AUTOCALL
UL, ULC Approved*

TrueAlert Multi-Candela Notification Appliances
Multi-Candela, High Intensity (non-addressable) Strobe and Horn/Strobe

Features

24 VDC high intensity notification appliance common features:

- Xenon strobe with intensity selectable as 135, 177, or 185 candela; visible selection jumper is secured behind strobe housing
- Regulated circuit design ensures consistent flash output and provides controlled inrush current
- Control is compatible with Autocall SmartSync two-wire operation
- Operation is compatible with ADA requirements
- Rugged, high impact, flame retardant thermoplastic housings available in red or white with clear lens
- Models are available for wall or ceiling mount
- Strobe operation is UL listed to Standard 1971

Appliances with audible notification (horn):

- Low current electronic horn with harmonically rich sound output suitable for either steady or coded operation (Temporal or 60 BPM March Time pattern)
- Horn operation is UL listed to Standard 464

Strobes provide synchronized flash for use with:

- Autocall fire alarm control panels and NAC Extenders when selected to provide strobe synchronization or SmartSync two-wire control
- Separate strobe Synchronization Modules or SmartSync Control Modules (SCMs) that convert conventional NAC inputs to a Smartsync output

SmartSync two-wire operation provides:

- Horns controlled separately from strobes on the same two-wire circuit, activated as Temporal pattern, March Time pattern (at 60 BPM), or on continuously

Wall mount appliance features:

- Wiring terminals are accessible from the front of the housing providing easy access for installation, inspection, and testing
- Covers are available separately to convert housing color
- A/V models have an available UL listed sound damper for locations requiring attenuation of 5 to 6 dBA (stairwells, small rooms, highly reverberant areas, etc.)

Optional adapters and wire guards:

- Wall mount A/V adapters are available to cover surface mounted electrical boxes and to adapt to 2975-9145 boxes
- UL listed red wire guards are available for wall or ceiling mount A/Vs.

Description

Convenient Selection and Installation

TrueAlert multi-candela high intensity appliances provide convenient installation to standard electrical boxes. They are both impact and vandal resistant and provide a convenient strobe intensity selection. Since each model can be selected for strobe intensity output, on-site model inventory is minimized and changes encountered during construction can be easily accommodated.

Wall Mount

Housings are a one-piece assembly (including lens) that mounts to a single or double gang, or 4" square standard electrical box. The cover can be quickly removed (a tool is required) and covers are available separately for color conversion.

Ceiling Mount

Strobe appliances install using standard single gang electrical boxes. Horn/strobe appliances install using standard 4" electrical boxes. Color choice is determined by model number.
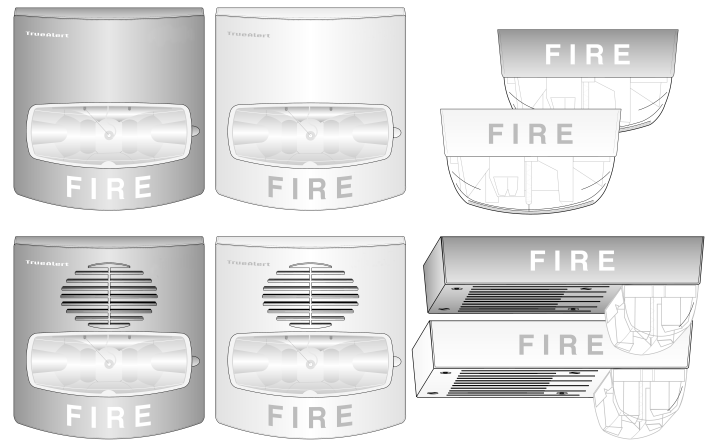

Fig 1: High Intensity Strobes and Horn/Strobes

Strobe Intensity Selection

During installation, a selection plug at the back of the housing determines the desired strobe intensity. An attached flag with black letters on a highly visible yellow background allows the selected intensity to be seen at the side of the strobe lens.

Strobe Application Selection

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).

SmartSync Two-Wire Control

SmartSync operation mode allows a two-wire circuit to provide the ability to activate both the horn and strobe on the same NAC and then allow the horn to be silenced while the strobe remains flashing. The horn operates as "on-until-silenced" while the strobe operation is "on-until-reset."

