

Guide to  
green public procurement of

# auto-off power strips and socket adapters

**This guide is based on the July 2012 edition of the Blue Angel eco-label criteria for Auto-Off Power Strips and Socket Adapters (RAL-UZ 134).**

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## 1. Introduction

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Power consumption for avoidable use of device stand-by modes pollutes the environment and generates unnecessary costs. The use of power strips with manual on-off switches allows two or more devices to be shut off at the same time, including devices that lack a genuine power switch. Experience has shown that manual power strips that can be shut off manually are not used because users find them to be inconvenient, or manually switchable power strips are not shut off on a regular basis.

On the other hand, auto-off power strips ensure that all devices not in use are switched off. This advantage normally outweighs the drawback that power strips themselves use a minute amount of current.

There are two types of power strips:

(1) Devices that shut off automatically in the absence of user-configurable minimum power consumption (shutoff threshold) on the part of the master device. When the master device is shut off, the peripheral (slave) devices that are connected to the master device are likewise automatically shut off. These devices are known as master-slave power strips.

(2) Devices which, in the absence of minimum power consumption (shutoff threshold) shut off not only the peripheral devices, but also the master device. This type of device involves no peripheral-device power consumption – in contrast to the idle current used by master-slave power strip master devices. These devices are also made with only one socket, whereby the device plugged into this socket will likewise be shut off.

The most advantageous environmental characteristics of eco-friendly auto-off power strips and socket adapters are as follows:

- Lower power consumption
- Minimization of standby loss
- Avoidance of materials that pollute the environment

In view of the fact that auto-off power strips and socket adapters cost more than simple power strips that can be shut off, the procurement costing process should factor in the actual estimated advantage of using the more cost intensive solution.

## 2. How to use this guide

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This guide contains key information and recommendations for contracting authorities concerning the incorporation of environmental aspects into tender and contractual documents. The list of criteria (available from [www.beschaffung-info.de](http://www.beschaffung-info.de)) for green public procurement of auto-off power strips and socket adapters should be used as an annex to the specifications. To this end, in terms of the environmental requirements for the contract subject matter in question, you need only include a reference in the specifications in order to meet the legal requirement that the deliverables be described clearly and completely.<sup>1</sup>

The tenderer questionnaire is also intended to serve as proof of compliance. The tender wording in this regard could go as follows:

*In order to be factored into the tender evaluation process, auto-off power strips and socket adapters must meet the minimum criteria pursuant to the attached tenderer questionnaire on green public procurement of auto-off power strips and socket adapters. By way of proof, you are to submit a completed questionnaire for each tendered product along with the mandated elements of proof.*

## 3. Scope

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This guide applies to auto-off power strips and socket adapters with and without overload protection.

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<sup>1</sup> Article 7(1) VOL/A and Article 8(1) VOL/A-EG state as follows: “The contractual performance must be described clearly and exhaustively, so that all candidates must understand the description in the same way and comparable tenders can be expected (contractual specifications).” It thus follows from Article 8(5) VOL/A-EG that it is admissible to apply eco-label specifications under certain circumstances. Hence merely referring to these criteria – at least when it comes to the upper threshold domain – is inadmissible. This concept is also supported by a European Court of Justice ruling of 10 May 2012, based on Article 23(6) Directive 2004/18/EU (Case C-368/10 – European Commission v. Kingdom of the Netherlands (see para. 112)).

## 4. Applicable laws

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- Regulation (EC) No 1272/2008, which governs substance and mixture categorization, labeling and packaging, promulgates a high level of health and environmental protection, while still allowing for free trade of chemical substances, mixtures, and specific products and for the improvement of competitiveness and innovation.<sup>2</sup>
- The Globally Harmonized System of Classification and Labeling of Chemicals (GHS) supercedes REACH, which means that international regulations concerning hazardous-chemical classification, labeling and packaging now also apply in the EU. The GHS aims to ensure that hazards are uniformly labeled worldwide. This in turn promotes free trade and improves safety.<sup>3</sup>
- “REACH” or Regulation (EC) No 1907/2006, is the European chemical law concerning chemical substance registration, evaluation, approval and restrictions. The law, which came into effect in 2007, promulgates a high level of health and environmental protection and also aims to promote free trade of chemicals within the EU and to improve competitiveness and innovation. REACH is based on the principle that manufacturers, importers and downstream users should take responsibility for chemicals by ensuring that the chemicals that they manufacture and market are used safely. REACH stands for Regulation concerning the Registration, Evaluation, Authorization and Restriction of Chemicals. REACH is regarded as one of the world’s most stringent chemical laws.<sup>4</sup>

