LIGHTINGEUROPE
THE VOICE OF THE LIGHTING INDUSTRY

LightingEurope

EU Compliant Requirements

Products Sheets for

LIGHTING COMPONENTS

1st Edition

29th November 2013

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a. Disclaimer

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b. Introduction

The European Association LightingEurope representing the interests of the lighting industry in Europe has developed summary check lists and detailed EU Compliant Requirements Products Sheets for its major lighting products' groups to support the Market Surveillance and Customs Authorities in the various EU Member States to identify compliance and/or non-compliance of the major lighting products' groups with the applicable EU legislation requirements.

These summary check lists and detailed EU Compliant Requirements Products Sheets for lighting products provide economic operators with a simple and immediate way to:

- Identify the product
- Identify the applicable legislation
- Check the label of the product and its markings
- Identify what kind of visual check may easily be done

This document contains EU Compliant Requirements Products Sheets for the following types of lighting COMPONENTS:

1. Electronic control gears for LED modules (drivers) and for halogen lamps
2. Electronic ballasts for tubular fluorescent and discharge lamps (HID)
3. Ballasts for tubular fluorescent and discharge lamps
4. Edison screw lampholders

c. Summary check lists for components

1. Summary check list for electronic control gears for LED modules (drivers) and for halogen lamps

Combined nomenclature (CN) Code:

CN Code : XXXX XX: ELECTRONIC CONTROLGEAR FOR LED MODULES (DRIVERS)

XXXX XX: ELECTRONIC CONTROLGEAR FOR HALOGEN LAMPS

Name of the product……..

✓ *If any of the grey boxes (NO) has been ticked, there is a need to contact relevant market surveillance authority.*

FORMAL REQUIREMENTS			
The conformity marking CE			
		YES	**NO**
1.	Is there the CE marking?		
2.	Is there the CE marking affixed visibly, legibly and indelibly: – on the product itself **or** – on the packaging?		
	Applicability of the requirement		
Basic information and warnings ***Marking on the products*** *(in case of control gear without enclosure the only marking required are trade mark and type ref.)*			
3.	Is there the identification of the entity placing the product on the market? (producer's name or his trade mark, **or** authorised representative's **or** importer's identification)		
4.	Is there the model number or type reference of the manufacturer?		

5.	Is there the symbol for independent lamp controlgear?  Only applicable for independent controlgear.		
6.	Is there the rated supply voltage (or voltages, if there are several), voltage range, supply frequency and supply current(s)? The supply current may be given in the manufacturer's literature.		
7.	Is the earthing terminals (if any) identified by the symbol?		
8.	Is there the claimed value of the rated maximum operating temperature of the controlgear following the symbol t_c?		
9.	Is there the wiring diagram indicating the position and purpose of terminals?		
10.	Is there the value of the output voltage U_{out} and/or the output current I_{rated}?		

Contact details of the competent market surveillance authority

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2. Summary check list for electronic ballasts for tubular fluorescent and discharge lamps (HID) – Ballasts for tubular fluorescent and discharge lamps

Combined nomenclature (CN) Code:

CN Code :

XXXX XX: Electronic ballast for tubular fluorescent and HID discharge lamps (EL)

XXXX XX: Ballast for tubular fluorescent and HID discharge lamps (EM)

Name of the product……..

✓	*If any of the grey boxes (NO) has been ticked, there is a need to contact relevant market surveillance authority.*

FORMAL REQUIREMENTS					
The conformity marking CE					
				YES	**NO**
1.	Is there the CE marking?				
2.	Is there the CE marking affixed visibly, legibly and indelibly: – on the product itself **or** – on the packaging?				
	Applicability of the requirement	**EM**	**EL**		
Basic information and warnings ***Marking on the products*** *(in case of control gear without enclosure the only marking required are trade mark and type ref.)*					
3.	Is there the identification of the entity placing the product on the market? (producer's name or his trade mark, **or** authorised representative's **or** importer's identification)	✓	✓		
4.	Is there the model number or type reference of the manufacturer?	✓	✓		