SmartSync Control Sources

SmartSync two-wire control is available from:

4007ES Hybrid, 4010ES, 4100ES, Fire Alarm Control Panels (refer to individual product data sheets for more information)

4009 IDNet NAC Extenders (refer to data sheet *AC4009-0002*)

SmartSync Control Module (SCM) Model A4905-9938 (refer to data sheet *AC4905-0003*)

* Additional listings may be applicable; contact your local product supplier for the latest status.

Product Selection

Table 1: Strobe (V/O) Product Selection

SKU	Housing	Lettering	Mounting	Description
A4906-9109	Red	White	Wall	Multi-candela strobe with intensity selectable as: 135, 177, or 185 candela; synchronized flash rate; SmartSync two-wire control compatible
A4906-9111	White	Red		
A4906-9110	Red	White	Ceiling	
A4906-9112	White	Red		

Table 2: Horn/Strobe (A/V) Product Selection

SKU	Housing	Lettering	Mounting	Description
A4906-9139	Red	White	Wall	Horn and multi-candela strobe with intensity selectable as: 135, 177, or 185 candela; synchronized flash rate; operates with SmartSync two-wire control
A4906-9141	White	Red		
A4906-9140	Red	White	Ceiling	
A4906-9142	White	Red		

Table 3: Wall Mount Common Accessories

SKU	Description		Dimensions
A4905-9937	Red	Surface Mount Adapter Skirt; use to cover 1-1/2" (38 mm) deep surface mounted boxes	5-3/8" H x 5-1/4" W x 1-5/8" D (136 mm x 133 mm x 41 mm) depth w/strobe = 4-3/8" (111 mm)
A4905-9940	White		
A4905-9931	Red Adapter Plate for mounting to 2975-9145 box (typically for retrofit, may be mounted vertical or horizontal)		8-5/16" x 5-3/4" x 0.060" Thick (211 mm x 146 mm x 1.5 mm)
A4905-9838	A/V only; Optional Sound Damper; package of 20; field installed adhesive backed horn output attenuator; reduces output 5 to 6 dBA **Note:** After Sound Damper installation, measure sound level to ensure compliance with applicable code requirements		1-3/4" Diameter (44.5 mm) with 0.31" (8 mm) sound opening
V/O Model	**A/V Model**	**Description**	**Dimensions**
A4905-9992	A4905-9994	Red Wall Mount Replacement cover with white "FIRE" lettering	5-1/8" H x 5" W x 1-1/2" D (130 mm x 127 mm x 38 mm)
A4905-9993	A4905-9995	White Wall Mount Replacement cover with red "FIRE" lettering	

Table 4: Wire Guards and Adapters

SKU	Description		Dimensions
4905-9961*	A/V or V/O Wall Mount Red Wire Guard with Mounting Plate, for semi-flush or surface mounted boxes		6-1/16" H x 6-1/16" W x 3-1/8" D (154 mm x 154 mm x 79 mm)
4905-9926	V/O Ceiling Mount Red Wire Guard with Mounting Plate, for semi-flush or surface mounted boxes		6-1/8" x 4-3/8" x 2-7/8" deep (156 mm x 111 mm x 73 mm)
4905-9927*	A/V Ceiling Mount Red Wire Guard for mounting to flush mounted electrical box		8-1/2" x 6-1/8" x 3" (216 mm x 156 mm x 76 mm)
4905-9928*	Red Adapter Plate, required to mount 4905-9927 guard to surface mounted electrical box		9" x 7" (229 mm x 178 mm)
4905-9910	Surface Mount Adapter Plate; zinc plated; required for mounting to handy box; not needed when using 4905-9926 guard		4-7/8" x 3-1/8" x 0.060" D (124 mm x 79 mm x 1.5)
A4905-9915	White	Ceiling Mount A/V Surface Mount Adapter Box Extension, use to cover 1-1/2" deep surface mounted boxes	4-3/4" x 6-7/8" x 1-1/2" deep, (121 mm x 175 mm x 38 mm)
A4905-9916	Red		
Note: * UL listed by Space Age Electronics Inc.			

