



**ANSI C82.17-2017 (R2022)**

*American National Standard for Lamp Ballasts—  
High Frequency (HF) Electronic Ballasts  
for Metal Halide Lamps*

Secretariat:

**National Electrical Manufacturers Association**

Approved: June 16, 2022

**American National Standards Institute, Inc.**

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**Foreword** (This foreword is not part of ANSI C82.17-2017 [R2022].)

Suggestions for improvement of this standard are welcome and should be sent to:

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## 1 Scope

This standard provides specifications for and operating characteristics of high-frequency electronic ballasts for metal halide lamps. Electronic ballasts are devices that use semiconductors to control lamp starting and operation. The ballasts operate from multiple supply sources up to 600VAC maximum at a frequency of 60 hertz. This standard covers electronic ballasts with sinusoidal lamp operating current frequencies above 40 kHz.

## 2 Normative References

The following normative documents contain provisions, which through reference in this text constitute provisions of this Standards Publication. By reference herein, these publications are adopted in whole or in part as indicated, in this Standards Publication. All Standards are subject to revision, and parties to agreements based on this American National Standard are encouraged to investigate the possibility of applying the most recent editions of the Standards indicated below.

- ANSI C78.43 *American National Standard for Electric Lamps—Single-Ended Metal Halide Lamps*
- ANSI C82.5 *American National Standard for Reference Ballasts—High-Intensity-Discharge and Low-Pressure Sodium Lamps*
- ANSI C82.6 *American National Standard for Lamp Ballasts—Ballasts for High-Intensity Discharge Lamps—Methods of Measurement*
- ANSI C82.9 *American National Standard for Lamp Ballasts—High-Intensity Discharge and Low-Pressure Sodium Lamps—Definitions*
- UL 1029 *Standard for Safety—High-Intensity-Discharge Lamp Ballasts*
- NEMA 410 *Performance Testing for Lighting Controls and Switching Devices with Electronic Drivers and Discharge Ballasts*

## 3 Definitions

Definitions of terms that apply specifically to the subject treated in this American National Standard are given in ANSI C82.9.

## 4 Ratings

### 4.1 Preferred Supply Voltage

The preferred design center supply voltage ratings for ballasts covered by this standard are 120 V, 127 V, 208 V, 220 V, 240 V, 254 V, 277 V, 347 V, and 480 V.

### 4.2 Supply Voltage Ranges

The designated supply voltage ranges specified in the various parts of this standard shall be made available by the manufacturer in ballast catalogs, technical literature, or websites.