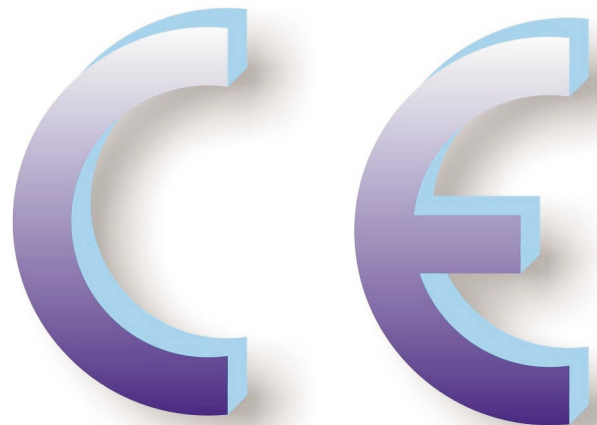




PM 92E
August 2004

Information on CE marking and on the EC Declaration of Conformity based on testing services and certificates of the VDE Testing and Certification Institute



Contents	Page
1 General Information on CE Marking as per EC Directives	2
2 Routes to CE Marking	3
3 Harmonized EC Directives (Selection)	4
4 Procedures of Conformity Assessment and Marking	5
5 Modules of Conformity Assessment	6
6 Useful information	7
7 CE Marking made easy	8
8 Statements of Conformity	9
9 EC Declaration of Conformity	10
10 Testing and Certification by the VDE Institute	11
11 Certification with VDE Certification Marks and VDE-Register-Number	12

1 General Information

General Information on CE Marking as per EC Directives



For the protection of the consumer or user, the EC Directives stipulate that products may only be brought onto the market if they comply with essential requirements of safety, health and with the essential protection objectives of electromagnetic compatibility (EMC).

Compliance with these requirements shall be assured by adequate measures in the phases of design and production.

In the frame of the new approach, compliance with the protection objectives of the EC Directives shall be confirmed by an **EC Declaration of Conformity** to be issued by the manufacturer and - in certain cases - by a **EC Declaration of Conformity** issued by a **notified body** (certification body notified to the European Union) - according to EMC Law also by the involvement of a Competent Body. These bodies must have undergone successfully and accreditation procedure for verification of their competence.

In case of products without mandatory testing, verification and documentation of conformity with EC Directives may be done by the manufacturer. Alternatively, he may entrust a neutral institute with this task.

The VDE Testing and Certification Institute (VDE Institute) was granted accreditation for its testing laboratories as well as for its certification activities and was notified for the Single Market of the European Union (EU) under the identification No. 0366. Testing is conducted according to national and international standards. Beyond that, the VDE Institute offers a variety of conformity attestations enjoying appreciation world-wide.

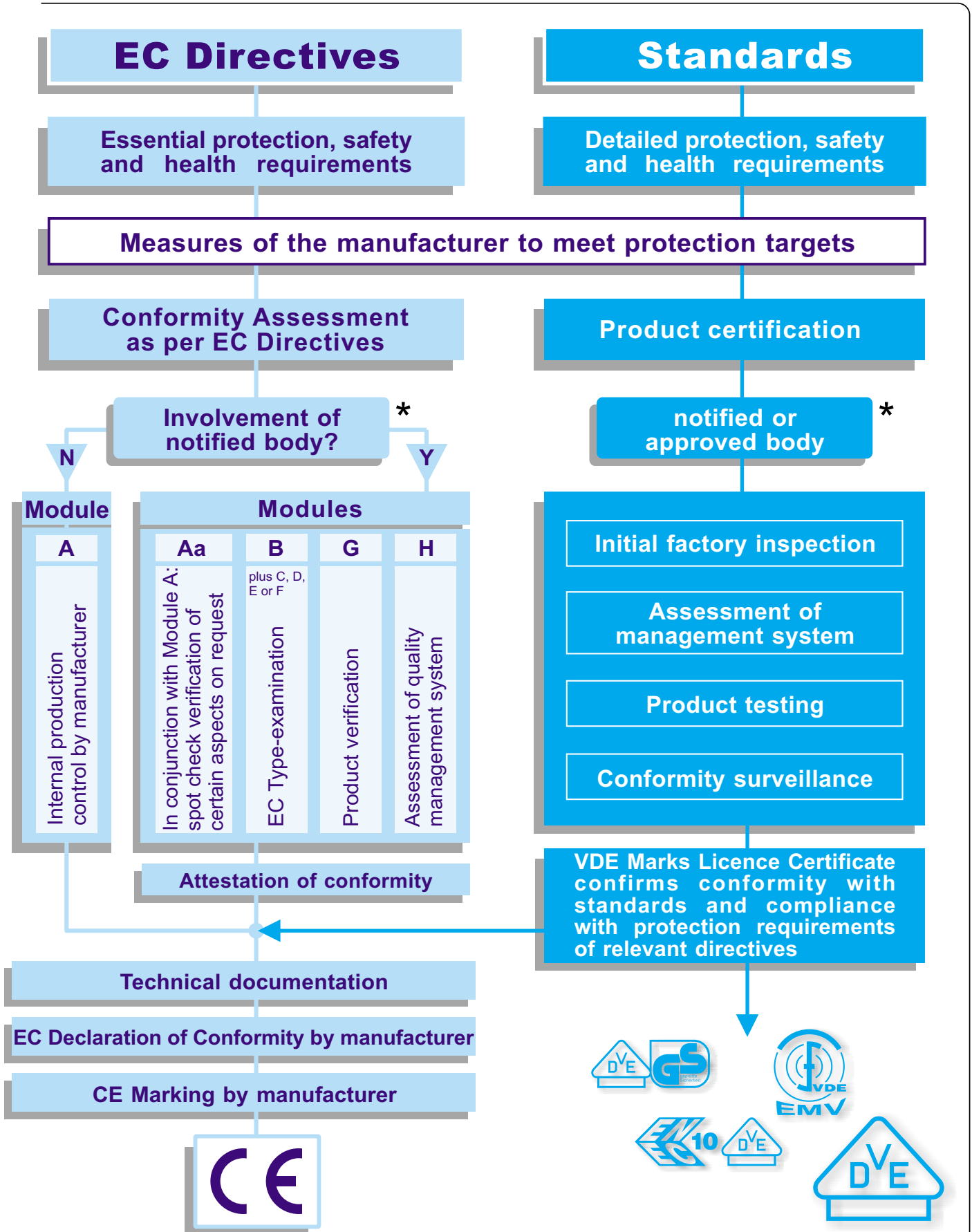
Besides the  Mark and the  Mark which can be found on a variety of electrotechnical products, conformity marks for cables and cords as well as for electronic components are equally treasured attestations of compliance with standards and directives.