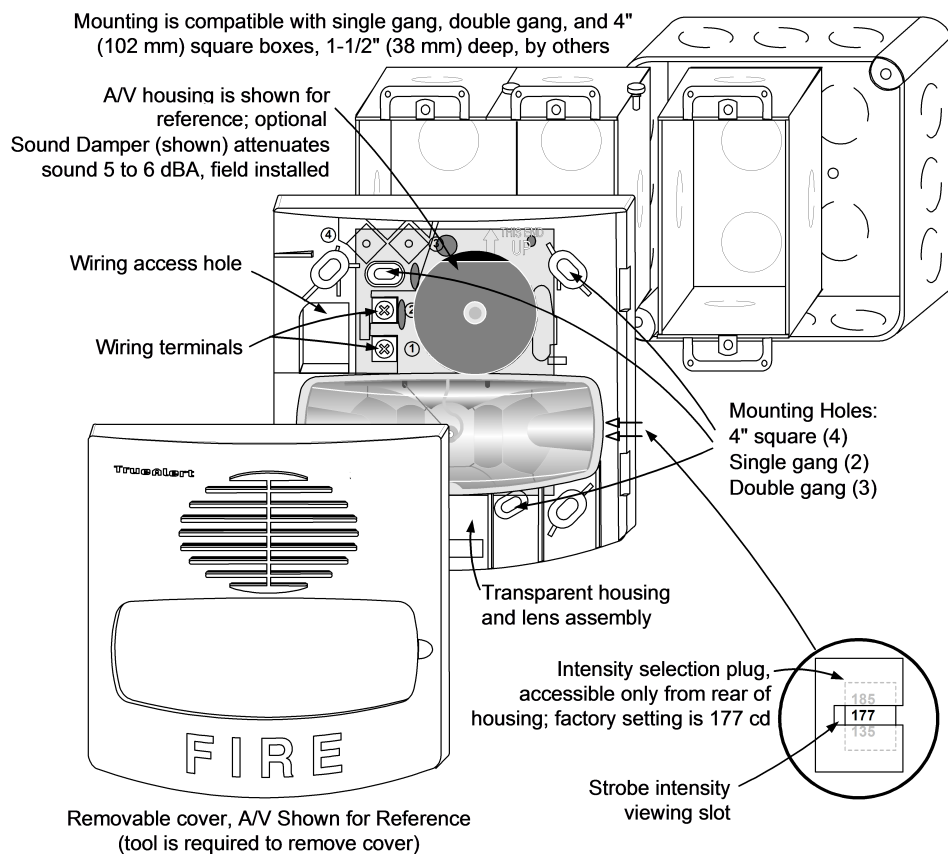## Installation Reference, Surface or Semi-Flush Mounting

Mounting is compatible with single gang, double gang, and 4" (102 mm) square boxes, 1-1/2" (38 mm) deep, by others

A/V housing is shown for reference; optional Sound Damper (shown) attenuates sound 5 to 6 dBA, field installed

Wiring access hole

Wiring terminals

Mounting Holes:
4" square (4)
Single gang (2)
Double gang (3)

Transparent housing and lens assembly

Intensity selection plug, accessible only from rear of housing; factory setting is 177 cd

185
177
135

Strobe intensity viewing slot

Removable cover, A/V Shown for Reference (tool is required to remove cover)

Fig 2: Installation reference, surface or semi-flush mounting

IMPORTANT! WALL MOUNT INSTALLATION HEIGHT REFERENCE

Bottom of lens is either even with, or slightly above bottom of compatible boxes

Electrical box outline

NFPA 72 requires that the entire lens be not less than 80" and not greater than 96" above the finished floor

