Ratings

| Rating | | Details | | | | | | |
|--|---------|---|------------------|---------------|--------|--------|--|--|
| Typical Operating Voltage Range | | 23 - 29.5 VDC, Special Application | | | | | | |
| Supervisory Requirements | | 1 unit load (= 0.8 mA control unit current) | | | | | | |
| IDNAC SLC Loading | Maximur | n of 127 addr | esses per SLC, 1 | 39 unit loads | | | | |
| Candela Setting | 15 cd | 30 cd | 75 cd | 110 cd | 135 cd | 185 cd | | |
| 23 VDC RMS Current Ratings, for typical design of IDNAC Addressable SLCs (6 VDC drop) | | 44 mA | 60 mA | 125 mA | I | | | |

Table 5: Percentage of rated light output at room temperature

| Angle | On-Axis | On-Axis Vertical, Below Axis | | Horizontal, Left/Right of Axis | | |
|--------------------|-----------|------------------------------|-----|--------------------------------|-----|--|
| Aligie | 0° | 45° | 90° | 45° | 90° | |
| UL required output | 100% | 34% | 12% | 75% | 25% | |
| Typical output | 145% | 84% | 21% | 102% | 47% | |

Table 6: General Specifications

| Specification | Details | | |
|--|---|--|--|
| Temperature Range | 32° to 120° F (0° to 49° C) | | |
| Humidity Range | 10% to 93%, non-condensing @ 104° F (40° C) | | |
| IDNAC CLC Wiring Coordinations (refer to control | UTP, unshielded twisted pair recommended | | |
| IDNAC SLC Wiring Specifications (refer to control panel installation instructions for more information) | Maximum wire length allowed with "T-Taps" for Class B wiring per SLC = 10,000 ft (3048 m) | | |
| | Maximum wire length to any appliance = 4000 ft (1219 m) | | |
| Connections Terminal blocks on mounting plate for 18 AWG to 12 AWG (0.82 mm ² to 3.31 mm ²); two wires per terminal for in/out wiring | | | |
| Note: Refer to compatibility table above for fire alarm control panel and power supply operation type. | | | |

Note: Refer to Installation Instructions 579-1162 for further information

© 2018 Johnson Controls. All rights reserved. All specifications and other information shown were current as of document revision and are subject to change without notice. Additional listings may be applicable, contact your local Autocall product supplier for the latest status. Listings and approvals under Tyco Fire & Security GmbH, and the product names listed in this material are marks and/or registered marks. Unauthorized use is strictly prohibited. NFPA 72 and National Fire Alarm Code are registered trademarks of the National Fire Protection Association (NFPA).