These marks allow easy identification of safe and electromagnetically compatible products. The continuous validity of this statement is assured by factory and market surveillance.

Various certification schemes allow the recognition of marks license certificates and conformity attestations on national, European and international level. The confidence thus established equally serves the competitiveness on the market, the product liability and the consumer protection.

CE marking - addressed to the surveillance authorities - governs the marketing of products in the European Single Market. The VDE Certification Marks confirm compliance with harmonized standards and take their important role as competent proof of compliance with requirements of safety, quality and EMC.

2 Routes to CE Marking



* e.g. VDE Testing and Certification Institute
Notified Body = accredited independent testing and certification body according to EC Directives
Approved Body = accredited independent testing and certification body according to Appliance Safety Law

3 Harmonized EC Directives (Selection)

Since the implementation of the EU Single Market, EC Directives for safety and health as well as for electromagnetic compatibility (EMC) were released.

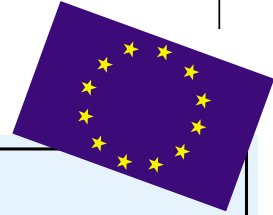
Harmonized EC Directives (Selection)

Number	Title in brief
73/23/EEC*)	Low-voltage equipment
87/404/EEC*)	Simple pressure vessels ⇒ 90/488/EEC
88/378/EEC*)	Safety of toys
89/106/EEC*)	Construction products
89/336/EEC*)	Electromagnetic compatibility
89/686/EEC*)	Personal protective equipment ⇒ 93/95/EEC ⇒ 96/58/EC
90/384/EEC*)	Non-automatic weighting equipment
90/385/EEC*)	Active implantable medical devices ⇒ 93/42/EEC
90/396/EEC*)	Appliances burning gaseous fuels
92/42/EEC*)	New hot-water boilers fired with liquid or gaseous fuels
93/42/EEC	Medical devices ⇒ 98/79/EC ⇒ 2000/70/EC
95/54/EC	Electromagnetic compatibility of motor vehicles (e marking)
98/37/EC	Machinery ⇒ 98/79/EC
1999/5/EC	Radio & Telecommunication Terminal Equipment (R&TTE)

*) amended by **Directive 93/68/EEC** of 22 July 1993 - as "this harmonization of the provisions concerning the affixing of the CE marking requires that existing Directives undergo detailed amendment to bring them into line with the new arrangements".

4 Procedures of Conformity Assessment and Marking

In the frame of the modular concept of conformity assessment of the "New Approach" Directives, various modules are applied depending on the hazard level of a product.