80" (2.03 m) minimum

Fig 3: Wall mount installation height reference

Note: Figure 2 shows optional A4905-9838 sound damper.
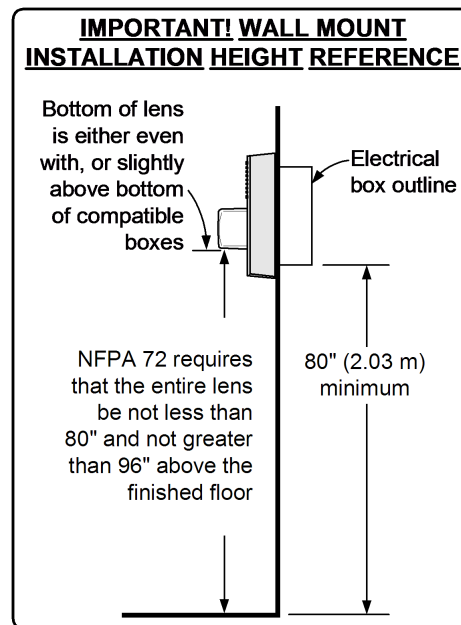
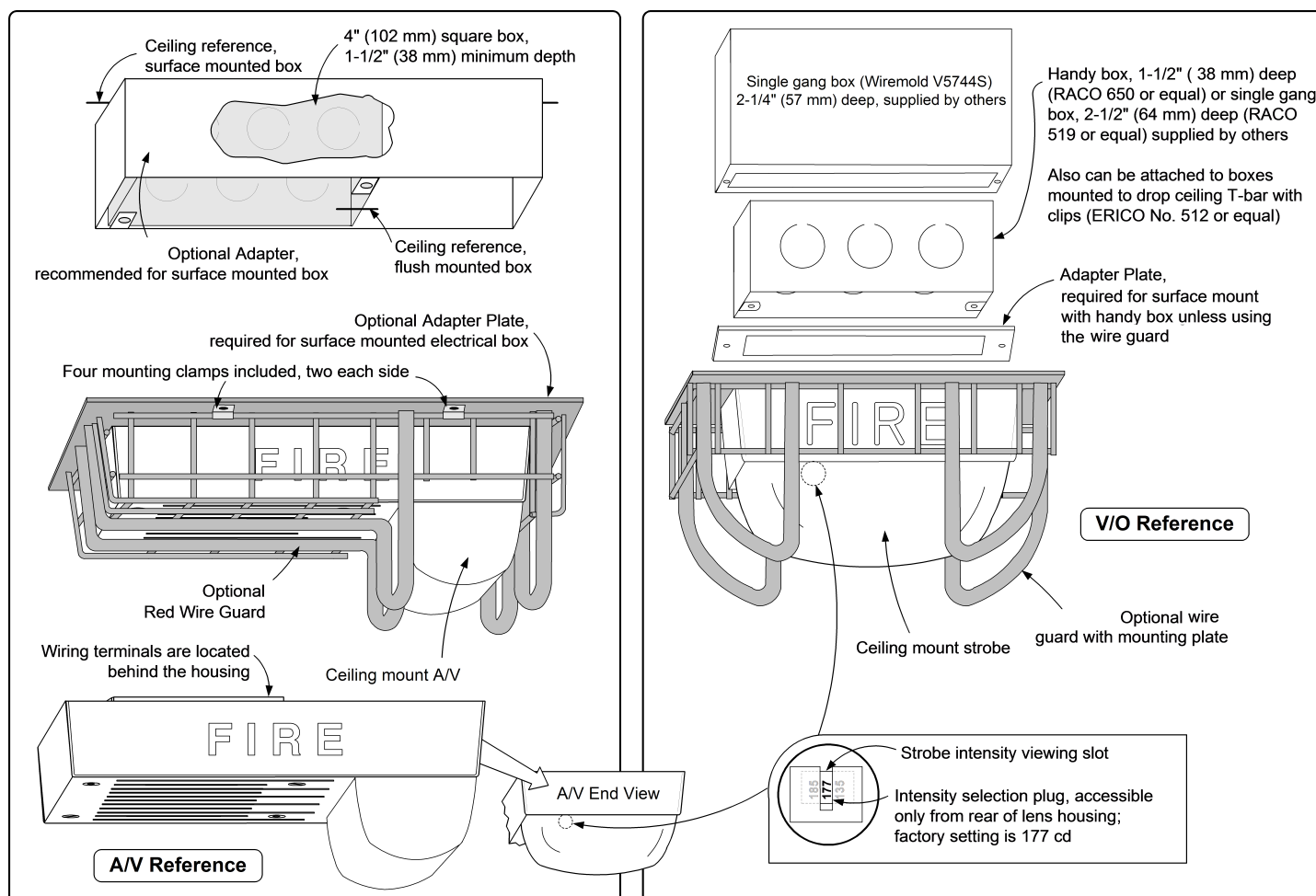## Ceiling Mount High Candela Appliances Installation Reference

