

Igniters for short arc Xenon lamps or similar arc lamps

Introduction

These igniters have been expressly designed to strike short arc Xenon lamps or similar arc lamps.

The use of highly sophisticated electronic appliances in the motion field has highlighted the problems related to the R.F. interferences generated by the igniters.

IREM has developed a range of igniters to alleviate this problems. In order to better define the noise level parameter, IREM decided to consider the number of sparks per half cycle (see section "no. of sparks per half cycle in the tables on next pages).

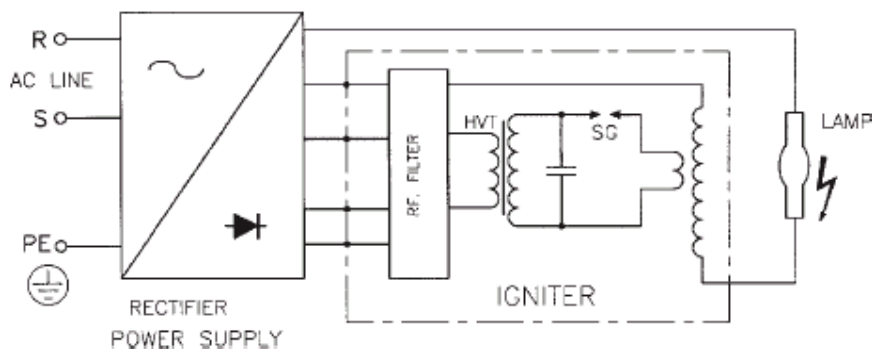
The igniters listed in the tables have different operating noise levels, depending on the application fields.

The igniters without suffix "A" are suitable for manual ignition.

The igniters with suffix "A" are fitted with a built-in relay system for automatic or short timed ignition to avoid damaging the igniter in case of lamp fault operation.

These igniters meet the lamp manufacturers recommendations to ensure immediate and correct ignition of the lamp when cold or at any cooling condition. These units should be installed close to the lamp but thermally shielded from it. The high voltage lead must be as short as possible and carefully insulated to prevent corona discharge and reduction in strike energy. As far as the insulation class, these devices can be considered Cl.II (as per IEC 536), but they must be grounded for proper interference suppression.

Block diagram



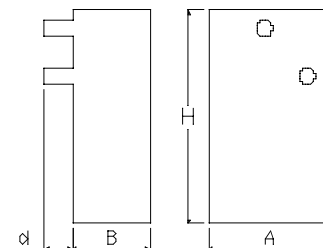
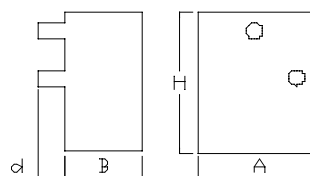
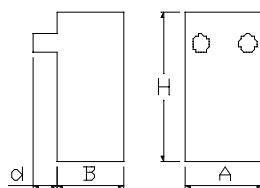
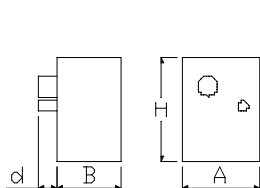
Outline drawing

AS-1530
AS-3040

AS-8030

ASN-700A ASN-700
AS-16035A AS-16035
AS-16040A AS-16040

ASN-1000A ASN-1000
AS-20045A AS-20045



**AS-1530
Models**

These igniters are suitable for the manual striking of short arc lamps under critical ignition conditions. These lamps are used in projection systems where the electronic appliances are not particularly affected by R.F. interferences.

	AS-1530	AS-1530		
<i>Ordering code</i>	02815010	02815011		
<i>AC nominal voltage [V]</i>	230	115		
<i>AC voltage range [V]</i>	207-253	103.5-126.5		
<i>Frequency [Hz]</i>	50 / 60	50 / 60		
<i>Input current during ignition [A]</i>	0.5 / 0.4	0.8 / 0.7		
<i>HV output [kV]</i>	≤ 30	≤ 30		
<i>Number of spark per half cycle</i>	≤ 8	≤ 8		
<i>Lamp Current Ta = 55°C</i>	≤ 15	≤ 15		
<i>Xenon lamp power [W]</i>	≤ 180	≤ 180		
<i>Weight [Kg]</i>	1.3	1.3		
<i>Dimensions AxBxHxd[mm]</i>	75x64x104x19	75x64x104x19		
<i>Marking</i>	CE	CE		
<i>Time delay board</i>	not provided	not provided		

Different input voltages or frequencies are available on demand.