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2 See Annex VI, part 3, table 3.2 of Regulation (EC) No 1272/2008, available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:DE:PDF> (29 July 2014) [PDF]. The currently valid list of harmonized hazardous-substance categories and labels pursuant to Annex 1 of Directive 67/548/EEC (GHS directive), available online at [http://www.reach-info.de/ghs\\_verordnung.htm](http://www.reach-info.de/ghs_verordnung.htm), (29 July 2014) [html document]. The GHS (Global Harmonization System) directive, which came into effect on 20 January 2009, replaces Directives 67/548/EU and 1999/45/EU; it governs substance classification, labeling and packaging until 1 December 2010 pursuant to Directive 67/548/EEC, and until 1 June 2015 governs mixtures in accordance with Directive 1999/45/EU. Contrary to this rule, substances and mixtures can be categorized, labeled and packaged prior to 1 December 2010 and 1 June 2015 respectively in accordance with the GHS directive, whereby Directive 67/548/EEC and Directive 1999/45/EEC do not apply in such cases.

3 [http://www.reach-info.de/ghs\\_verordnung.htm](http://www.reach-info.de/ghs_verordnung.htm) (7 July 2014) [html document]

4 [http://www.reach-info.de/einfuehrung.htm#was\\_ist\\_das](http://www.reach-info.de/einfuehrung.htm#was_ist_das) (7 July 2014) [html document]

## 5. Environmental requirements

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### 5.1. Power consumption

**Criterion: Minimum**

**Proof of compliance: Manufacturer's declaration and/or product documentation from the manufacturer**

- a) The power consumption of power strips with overload protection, control lamps and an illuminated on-off switch (if present) is not to exceed 0.9 watts.
- b) The power consumption of power strips without overload protection, but with an illuminated on-off switch (if present), is not to exceed 0.7 watts.
- c) The device is to integrate a switching threshold function.
- d) The device is to integrate a power switch that cuts off power to the device. The fore-going does not apply to power strips which, in the absence of minimum power consumption, shut off not only the peripheral devices, but also the master device and each of the various connected devices. However, such power strips are to integrate a wake-up function (via a switch or infrared receiver, for example) that restores the power supply.

### 5.2 Material requirements concerning housing and housing component plastics

**Criterion: Minimum**

**Proof of compliance: Manufacturer's declaration**

- Housing plastics are not to be constructed of halogen-containing polymers such as PVC; nor are chlorine or bromide containing flame retardants to be used as additives in plastic housing components weighing more than 25 grams.
- Substances that are classified as exhibiting the following hazardous properties within the meaning of Regulation (EC) No 1272/2008 Annex VI are not to be used in plastic housing components weighing more than 25 grams.
- Class 1A and 1B carcinogenic substances
- Class 1A and 1B mutagenic substances
- Class 1A and 1B reprotoxic substances

- Substance of particular concern on any other grounds pursuant to REACH Annex XIII criteria, insofar as such substance is listed in the candidate list in REACH Article 59(1).

### 5.3 Safety requirements

**Criterion: Minimum**

**Proof of compliance: CE mark**

Auto-off power strips are to bear the CE mark, and thus comply with the following European directives:

- 2006/95/EU Low Voltage Directive (LVD)
- 2004/108/EU Electromagnetic Compatibility (EMC)

## 6. Evaluating tenders

Tender evaluations are to factor in contract subject matter related criteria such as environmental characteristics and life cycle costs.<sup>5</sup>

For the procurement of energy related products exceeding the Community thresholds, energy consumption is to be adequately taken into account as a procurement crite-

rion.<sup>6</sup> This can be done by factoring in life cycle costs<sup>7</sup> and/or by evaluating specific power consumption data.<sup>8</sup>

Life cycle costs can be calculated using one of the calculation tools that are available here: <https://www.umweltbundesamt.de/en/topics/economics-consumption/green-procurement/life-cycle-costing>.

<sup>5</sup> See Article 16(8) VOL/A and Article 19(9) VOL/A-EG.