Fig 4: Ceiling Mount High Candela Appliances Installation Reference

Note: Figure 4 shows:
· Optional A4905-9915/A4905-9916 Adapter for A/V installation, recommended for surface mounted box
· Optional A/V 4905-9927 Red Wire Guard
· 4905-9910 Adapter Plate, required for surface mount V/O installation with handy box unless using the 4905-9926 wire guard
· Optional 4905-9926 wire guard with mounting plate for V/O installation

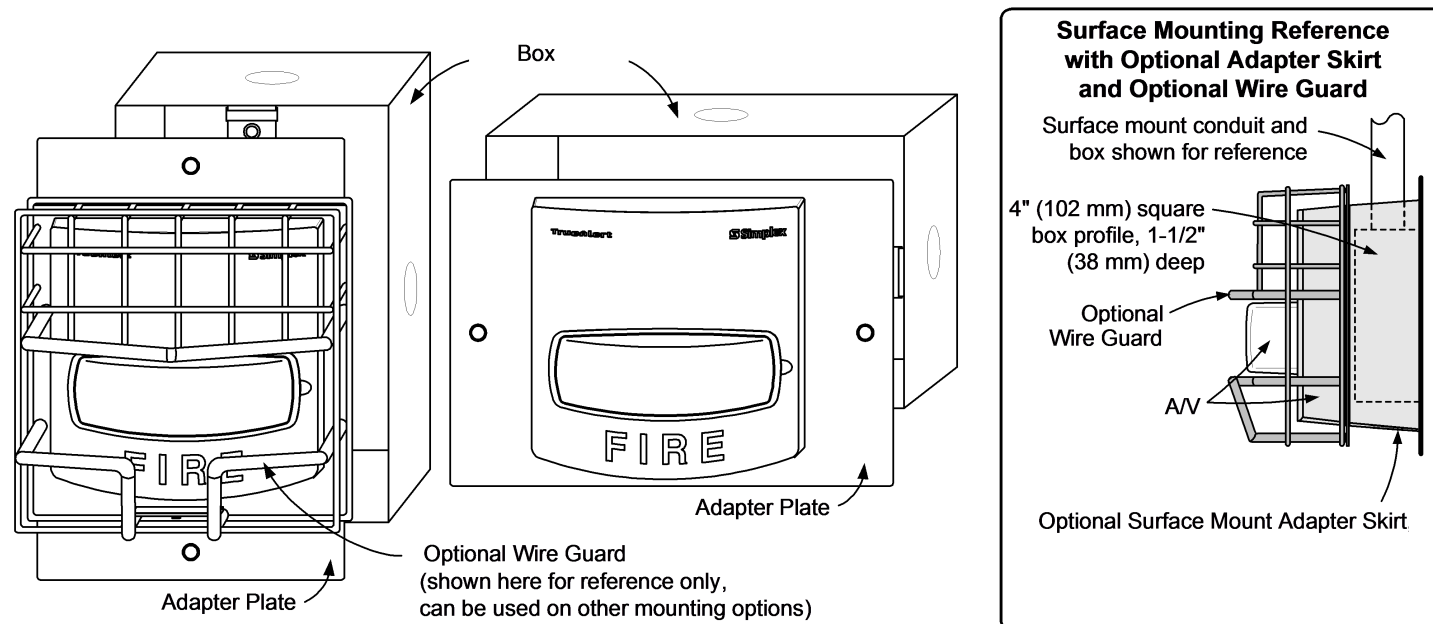## Wall Mount Installation Reference; Adapter Plate, Guard, and Adapter Skirt

Fig 5: Wall Mount Installation Reference; Adapter Plate, Guard, and Adapter Skirt

Note: Figure 5 shows:

1. A4905-9931 Adapter Plate
2. 4905-9961 Optional Wire Guard
3. 2975-9145 back box
4. Optional Surface Mount Adapter Skirt, 1-1/2" deep: A4905-9937, Red; A4905-9940, White (conduit knockouts are provided on all four sides)
V/O shown for reference, A/V mounts the same.