5.	Is there the symbol for independent lamp controlgear?  Only applicable for independent ballast.	✓	✓		
6.	Is there the rated supply voltage (or voltages, if there are several), voltage range, supply frequency and supply current(s)? The supply current may be given in the manufacturer's literature.	✓	✓		
7.	Is the earthing terminals (if any) identified by the symbol?	✓	✓		
8.	Is there the claimed value of the rated maximum operating temperature of the winding following the symbol t_w?	✓			
9.	Is there the wiring diagram indicating the position and purpose of terminals?		✓		
10.	Is there the value of t_c?		✓		
11.	Is there the value of the output voltage U out?		✓		
12.	Is there the Energy efficiency Index EEI or the ballast efficiency (reg. EC 245/2009)?	✓	✓		
	Other element to be checked				
13.	Is the energy efficiency index or the ballast efficiency allowed to be put on the market according to regulation (EC) 245/2009?	✓	✓		

Contact details of the competent market surveillance authority

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3. Summary check list for edison screw lampholders

Combined nomenclature (CN) Code:

CN Code : 8536 6110:Edison Screw lampholder

Name of the product……..

✓ *If any of the grey boxes (NO) has been ticked, there is a need to contact relevant market surveillance authority.*

FORMAL REQUIREMENTS			
The conformity marking CE			
		YES	**NO**
1.	Is there the CE marking? (only on lampholder with rated voltage > 50V)		
2.	Is there the CE marking affixed visibly, legibly and indelibly: – on the product itself **or** – on the packaging?		
Basic information ***Marking on the products***			
3.	Is there the identification of the entity placing the product on the market? (producer's name or his trade mark, **or** authorised representative's **or** importer's identification)		
4.	Is there the model number or type reference?		
5.	Is there the rated voltage (V)? For miscellaneous lampholder this marking be given either on the lampholder or be made available in the manufacturer's catalogue or the like		

6.	Is there the rated current (A)? - For miscellaneous lampholder this marking may be given either on the lampholder or be made available in the manufacturer's catalogue or the like - For bayonet lampholder rated current is required if greater than 2A		
7.	Is there the rated operating temperature "T"? - For Edison screw and bayonet lampholder this marking is only required for lampholder for operating in high temperature conditions. For bayonet lampholder it could be T1 or T2. - For Lampholder for tubular fluorescent lamp and miscellaneous lampholder this marking is required for lampholder fort operating temperatures over 80 °C - For miscellaneous lampholder this marking may be given either on the lampholder or be made available in the manufacturer's catalogue or the like.		
8.	Is there the symbol for nature of current, (for switched lampholder only)?		
	PHYSICAL CHECKS		
9.	Is the side contact E14 and E27 lampholder separated from metal threading (screw shell)?		
10.	Is the side contact of the E14 and E27 lampholder deep down to the holder so the contact with the lamp is made when the lam is almost completely screwed?		

Contact details of the competent market surveillance authority

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Example of correctly designed lampholder

Examples of lampholder <u>not in compliance</u> with the requirements

d. Detailed EU compliant requirements products sheets for components

1. Detailed EU compliant requirements products sheet for electronic control gears for LED modules (drivers) and for halogen lamps

1.1 Minimum information to be marked on the product

- Mark of origin (trade mark, manufacturer's name or name of the responsible vendor/supplier).
- Model number or type reference (model / article / serial number)
- Technical data (*):
  - Rated supply voltage (e.g. 220V... 230V) (1)
  - Rated supply frequency (e.g. 50-60Hz) (2)
  - Value of tc (e.g. tc= 80°C) (3)
  - rated output voltage or rated output current (eg. 350mA) (4)
- "SELV" or "SELV EQUIVALENT" indication for SELV control gear (5)
- Symbol for independent lamp control gear if applicable 
- Symbol for temperature declared, thermally protected control gear if applicable 
- The earthing terminals (if any)
- Wiring diagram indicating the position and purpose of terminals
- CE marking (6)

(*) in case of control gear without enclosure the only marking required are trade mark and type ref.