<sup>6</sup> See Regulation on the Award of Public Contracts (VgV) Article 4(6b).

<sup>7</sup> For a practical guide to life cycle costing and a list of suitable life cycle costing tools, see the series of Schulungsskripte titled Umweltfreundliche Beschaffung und therein Einführung in die Berechnung der Lebenszykluskosten und deren Nutzung im Beschaffungsprozess (<http://www.umweltbundesamt.de/publikationen/umweltfreundliche-beschaffung-schulungsskript-5>).

<sup>8</sup> See Article 4(6b) in conjunction with Regulation on the Award of Public Contracts (VgV) Article 6.



## Annex: Tenderer questionnaire for green public procurement of auto-off power strips and socket adapters

Product name	
Manufacturer	
Tenderer	
Tenderer's contact details	

### Does the product have the Blue Angel eco-label?

If the product in question has Blue Angel eco-label certification for auto-off power strips and socket adapters (RAL-UZ 134, July 2012), then the criteria below are deemed to have been met and the remainder of this questionnaire can be skipped.

☐

No.	Criterion	Comment	Criterion met, proof of compliance submitted <sup>9</sup>  (to be completed by the tenderer)
1	<b>Power consumption</b>		
	<p>a) The power consumption of power strips with overload protection, control lamps and an illuminated on-off switch (if present) is not to exceed 0.9 watts.</p> <p>b) The power consumption of power strips without overload protection, but with an illuminated on-off switch (if present), is not to exceed 0.7 watts.</p>	<p>Minimum criterion</p> <p>Proof of compliance via a manufacturer's declaration and/or product documentation from the manufacturer</p>	<input type="checkbox"/>

No.	Criterion	Comment	<b>Criterion met, proof of compliance submitted<sup>9</sup></b>  (to be completed by the tenderer)
	<p>c) The device is to integrate a switching threshold function.</p> <p>d) The device is to integrate a power switch that cuts off power to the device. The foregoing does not apply to power strips which, in the absence of minimum power consumption, shut off not only the peripheral devices, but also the master device and each of the various connected devices. However, such power strips are to integrate a wake-up function (via a switch or infrared receiver, for example) that restores the power supply.</p>		
<b>2</b>	<b>Material requirements concerning housing and housing component plastics</b>		
	<p>Housing plastics are not to be constructed of halogen-containing polymers such as PVC; nor are chlorine or bromide containing flame retardants to be used as additives in plastic housing components weighing more than 25 grams.</p> <p>Substances that are classified as exhibiting the following hazardous properties within the meaning of Regulation (EC) No 1272/2008 Annex VI are not to be used in plastic housing components weighing more than 25 grams.</p>	<p>Minimum criterion</p> <p>Proof of compliance via manufacturer's declaration</p>	<div data-bbox="1027 1090 1066 1130" data-label="Image"> </div>

No.	Criterion	Comment	<b>Criterion met, proof of compliance submitted<sup>9</sup></b>  (to be completed by the tenderer)
	<ul style="list-style-type: none"> <li>• Class 1A and 1B carcinogenic substances</li> <li>• Class 1A and 1B mutagenic substances</li> <li>• Class 1A and 1B reprotoxic substances</li> <li>• Substance of particular concern on any other ground pursuant to REACH Annex XIII criteria, insofar as such substance is listed in the candidate list in REACH Article 59(1).</li> </ul>		
<b>3</b>	<b>Safety requirements</b>		
	<ul style="list-style-type: none"> <li>• Auto-off power strips are to bear the CE mark, and thus comply with the following European directives:</li> <li>• 2006/95/EU Low Voltage Directive (LVD)</li> <li>• 2004/108/EU Electromagnetic Compatibility (EMC)</li> </ul>	Minimum criterion  Proof of compliance via the CE mark	<div data-bbox="1027 968 1066 1006" data-label="Image"> </div>

<sup>9</sup> Proof of compliance is to be submitted in the guise of the questionnaires in the documents listed under "Comments"

# Imprint

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**Design and Layout:**

KOMAG mbH Berlin

**Link to publication:**

[https://www.umweltbundesamt.de/en/  
document/guide-to-auto-off-power-strips-socket-  
adapters](https://www.umweltbundesamt.de/en/document/guide-to-auto-off-power-strips-socket-adapters)

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**Last updated:** 23 July 2014