**AS-3040
Models**

These igniters are suitable for the manual striking of short arc lamps under critical ignition conditions. These lamps are used in projection systems where the electronic appliances are not particularly affected by R.F. interferences

	AS-3040	AS-3040		
<i>Ordering code</i>	02820010	02820011		
<i>AC nominal voltage [V]</i>	230	115		
<i>AC voltage range [V]</i>	207-253	103.5-126.5		
<i>Frequency [Hz]</i>	50 / 60	50 / 60		
<i>Input current during ignition [A]</i>	0.5 / 0.4	0.8 / 0.7		
<i>HV output [kV]</i>	≤ 40	≤ 40		
<i>Number of spark per half cycle</i>	≤ 7	≤ 7		
<i>Lamp Current Ta = 55°C</i>	≤ 30	≤ 30		
<i>Xenon lamp power [W]</i>	≤ 550	≤ 550		
<i>Weight [Kg]</i>	1.3	1.3		
<i>Dimensions AxBxHxd[mm]</i>	75x64x104x19	75x64x104x19		
<i>Marking</i>	CE	CE		
<i>Time delay board</i>	not provided	not provided		

Different input voltages or frequencies are available on demand.

**AS-8030
Models**

These igniters are suitable for the manual striking of short arc lamps under critical ignition conditions. These lamps are used in projection systems where the electronic appliances are not particularly affected by R.F. interferences

	AS-8030	AS-8030		
<i>Ordering code</i>	02836080	02836081		
<i>AC nominal voltage [V]</i>	230	115		
<i>AC voltage range [V]</i>	207-253	103.5-126.5		
<i>Frequency [Hz]</i>	50 / 60	50 / 60		
<i>Input current during ignition [A]</i>	1.2 / 1	1.8 / 1.5		
<i>HV output [kV]</i>	≤ 30	≤ 30		
<i>Number of spark per half cycle</i>	≤ 16	≤ 16		
<i>Lamp Current Ta = 55°C</i>	≤ 80	≤ 80		
<i>Xenon lamp power [W]</i>	≤ 1600	≤ 1600		
<i>Weight [Kg]</i>	1.5	1.5		
<i>Dimensions AxBxHxd[mm]</i>	75x64x145x23	75x64x145x23		
<i>Marking</i>	CE	CE		
<i>Time delay board</i>	not provided	not provided		

Different input voltages or frequencies are available on demand.

ASN-700A ASN-700 Models

These igniters are suitable for striking short arc lamps used in projection systems where the electronic appliances are particularly affected by R.F. interferences. These igniters are characterised by a **restrained level of electrical noise**.

	ASN-700A	ASN-700	ASN-700A	ASN-700
Ordering code	02837000	on demand	on demand	02837015
AC nominal voltage [V]	230	230	115	115
AC voltage range [V]	207-253	207-253	103.5-126.5	103.5-126.5
Frequency [Hz]	50 / 60	50 / 60	50 / 60	50 / 60
Input current during ignition [A]	1.3 / 1	1.3 / 1	3.1 / 2.5	3.1 / 2.5
HV output [kV]	≤ 35	≤ 35	≤ 35	≤ 35
Number of spark per half cycle	≤ 3	≤ 3	≤ 3	≤ 3
<small>Operation time: limited to one half cycle</small>				
Lamp current Ta = 60°C	≤ 160	≤ 160	≤ 160	≤ 160
Lamp Current Ta = 55°C	≤ 165	≤ 165	≤ 165	≤ 165
Xenon lamp power [W]	≤ 7000	≤ 7000	≤ 7000	≤ 7000
Weight [Kg]	3.5	3.5	3.5	3.5
Dimensions AxBxHxd[mm]	130x83x150x30	130x83x150x30	130x83x150x30	130x83x150x30
Marking	CE	CE	CE	CE / UL
Time delay board	78800493	not provided	78800493	not provided

Time delay board Code 78800493

This **time delay board (timer)** has been expressly designed to operate along with some AS series igniters. Its main function is to detect the no-load voltage of the rectifier power supply and then to allow the striking. **It's fitted with a preset voltage threshold.**

Voltage threshold value	Board voltage threshold [V]	Rectifier min. no-load voltage [V]	Delay after threshold [s]	Timing [s]
Factory preset	63-72	> 73	3	4 on/off cycles 2-3s

Different input voltages or frequencies are available on demand.