Manufacturer / Trade mark

Model / Type reference

230V (1)

50Hz (2)

tc 80°C (3)

I out = 350mA - Uout max 15V (4)

SELV (5)

CE (6)

Example of marking

1.2 Documentation to be provided with the product

- All technical data shall be marked on the product. These data shall be available either on the control gear, or be made available in the manufacturer's catalogue or similar.

1.3 Main aspects to be verified

- **Visual inspection**:
  - Identification data (see clause 1); if data are marked on a label, it shall be durable and legible: sticker or similar are accepted but not paper without protective tape or layer
  - Control gear shall be complete with all components

- **Verification of documentation:**
  - Verification of Declaration of Conformity (D.o.C). The D.o.C. shall contain all the reference to applicable legislation and applied standards (see Applicable standards section)

1.4 Applicable legislation

List of applicable legislations and standards to be indicated in the Declaration of Conformity and Technical File:

Directive/Regulation	Directive Number	Declaration of Conformity	Technical File
LVD - LOW VOLTAGE DIRECTIVE *(1)*	2006/95/EC	YES	YES
EMC - ELECTROMAGNETIC COMPATIBILITY *(2)*	2004/108/EC	YES	YES
RoHS - RESTRICTION OF THE USE OF CERTAIN HAZARDOUS SUBSTANCES *(3)*	2011/65/EU (replaces 2002/95/EC)	NO	NO
ECODESIGN	Directive 2009/125/EC		
	Regulation (EU) 1194/2012 *(4)*	YES	YES
GENERAL PRODUCT SAFETY	2001/95/CE	NO	NO

(1) This product itself does not fall under the scope of RoHS directive, but this component is normally designed to become part of the luminaire so the prohibited substances need not to be used.
(2) EMC directive is only applicable to independent controlgear and to controlgear for incorporation into an apparatus by the end-user and available to end-users.
(3) Only the substances requirements are required as this component is designed to be incorporated in electrical and electronic apparatus under the scope of RoHS directive.
(4) Starting from 01/09/2014.

1.5 Applicable standards

Standards listed in the table below have to be all indicated in the Declaration of Conformity (legislation allows to indicate measures adopted to respect essential requirements as alternative to harmonized standards. This option is rarely used). The reference year of the listed standards have to be indicated.

LOW VOLTAGE	EN 62347-1:(year) EN61347-2-2 (Year) – for halogen lamps EN 61347-2-13(year) – LED driver EN 62493 only for independent control gear identified by the following symbol: 
ELECTROMAGNETIC COMPATIBILITY	EN 55015 (year) EN 61000-3-2 (year) EN 61000-3-3 (year) EN 61547 (year)
ECODESIGN	EN 62442-3 (under development)

2. Detailed EU compliant requirements products sheet for electronic ballasts for tubular fluorescent and discharge lamps (HID)

2.1 Minimum information to be marked on the product

- Mark of origin (trade mark, manufacturer's name or name of the responsible vendor/supplier).
- Model number or type reference (model / article / serial number)
- Symbol for independent lamp controlgear if applicable
- Technical data (*):
  - Rated supply voltage (e.g. 220V... 230V) (1)
  - Rated supply frequency (e.g. 50-60Hz) (2)
  - Value of tc (e.g. tc= 80°C) (3)
  - maximum working voltage (r.m.s.) U-OUT=...V (4)
  - For controllable ballasts, the control terminals shall be identified;
  - Output terminals shall be identified as such;
  - ignition voltage (if higher than 1500 V) (5) for HID controlgear only
  - Energy Efficiency index (EEI) or the ballast efficiency (6)
  - CE marking (7)

(*) in case of control gear without enclosure the only marking required are trade mark and type ref.