Harmonized EC Directives (Selection)		Applicable Modules acc. to 93/465/EEC (Conformity assessment procedure)	Marking		
Number	Title in brief		CE	Year Indication	Notified body identification
98/37/EC	Machinery	A; Aa ¹ ; B ²	X	on machine (year of manufacture)	
89/336/EEC	EMC	A ³ ; **	X		
73/23/EEC	Low-voltage Equipment	A	X	in conformity declaration	
93/42/EEC	Medical Devices	A ⁴ ; (C;D;E;H) ⁵ (H; B+C; B+D; B+E) ⁶ (H [*] ; B+C; B+D) ⁷	X		besides CE ¹²
90/385/EEC	Active Implantable Medical Devices	H [*] ; B+C; B+D	X	besides CE ¹²	
88/378/EEC	Safety of Toys	A; B ⁸	X		
89/686/EEC	Personal Protective Equ.	B+C; B+E; A ⁹	X	besides CE ¹¹	besides CE ¹²
1999/5/EC	Radio & Telecommunication Terminal Equipment	A, B ¹⁰	X		besides CE ¹³

Legend

- 1 voluntary as per Annex V
- 2 for machines and safety relevant components as per Annex IV
- 3 for production as per harmonized standards
- 4 Class I equipment
- 5 Class IIa equipment
- 6 Class IIb equipment
- 7 Class III equipment
- 8 production without or only with partial consideration of standards
- 9 for types with minor risks
- 10 in case of manufacture without or with only partial consideration of harmonized standards, involvement of a notified body is mandatory
- 11 not for simple types as per Article 8 (3)
- 12 in case of involvement of a notified body for production surveillance
- 13 in case of involvement of a notified body
- * plus EC Design-Examination Certificate by notified body
- ** in case of manufacture without or with only partial consideration of harmonized standards, involvement of a competent body is mandatory.

5 Modules of Conformity Assessment

Each conformity assessment procedure aims at compliance with relevant regulations. The prescribed control measures vary from procedure to procedure.

Module "A"

The manufacturer issues a Declaration of Conformity. Involvement of a third party such as the interference of a notified body is not required.

Module "Aa"

Same as "A", but - if required - verification of specific aspects of the product at random intervals by an independent body.

Module "B"

The manufacturer submits his product in the design phase to a notified body for EC type examination.

Module "C"

The manufacturer declares conformity with approved type. Notified body checks at random intervals.

Module "D"

After type examination, the manufacturer declares conformity with certified type and maintains an approved quality management system for production and testing.

Module "E"

After type examination, the manufacturer declares conformity with certified type and maintains an approved quality management system for inspection and testing.

Module "F"

Subsequent to type examination, the manufacturer submits his product to a notified body for type testing.

Module "G"

The manufacturer submits his product to a notified body for type testing.

Module "H"

The manufacturer declares conformity on the basis of an approved quality system for design, production and testing.

In case of Module "F" and "G", an independent body notified to the EU declares conformity by issuing a Certificate of Conformity.

6 Useful Information

is available from the following institutions:

Directives and Official Journals of the EU	Bundesanzeiger Verlagsgesellschaft mbH Amsterdamer Str. 192 50735 Köln	Tel. 0221/97668-0 Fax 0221/97668-278 http://www.bundesanzeiger.de
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National Laws and Decrees	Bundesanzeiger Verlagsgesellschaft mbH Amsterdamer Str. 192 53175 Bonn	Tel. 0228/38208-0 Fax 0221/97668-278 http://www.bundesanzeiger.de
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Standards	VDE-VERLAG GMBH Bismarckstr. 33 10625 Berlin	Tel. 030/348001-0 Fax 030/3417093 http://www.vde-verlag.de
	Beuth Verlag GmbH Burggrafenstr. 6 10787 Berlin	Tel. 030/2601-2260 Fax 030/2601-1260 http://www.beuth.de

The full text of EC Directives, lists of mandated standards etc. is available from the website of the European Union under the following address:



<http://europa.eu.int/comm/enterprise/newapproach/standardization/harmstds/reflist.html>

Others	Zentralverband Elektrotechnik und Elektronikindustrie (ZVEI) e. V. Stresemannallee 19 60596 Frankfurt	Tel. 069/6302-0 Fax 069/6302-317 http://www.zvei.org
	VDMA Verlag GmbH Lyoner Str. 18 60528 Frankfurt	Tel. 069/6603-1580 Fax 069/6603-1611 http://www.vdma-verlag.de
	Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (BAuA) Friedrich-Henkel-Weg 1-25 44149 Dortmund	Tel. 0231/9071-0 Fax 0231/9071-454 http://www.baua.de

7 CE Marking made easy

VDE-certified products moving freely on markets in Europe - and world-wide

The VDE Testing and Certification Institute in Offenbach tests and certifies products of the electrotechnical and electronic industries as per VDE standards which are in line with IEC standards and with harmonized European standards (EN). The VDE marks enjoy world-wide reputation and inspire confidence in the safety and quality of the product.

	
for equipment, components and wiring accessories	for equipment and components
for certification of conformity with the protection requirements of	
e.g. the EC Low-voltage Directive EC Directive for Machinery	the EMC Directive through conformity standards

With these marks, the manufacturer demonstrates conformity to standards in aspects relevant to safety and EMC - in certain cases even more than that. The VDE Institute has verified this as an independent institution. Furthermore, the VDE Institute makes sure that products brought on the market continue to comply with relevant requirements.