AS-16035A AS-16035 Models

These igniters are suitable for striking short arc lamps. These lamps are used in projection systems where the electronic appliances are affected by R.F. interferences. These igniters are characterised by a **restrained level of electrical noise** and the **built-in time delay board is fitted with a jumper for voltage threshold setting**.

	AS-16035A	AS-16035	AS-16035A	AS-16035
Ordering code	02836035	on demand	on demand	on demand
AC nominal voltage [V]	230	230	115	115
AC voltage range [V]	207-253	207-253	103.5-126.5	103.5-126.5
Frequency [Hz]	50 / 60	50 / 60	50 / 60	50 / 60
Input current during ignition [A]	1.3 / 1	1.3 / 1	3.1 / 2.5	3.1 / 2.5
HV output [kV]	≤ 35	≤ 35	≤ 35	≤ 35
Number of spark per half cycle	≤ 5	≤ 5	≤ 5	≤ 5
Lamp current Ta = 60°C	≤ 160	≤ 160	≤ 160	≤ 160
Lamp Current Ta = 55°C	≤ 165	≤ 165	≤ 165	≤ 165
Xenon lamp power [W]	≤ 7000	≤ 7000	≤ 7000	≤ 7000
Weight [Kg]	3.5	3.5	3.5	3.5
Dimensions AxBxHxd[mm]	130x83x150x30	130x83x150x30	130x83x150x30	130x83x150x30
Marking	CE	CE	CE	CE
Time delay board	78800492	not provided	78800492	not provided
Timer jumper position*	4	4	4	4

* factory setting

Time delay board Code 78800492

This **time delay board (timer)** has been expressly designed to operate along with some AS series igniters. Its main function is to detect the no-load voltage of the rectifier power supply and then to allow the striking. **It's fitted with a jumper for voltage threshold setting.**

Jumper positions	Board voltage threshold [V]	Rectifier min. no-load voltage [V]	Delay after threshold [s]	Timing [s]
4	69-77	> 78	NONE	2-3
3	82-92	> 93	NONE	2-3
2	112-117	> 118	NONE	2-3
1	129-146	> 147	NONE	2-3

Different input voltages or frequencies are available on demand.

AS-16040A AS-16040 Models

These igniters are suitable for striking short arc lamps under critical ignition conditions. These lamps are used in projection systems where the electronic appliances are not particularly affected by R.F. interferences

	AS-16040A	AS-16040	AS-16040A	AS-16040
Ordering code	02836001	02836005	02836011	02836016
AC nominal voltage [V]	230	230	115	115
AC voltage range [V]	207-253	207-253	103.5-126.5	103.5-126.5
Frequency [Hz]	50 / 60	50 / 60	50 / 60	50 / 60
Input current during ignition [A]	3.8 / 3	3.8 / 3	10 / 8	10 / 8
HV output [kV]	≤ 40	≤ 40	≤ 40	≤ 40
Number of spark per half cycle	≤ 16	≤ 16	≤ 16	≤ 16
Lamp current Ta = 60°C	≤ 160	≤ 160	≤ 160	≤ 160
Lamp Current Ta = 55°C	≤ 165	≤ 165	≤ 165	≤ 165
Xenon lamp power [W]	≤ 7000	≤ 7000	≤ 7000	≤ 7000
Weight [Kg]	3.5	3.5	3.5	3.5
Dimensions AxBxHxd[mm]	130x83x150x30	130x83x150x30	130x83x150x30	130x83x150x30
Marking	CE	CE	CE	CE / UL
Time delay board	78800493	not provided	78800493	not provided

Time delay board Code 78800493

This **time delay board (timer)** has been expressly designed to operate along with some AS series igniters. Its main function is to detect the no-load voltage of the rectifier power supply and then to allow the striking. **It's fitted with a preset voltage threshold.**

Voltage threshold value	Board voltage threshold [V]	Rectifier min. no-load voltage [V]	Delay after threshold [s]	Timing [s]
Factory preset	63-72	> 73	3	4 on/off cycles 2-3s

Different input voltages or frequencies are available on demand.