Manufacturer / Trade mark

Model / Type reference

230V (1)

50Hz (2)

tc 80°C (3)

I out = 350mA - Uout max 15V (4)

SELV (5)

EEI = A2 (6)

CE (7)

Example of marking

2.2 Documentation to be provided with the product

- All technical data shall be marked on the product. These data shall be available either on the control gear, or be made available in the manufacturer's catalogue or similar

2.3 Main aspects to be verified

- **Visual inspection**:
  - Identification data (see clause 1); if data are marked on a label, it shall be durable and legible: sticker or similar are accepted but not paper without protective tape or layer.
  - Control gear shall be complete with all components

- **Verification of documentation:**
  - Verification of Declaration of Conformity (D.o.C). The D.o.C. shall contain all the reference to applicable legislation and applied standards (see Applicable standards section)

2.4 Applicable legislation

List of applicable legislations and standards to be indicated in the Declaration of Conformity and Technical File:

Directive/Regulation	Directive Number	Declaration of Conformity	Technical File
LVD - LOW VOLTAGE DIRECTIVE *(1)*	2006/95/EC	YES	YES
EMC - ELECTROMAGNETIC COMPATIBILITY *(2)*	2004/108/EC	NO	NO
RoHS - RESTRICTION OF THE USE OF CERTAIN HAZARDOUS SUBSTANCES *(3)*	2011/65/EU (replaces 2002/95/EC)		
ECODESIGN	Directive 2009/125/EC		
	Regulation (EC) 245/2009 + (EU) 347/2010	YES	YES
GENERAL PRODUCT SAFETY	2001/95/CE	NO	NO

(1) This product itself does not fall under the scope of RoHS directive, but this component is normally designed to become part of the luminaire so the prohibited substances need not to be used.
(2) EMC directive is only applicable to independent controlgear and to controlgear for incorporation into an apparatus by the end-user and available to end-users.
(3) Only the substances requirements are required as this component is designed to be incorporated in electrical and electronic apparatus under the scope of RoHS directive.

2.5 Applicable standards

Standards listed in the table below have to be all indicated in the Declaration of Conformity (legislation allows to indicate measures adopted to respect essential requirements as alternative to harmonized standards. This option is rarely used). The reference year of the listed standards have to be indicated.

LOW VOLTAGE	EN 62347-1:(year) EN 61347-2-3 (year) for ballast for fluorescent lamp EN 61347-2-12 (year) for ballast for discharge lamp EN 62493 only for independent control gear identified by the following symbol: 
ELECTROMAGNETIC COMPATIBILITY	EN 55015 (year) EN 61000-3-2 (year) EN 61000-3-3 (year) EN 61547 (year)
ECODESIGN (Directive 2009/125/EC Regulation 245/2009 + 347/2010)	EN 62442-1(year) for ballast for fluorescent lamps (EN 50294 may be applicable until 2014/11/16 EN 62442-2 (under development) for ballast for high intensity discharge lamps

3. Detailed EU compliant requirements products sheet for ballasts for tubular fluorescent and discharge lamps

3.1 Minimum information to be marked on the product

- Mark of origin (trade mark, manufacturer's name or name of the responsible vendor/supplier).
- Model number or type reference of the manufacturer.
- Rated supply voltage (or voltages, if there are several), voltage range (1), supply frequency (2) and supply current(s); the supply current may be given in the manufacturer's literature.
- The claimed value of the rated maximum operating temperature of the winding following the symbol tw (3), values increasing in multiples of 5 °C.
- Energy Efficiency index (EEI) or the ballast efficiency (4) (**).
- CE marking (5)

(*) in case of control gear without enclosure the only marking required are trade mark and type ref.
(**) required for ballast for tubular fluorescent lamp. For ballast for discharge lamp it is mandatory since 13/04/2012

Manufacturer / Trade mark	tw 130°C (3)	
Model / Type reference		CE (5)
230V (1)	50 – 60Hz (2)	EEI = B2 (4)