Specifications

Refer to Instructions 579-859AC for additional information.

Table 5: Specifications

Specification			Rating					
Rated Voltage Range	UL Listed Rating		Regulated 24 DC; see Note 1 below					
	ULC Listed Rating		20 VDC to 30 VDC per ULC S526-M878					
Flash Rate and Synchronized NAC Loading			1 Hz; with up to 35 synchronized strobes maximum per NAC					
Environmental; Temperature and Humidity			32° to 122° F (0° to 50° C); 10% to 93%, non-condensing at 100° F (38° C)					
Screw Terminal Connections			18 AWG to 12 AWG (0.82 mm2 to 3.31 mm2); two wires per terminal for in/out wiring					
Dimensions (with lens)	A/V and V/O Wall Mount		5-1/8" H x 5" W x 2-3/4" D (130 mm x 127 mm x 70 mm)					
	V/O Ceiling Mount		4-3/4" L x 2-5/16" W x 2-5/8" D (121 mm x 75 mm x 67 mm)					
	A/V Ceiling Mount		4-3/4 L" x 6-7/8" W x 2-5/8" D (121 mm x 175 mm x 67 mm)					
Horn Output Characteristics			2400 to 3700 Hz sweep, modulated at 120 Hz rate					
A/V Horn Ratings, dBA @ 10 ft (3 m); at 24 VDC (see Note 2)			Steady Sound Output		Coded Sound Output (see Note 2 below)			
	UL 464 Reverberant Chamber		**Wall Mount**	**Ceiling Mount**	**Wall Mount**	**Ceiling Mount**		
			86 dBA	87 dBA	82 dBA	83 dBA		
	Anechoic Chamber		92 dBA	93 dBA	92 dBA	93 dBA		
	Angular Dispersion		Per ULC S525; -3 dB at 45° off-axis for both wall and ceiling mount models					
Wall Mount			**Visible Only (V/O)**			**Audible/Visible (A/V)**		
	Maximum RMS Current Rating per Strobe Setting (see Note 3 below)		135 cd	177 cd	185 cd	135 cd	177 cd	185 cd
			314 mA	390 mA	409 mA	333 mA	418 mA	433 mA
	Reference RMS Currents at other voltages	18 VDC	279 mA	347 mA	364 mA	296 mA	372 mA	385 mA
		24 VDC	209 mA	260 mA	273 mA	222 mA	279 mA	289 mA
Ceiling Mount			**Visible Only (V/O)**			**Audible/Visible (A/V)**		
	Maximum RMS Current Rating per Strobe Setting (see Note 3 below)		135 cd	177 cd	185 cd	135 cd	177 cd	185 cd
			356 mA	431 mA	447 mA	389 mA	456 mA	463 mA
	Reference RMS Currents at other voltages	18 VDC	316 mA	383 mA	397 mA	346 mA	405 mA	412 mA
		24 VDC	237 mA	287 mA	298 mA	259 mA	304 mA	309 mA

Note:

1. "Regulated 24 DC" refers to the voltage range of 16 to 33 VDC per UL Standard 1971, Signaling Devices for the Hearing Impaired. This voltage range is the absolute operating range. Operation outside of this range may cause permanent damage to the appliance. Please note that 16 VDC is the lowest operating voltage that is allowed at the last appliance on the NAC under worst case conditions.
2. Coded values are typical of the output measured with a Temporal pattern or a March Time coded pulse and with a sound level meter reading on a "fast" setting. Under the same test conditions, coded horn output "peak" sound level readings are typically 4 dBA higher. Anechoic horn output ratings are typically more representative of actual installed sound output.
3. Currents are with horn on steady. The maximum RMS current listed is the device nameplate rating. Strobe designs are constant wattage and the maximum RMS current rating occurs at the lowest allowable operating voltage. (RMS is root mean square and refers to the effective value of a varying current waveform.)