# LICENCE

**No. 16543**

Issued to:
Applicant:
**Plugwise B.V.**
**Wattstraat, 56**
**2171 TR SASSENHEIM**
**Netherlands**

Licensee:
**Plugwise B.V.**
**Wattstraat, 56**
**2171 TR SASSENHEIM**
**Netherlands**

| | | |
|---|---|---|
| Product | : | plug-in adaptors |
| Trade name(s) | : | PLUGWISE |
| Type(s)/model(s) | : | Circle, Circle+ |

The product and any acceptable variation thereto is specified in the annex to this licence and the documents therein referred to.

SGS CEBEC hereby declares that the above-mentioned product has been certified on the basis of:
- a type test according to the standard specified in annex
- an inspection of the production location
- a certification agreement with the number 1443

SGS CEBEC hereby grants the right to use the CEBEC certification mark
The CEBEC certification mark may be applied to the product as specified in this licence for the duration of the CEBEC certification agreement and under the conditions of the CEBEC certification agreement.

This licence is issued on: 24/02/2010

ir. C. Lana,
Certification Manager

005-PROD

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**SGS Belgium NV-Division SGS CEBEC**
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## SPECIFICATION OF THE CERTIFIED PRODUCT

### Product data

| | | |
|---|---|---|
| Product | : | plug-in adaptors |
| Trade name(s) | : | PLUGWISE |
| Type(s)/Model(s) | : | Circle, Circle+ |
| rated current (In) | : | 16 A |
| rated power | : | 3680 W |
| rated voltage (Un) | : | 230 Vac |
| kind of load | : | 16 A resistance<br>4 A inductive (motor) |
| method of actuating | : | ZigBee-MESH-network |
| method of disconnection | : | relay; micro gap |
| design | : | safety socket outlet (with shutters) |
| earthing | : | plug part provided with dual earthing system.<br>socket part provided with pin earthing contact |
| standard sheet | : | socket outlet : V<br>plug : VII |
| description | : | body of thermoplastic material, provided with electronis |
| markings | : | are shown on the body |

## TESTS

### Test requirements

NBN C 61-112-1:1990 + A1:1993 + A2:1995 + A3:1999 + A4:2001 + A5:2004 + A6:2007
NBN C 61-112-3:1991
NBN EN 60730-1 based on EN 60730-1:2000 + A12:2003 + A1:2004 + A13:2004 + A14:2005 + A16:2007 + A2:2008

### Test results

The test results are laid down in certification file ref.587019/01

### Remarks

This certificate is based on certificate KEMA No.: 2127769.01 and test report(s) ref. 2127769.50-QUA\DCC, 2127769.51-QUA\DCC and 2127769.52-QUA\DCC



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## Conclusion

The examination proved that all test requirements were met.

| | | |
|---|---|---|
| Checked by, project leader | : | Zanutto Luigi - 24/02/2010 |
| Department Manager, Product Certification | : | 2010-03-04 |
| Certification Manager | : | |



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**FACTORY LOCATION(S)**

Applied Micro Electronics "AME" B.V.
ESP 100,
5633 AA Eindhoven
Netherlands

Additional information :

The Circle is a basic element of the Plugwise system. It is a plug which is easily placed between the wall socket and the plug of the appliance.
The smart plug measures the energy consumption of the connected appliance and stores the data in its own memory. Additionally it can switch the appliance on and off.
Energy-consumption data are transmitted to the Plugwise software, installed on your PC via a wireless Zigbee-MESH-network.
The energy usage-data of the connected appliance are subsequently processed by the software into clear overviews and graphs. From your computer you can wirelessly switch the connected appliance on and off, either manually or automatically though pre-set switching schedules. The plug also contains a stand-by killer function.

The Circle + contains additional characteristics within the network, apart from the basic functions of the Circle.

The Circle + functions as a coordinator in the build-up of the Plugwise network. it keeps track of those Circles which are part of the network and communicates this information to the stick in the computer.

List of components :

| Component | Trade name | Type/model | Approval mark [1]) |
|---|---|---|---|
| Printed Wire Board (main) | AME | 2008<br>power meter R06 | * |
| Printed Wire Board (receiver) | AME | 2008<br>NU | * |
| Relay | Hongfa | JQX-115F<br>005-1H3A(555)<br>5Vdc / 16A-250 V | * |
| [1]) * indicates a component tested as part of the product | | | |