3.2 Documentation to be provided with the product

- All technical data shall be marked on the product. These data shall be available either on the control gear, or be made available in the manufacturer’s catalogue or similar

3.3 Main aspects to be verified

- **Visual inspection**:
  - Identification data (see clause 1); if data are marked on a label, it shall be durable and legible: sticker or similar are accepted but not paper without protective tape or layer
  - Control gear shall be complete with all components

- **Verification of documentation:**
  - Verification of Declaration of Conformity (D.o.C). The D.o.C. shall contain all the reference to applicable legislation and applied standards (see Applicable standards section)

3.4 Applicable legislation

- List of applicable legislations and standards to be indicated in the Declaration of Conformity and Technical File:

Directive/Regulation	Directive Number	Declaration of Conformity	Technical File
LVD - LOW VOLTAGE DIRECTIVE *(1)*	2006/95/EC	YES	YES
EMC - ELECTROMAGNETIC COMPATIBILITY *(2)*	2004/108/EC	NO	NO
RoHS - RESTRICTION OF THE USE OF CERTAIN HAZARDOUS SUBSTANCES *(3)*	2011/65/EU (replaces 2002/95/EC)	NO	NO
ECODESIGN	Directive 2009/125/EC		
	Regulation (EC) 245/2009 + (EU) 347/2010	YES	YES
GENERAL PRODUCT SAFETY	2001/95/CE	NO	NO

(1) This product itself does not fall under the scope of RoHS directive, but this component is normally designed to become part of the luminaire so the prohibited substances need not to be used.
(2) EMC directive is only applicable to independent controlgear and to controlgear for incorporation into an apparatus by the end-user and available to end-users.
(3) Only the substances requirements are required as this component is designed to be incorporated in electrical and electronic apparatus under the scope of RoHS directive.

3.5 Applicable standards

Standards listed in the table below have to be all indicated in the Declaration of Conformity (legislation allows to indicate measures adopted to respect essential requirements as alternative to harmonized standards. This option is rarely used). The reference year of the listed standards have to be indicated.

LOW VOLTAGE	EN 62347-1:(year) EN 61347-2-8 (year) for ballast for fluorescent lamp EN 61347-2-9 (year) for ballast for discharge lamp
ELECTROMAGNETIC COMPATIBILITY	EN 55015 (year) EN 61000-3-2 (year) EN 61000-3-3 (year) EN 61547 (year)
ECODESIGN (Directive 2009/125/EC Regulation 245/2009 + 347/2010)	EN 62442-1 (year)for ballast for fluorescent lamp (EN 50294 may be applicable until 2014/11/16) EN 62442-2 (under development)for ballast or high intensity discharge lamps

4. Detailed EU compliant requirements products sheet for ballasts for Edison screw lampholders

4.1 Minimum information to be marked on the product

- Mark of origin (trade mark, manufacturer's name or name of the responsible vendor/supplier)
- Model number or type reference (model / article / serial number)
- Technical data:
  - Rated supply voltage (e.g. 250V) (1)
  - Rated supply current (e.g. 4 A) (2)
- Degree of protection IP (only for lampholder other than ordinary) (3)
- CE marking (4)

Manufacturer / Trade mark
Model / Type reference

250V (1) IP 44 (3)
4 A (2)
CE (4)

4.2 Documentation to be provided with the product

- Not required

4.3 Main aspects to be verified

- **Visual inspection (see annex)**:
  - Identification data (see clause 1)
  - Completeness of the lampholder. It shall be complete with all contacts and accessories
  - Protection against electric shock: the screw shell of the lampholder shall not be live (see example in the photographic documentation) (only for E14 and E27 lamp cap)

- **Verification of documentation:**
  - Verification of Declaration of Conformity (D.o.C). The D.o.C. shall contain all the reference to applicable legislation and applied standards (see Applicable standards section)