ASN-1000A ASN-1000 Models

These igniters are suitable for striking short arc lamps used in projection systems where the electronic appliances are particularly affected by R.F. interferences. These igniters are characterised by a **restrained level of electrical noise**.

	ASN-1000A	ASN-1000	ASN-1000A	ASN-1000
Ordering code	02841000	on demand	on demand	on demand
AC nominal voltage [V]	230	230	115	115
AC voltage range [V]	207-253	207-253	103.5-126.5	103.5-126.5
Frequency [Hz]	50 / 60	50 / 60	50 / 60	50 / 60
Input current during ignition [A]	1.3 / 1	1.3 / 1	3.1 / 2.5	3.1 / 2.5
HV output [kV]	≤ 40	≤ 40	≤ 40	≤ 40
Number of spark per half cycle	≤ 5	≤ 5	≤ 5	≤ 5
Lamp current Ta = 45°C	≤ 200	≤ 200	≤ 200	≤ 200
Lamp current Ta = 60°C	≤ 180	≤ 180	≤ 180	≤ 180
Xenon lamp power [W]	≤ 10000	≤ 10000	≤ 10000	≤ 10000
Weight [Kg]	4.7	4.7	4.7	4.7
Dimensions AxBxHxd[mm]	130x83x225x32	130x83x225x32	130x83x225x32	130x83x225x32
Marking	CE	CE	CE	CE
Time delay board	78800499	not provided	78800499	not provided

Time delay board Code 78800499

This **time delay board (timer)** has been expressly designed to operate along with some AS series igniters. Its main function is to detect the no-load voltage of the rectifier power supply and then to allow the striking. **It's fitted with a preset voltage threshold.**

Voltage threshold value	Board voltage threshold [V]	Rectifier min. no-load voltage [V]	Delay after threshold [s]	Timing [s]
Factory preset	129 - 146	> 147	3	4 on/off cycles 2-3s

Different input voltages or frequencies are available on demand.

AS-20045A AS-20045 Models

These igniters are suitable for striking short arc lamps used in projection systems where the electronic appliances are affected by R.F. interferences. These igniters are characterised by a **restrained level of electrical noise** and the **built-in time delay board is fitted with a jumper for voltage threshold setting**.

	AS-20045A	AS-20045	AS-20045A	AS-20045
Ordering code	02841023	on demand	02841015	on demand
AC nominal voltage [V]	230	230	115	115
AC voltage range [V]	207-253	207-253	103.5-126.5	103.5-126.5
Frequency [Hz]	50 / 60	50 / 60	50 / 60	50 / 60
Input current during ignition [A]	1.3 / 1	1.3 / 1	3.1 / 2.5	3.1 / 2.5
HV output [kV]	≤ 45	≤ 45	≤ 45	≤ 45
Number of spark per half cycle	≤ 5	≤ 5	≤ 5	≤ 5
Lamp current Ta = 45°C	≤ 200	≤ 200	≤ 200	≤ 200
Lamp current Ta = 60°C	≤ 180	≤ 180	≤ 180	≤ 180
Xenon lamp power [W]	≤ 10000	≤ 10000	≤ 10000	≤ 10000
Weight [Kg]	4.7	4.7	4.7	4.7
Dimensions AxBxHxd[mm]	130x83x225x32	130x83x225x32	130x83x225x32	130x83x225x32
Marking	CE	CE	CE	CE
Time delay board	78800492	not provided	78800492	not provided
Timer jumper position*	4	4	4	4

* factory setting

Time delay board Code 78800492

This **time delay board (timer)** has been expressly designed to operate along with some AS series igniters. Its main function is to detect the no-load voltage of the rectifier power supply and then to allow the striking. **It's fitted with a jumper for voltage threshold setting**.

Jumper positions	Board voltage threshold [V]	Rectifier min. no-load voltage [V]	Delay after threshold [s]	Timing [s]
4	69-77	> 78	NONE	2-3
3	82-92	> 93	NONE	2-3
2	112-117	> 118	NONE	2-3
1	129-146	> 147	NONE	2-3

Different input voltages or frequencies are available on demand.