ErP and Energy labeling directives

2 directives are applicable for non directional lamps:

• The ErP Energy related Products directive 2009/125/EC replacing the EUP (Energy Using Products) directive 2005/32/EC. The ErP directive is a very general directive about the ecodesign of products taking into consideration every stage of the product life cycle from raw material use to final disposal.
• The 98/11/EC directive with regard to energy labeling of household products

Directional lamps are excluded:

- Regulation N° 244/2009 of ErP - Article 1 specifies that directional lamps are excluded from the regulation. Article 2 defines directional lamp as a lamp having at least 80 % light output within a solid angle of π sr (corresponding to a cone with an angle of 120°).
- Energy labeling directive Article 1 clause 2 mentions lamps with an input power <4W and reflector lamps are excluded from the directive. Therefore all directional lamp and lamp < 4W are excluded from the energy labeling directive.

Our entire reflector retrofits range such GU10, GU5.3, R50, R63 are not under the scope of the regulations.

Luminaire are excluded:

Both directives are for lamp only and do not apply to luminaire. Displaying an energy label of the lamp on a luminaire packaging is misleading because the lighting efficiency of the lamp is usually superior to the lighting efficiency once installed in the luminaire.

Our entire range of luminaires, even if supplied with non directional lamps is excluded from the scope of the regulations.

* Regulation (EC) NO. 244 / 2009
* * Directive 98 / 11 / EC

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ErP and Energy labeling directives

1.ErP Efficiency requirements

Stage	Implementation	Non clear lamp 	Non clear lamp with second envelope* 	Clear lamp 
1	Sept. 2009	A	B+ (see table 7 for details)	> 100W C
2	Sept. 2010			> 75W C
3	Sept. 2011			> 60W C
4	Sept. 2012			C for all
5	Sept. 2013			
6	Sept. 2016	Requirements will be reviewed for 2014		

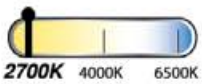
* Applicable for all CFL and LED lamp with covers. For this category the ErP requirements are above the minimum of B class. There is also a specific requirement for GX53. Pls refer to table 7

2. ErP Functional requirements for CFL applicable since stage 1

Functionality	Requirement
Lamps survival factor	≥ 0.50 at 6000h
Lumen maintenance factor	≥ 85% at 2000h (or 80% for lamps with second envelope)
Number of switching cycles before failure	≥ half the lamp lifetime expressed in hours ≥ 10 000 cycles if starting time > 0.3 s
Starting time	< 2 s
Lamp warm-up time	<60 s to 60% of flux (< 120 s for amalgam mercury lamps)
Premature failure rate	≤ 2% at 200h
UVA + UVB radiation	≤ 2.0mW/klm
UVC radiation	≤ 0.01mW/klm
Lamp power factor	≥ 0.50 for power < 25W or ≥ 0.9 if power ≥ 25W
Color rendering index	≥ 80

ErP and Energy labeling directives

3. ErP Compulsory product information to display on packaging

	Energy label as per directive 98/11/EC (see table 6 for energy class table)		If lamp is designed for use in non-standard condition (ie. -10°)
	Lifetime in hours		Lamp dimension in mm
	Number of switching cycles		If equivalence to incandescent is claimed it should be based on table 5
	Color temperature		Energy saving can only be written if the lamp complies with requirement of stage 1 applicable to non-clear lamps
	Warm-up time to 60% of full light output (instant full light can be written if <1 sec.)		Lamp mercury content in mg if the lamp contains mercury
	Warning if non dimmable or dimmable on specific dimmers only		Website onto which instructions on how to clean up the lamp debris in case of breakage are available (if the lamp contains mercury)

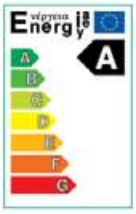
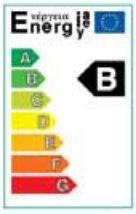
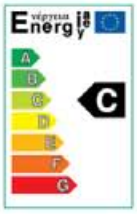
ErP and Energy labeling directives

5. ErP Equivalence with incandescent on packaging

Equivalent incandescent lamp power shown on packaging or catalog	Minimum required luminous flux to claim equivalence		
	CFL	LED	Halogen
15W	125lm	**136lm**	119lm
25W	229lm	**249lm**	217lm
40W	432lm	**470lm**	410lm
60W	741lm	**806lm**	702lm
75W	970lm	1055lm	920lm
100W	1398lm	1521lm	1326lm

6. Energy class calculation table

7. ErP minimum requirements

Power	Energy label			ErP Minimum requirements for lamp with second envelope (B+)	
				All lamps with second envelope (<5000K)	GX 53 lamps
(Watt)	Min. lumen requirements*			Min. lumen requirements	
4	126	N.A.	N.A.	117	81
5	176	47	N.A.	163	115
6	230	62	40	213	151
7	286	79	51	266	189
8	344	96	62	321	230
9	405	114	75	377	271
10	467	133	87	436	315
11	531	153	101	496	359
12	596	173	114	557	405
13	662	193	128	619	451
14	730	214	143	683	499
15	798	235	157	747	547
16	867	257	172	812	596
17	937	279	188	878	646
18	1008	301	203	944	696
19	1079	324	219	1011	747
20	1151	347	235	1079	798
21	1224	370	251	1148	850
22	1297	393	267	1216	902
23	1370	417	284	1286	955
24	1445	440	301	1356	1008
25	1519	464	318	1426	1061

* For all lamps excluding fluoresscent lamp without integrated ballast