4.4 Applicable legislation

- List of applicable legislations and standards to be indicated in the Declaration of Conformity and Technical File:

Directive/Regulation	Directive Number	Declaration of Conformity	Technical File
LVD - LOW VOLTAGE DIRECTIVE *(1)*	2006/95/EC	YES	YES
RoHS - RESTRICTION OF THE USE OF CERTAIN HAZARDOUS SUBSTANCES *(2)*	2011/65/EU (replaces 2002/95/EC)	NO	NO
GENERAL PRODUCT SAFETY	2001/95/CE	NO	NO

(1) This product itself does not fall under the scope of RoHS directive, but this component is normally designed to become part of the luminaire so the prohibited substances need not to be used
(2) It is required only the substances requirements as this component is designed to be incorporated in electrical and electronic apparatus under the scope of RoHS directive

4.5 Applicable standards

Standards listed in the table below have to be all indicated in the Declaration of Conformity (legislation allows to indicate measures adopted to respect essential requirements as alternative to harmonized standards. This option is rarely used). The reference year of the listed standards have to be indicated.

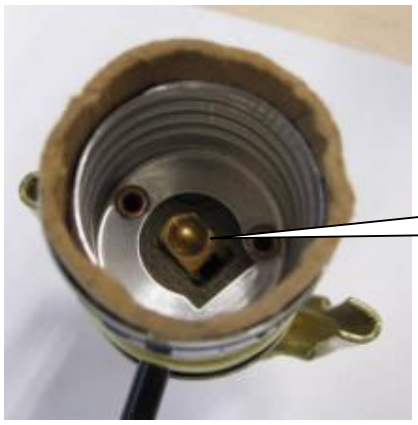
LOW VOLTAGE	EN 60238: (year)

4.6 Photographic documentation

Example 1 unsafe (life-Shell) Edison holders

Metal Threading is electrical connected to the mains

Example 2 unsafe (life-Shell) Edison holders



Metal Threading is electrical connected to the mains

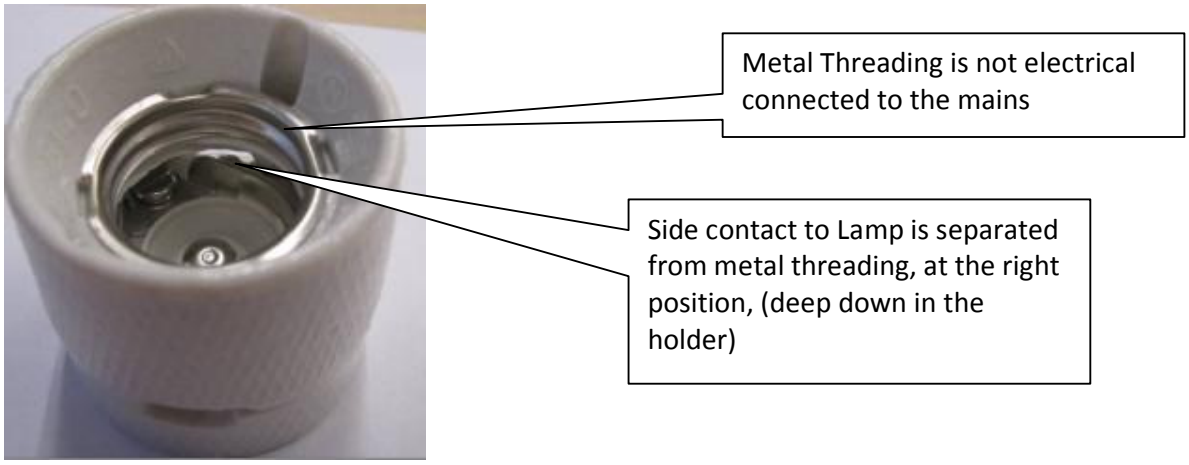
Example 3 unsafe (life-Shell) Edison holders