For manufacturers holding a VDE Marks Licence it is easy to show compliance with legal requirements in context with CE marking and EC Declaration of Conformity: The most comprehensive part of this duty - the verification of compliance with essential protection requirements of EC Directives as well as the compilation of the "Technical Documentation" necessary in this context - is already covered by the VDE Institute.

With the stylized sequence of letters




the manufacturer declares in his own responsibility towards national authorities that he has observed all legal provisions applicable for his product.

CE is taken as the passport for the free flow of a product in a Europe without internal borders, whereas the **VDE** Mark as well as other certification marks of the **VDE** address the end user and take care of his need for protection.

9 EC Declaration of Conformity

In addition to the VDE Marks Licence Certificate, the VDE Institute provides an EC Declaration of Conformity to the manufacturer as a basis for the CE marking of his product. Data available from the manufacturer are included in this Declaration.

Example:

EC Declaration of Conformity		
<u>Manufacturer's Name and Address:</u>		
<u>Product:</u>		
<u>Type designation:</u>		
The designated product is in conformity with the European Directive		
89/336/EEC including amendments		
"Council Directive on the approximation of the laws of the Member States relating to electromagnetic compatibility".		
Full compliance with the standards listed below proves the conformity of the designated product with the provisions of the EC Directive:		
<u>European standard</u>	<u>National standard</u>	<u>VDE classification</u>
The VDE Testing and Certification Institute, Merianstr.28, D-63069 Offenbach, has tested and certifiziert the product granting the VDE Marks Licence for the mark(s) as displayed.		
VDE Marks Licence: VDE Reference No.		
_____ (Place, Date)	_____ (Legally binding signature of the issuer)	
	Issuer's address: (if different from manufacturer)	

10 Testing and Certification by the VDE Institute

Services you can trust

The VDE Testing and Certification Institute is accredited on national and international level and notified for the EU Single Market under the EU Identification No. 0366 for the areas of testing and certification of electrotechnical equipment, components and systems. Such products are tested for safety, electromagnetic compatibility and other product characteristics.

Testing areas

- Lighting
- Electronics
- Information technology
- Industrial and medical technologies
- Appliances and systems for house and commercial use
- Installation technology
- electrical and electronic components
- Cables and cords
- Material testing
- Special testing
- EMC testing

The VDE Institute offers:

- Testing for VDE Marks Licences with subsequent periodic factory inspection and product surveillance.
- Testing for EC Type-examination Certificates
- Assessment of technical documentation in the frame of EC Directives
- Safety analyses / risk assessment
- Expertise and opinions

Support in context with EC Declaration of Conformity

Together with the VDE Marks Licence Certificate, the VDE Institute issues documents forming the basis of CE marking as well as an EC Declaration of Conformity ready for signing.





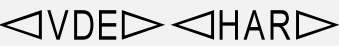





Global Service

The VDE Institute as recognized neutral and independent institution serving science and accident prevention is ready to face the increasing challenges of international testing and certification activities. Cooperation agreements with institutions in many countries around the globe allow the recognition of VDE test reports. National approvals for other countries can be obtained easily.

A mark known to consumers

66 % of the population know the VDE Mark. A further result of the recent survey is the fact that 78 % appreciate neutral safety testing. For the majority, the VDE Mark is a significant criterion for the buying decision.

11 Certification with VDE Certification Marks and VDE-Register-Number

Mark	Name	Application
	VDE Mark	Appliances as technical equipment according to the Appliance Safety Law (GSG), Medical devices according to the Medical Products Law (MPG), components and installation materials
 (for heights up to 20mm) (more than 20mm)	VDE GS Mark	Appliances as technical equipment according to the GSG
	VDE Cable Mark	Cables and insulated cords as well as conduits and ducts
 schwarz black rot red	VDE Identification Thread	Cables and insulated cords
	VDE HARmonization Marking	Cables and insulated cords acc. to the HAR certification procedure
 schwarz black (3 cm) rot red (1 cm) gelb yellow (1 cm)	VDE HARmonization Thread	Cables and insulated cords acc. to the HAR certification procedure
	VDE EMC Mark	Electrotechnical products, which comply with the standards for electromagnetic compatibility (EMC; German "EMV"; emission and immunity)
	CECC Mark	Electronic components according to CECC Specifications
	ENEC Mark of the VDE	Electrotechnical products according to the ENEC certification procedure
	VDE-Register-Nr.	VDE Certificate of Conformity in conjunction with factory surveillance for electro-technical products