Metal Threading is electrical connected to the mains

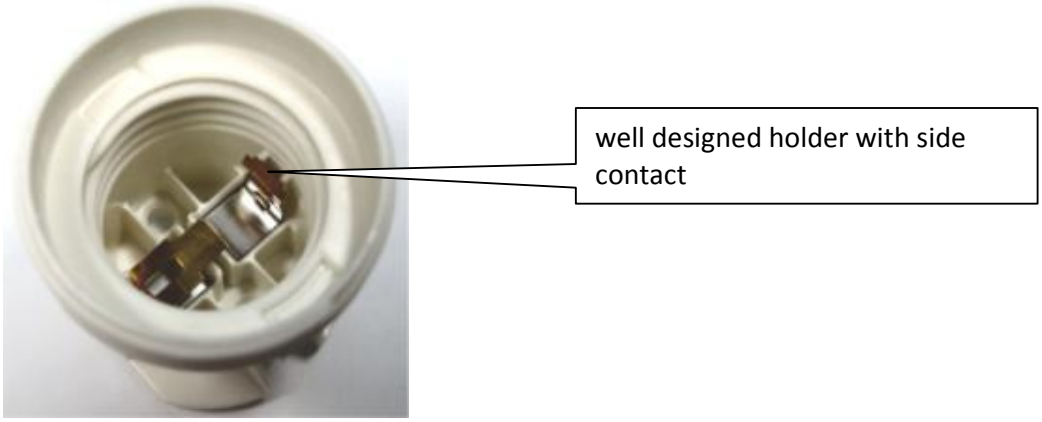
Cousing to early electrical contact during insertion of the lamps.

And can easily be touched

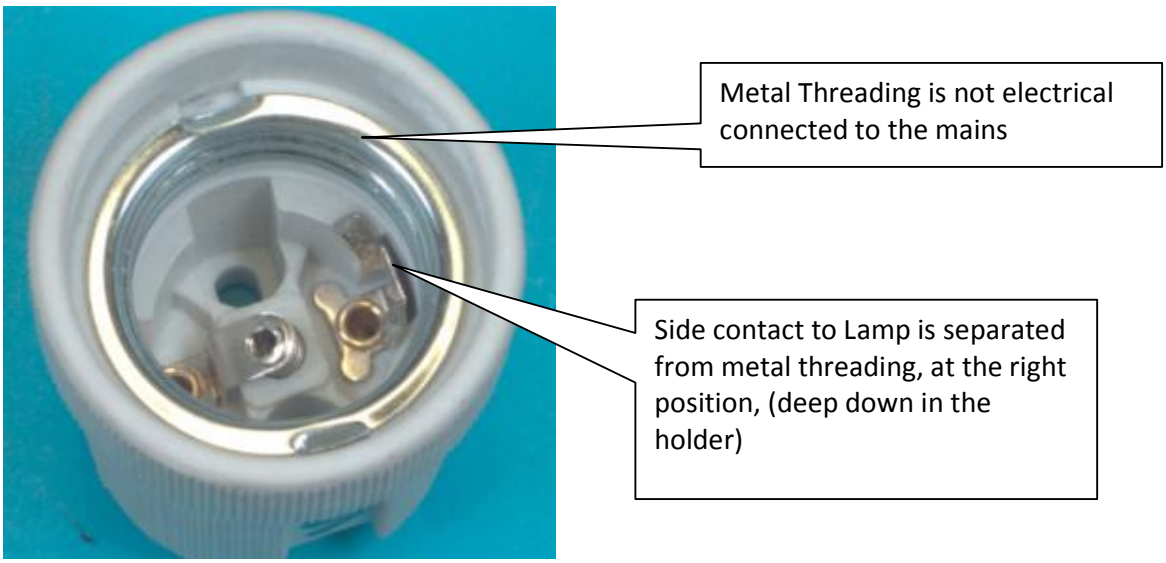
Example 4 safe Edison holders



Example 5 safe Edison insulating holders



Example 6 safe (non life-Shell) Edison ceramic holders



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