

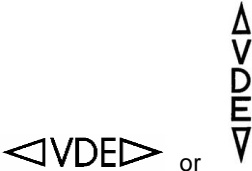

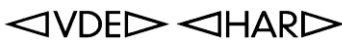










## **Certification Marks, Certificates and further services**



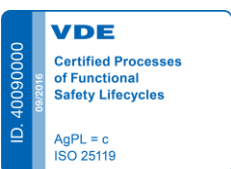
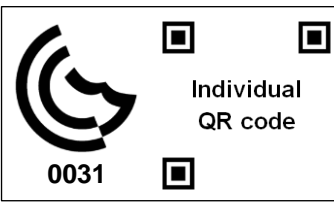
of the VDE Prüf- und Zertifizierungsinstitut GmbH  
(VDE Institute)

(For information purpose only. In any case the German version shall prevail.)

<p><b>1</b></p>	<p><b>Certification Marks including periodic monitoring</b>                  (For granting a Certification Mark the full compliance with the testing requirements based on the relevant standards, other technical specification and any legislation concerning safety and health, as well as a successful inspection of the factory are obligatory. As far as existing applicable standards shall be apply in the following order: VDE- / EN- / HD- / IEC- / CISPR standards / other technical specifications.)</p>		
<p>1.1</p>		<p><b>VDE Mark</b></p>	<p>Electrotechnical products</p>
<p>1.2</p>	 <p>(up to 20mm in height)      or      (up to 20mm in height)</p>	<p><b>VDE GS Mark</b></p>	<p>Electrotechnical products ready for use, in the sense of ProdSG                  (optional for such products instead of 1.1)</p>
<p>1.3</p>		<p><b>VDE Cable Mark (horizontal or vertical)</b></p>	<p>Cables and insulated cords as well as conduits and ducts</p>
<p>1.4</p>	 <p>Schwarz      rot</p>	<p><b>VDE Identification Thread</b></p>	<p>Cables and insulated cords</p>
<p>1.5</p>		<p><b>VDE HARmonization Marking</b></p>	<p>Cables and insulated cords according to the HAR certification procedure</p>
<p>1.6</p>	 <p>Schwarz (3 cm)      rot (1 cm)      gelb (1 cm)</p>	<p><b>VDE HARmonization Thread</b></p>	<p>(based on EN/HD standards and specifications of the HAR procedure)</p>
<p>1.7</p>		<p><b>VDE EMC Mark</b></p>	<p>Electrotechnical products complying with the standards for electromagnetic compatibility as well as on basis of a type examination certificate</p>
<p>1.8</p>		<p><b>VDE Registration Number</b></p> <p><i>Remark:</i>                  REG 1234 is an example. The actual version of the certification mark is displayed in the relevant Marks Approval.</p>	<p>Certificate of Conformity in conjunction with factory surveillance for electrotechnical products                  (according to VDE/EN/IEC standards, other technical specifications as well as possible provisions of law with respect to safety and health requirements)</p> <p> without Registration Number:                  Quality evaluation for electronic components)</p> <p>For cables and insulated cords as well as conduits and ducts</p>



1.9		<b>ENEC Mark of the VDE</b>	Products according to the ENEC certification procedure (based on EN standards and specifications of the ENEC procedure)
1.10		<b>ENEC PLUS Mark of the VDE</b>	Performance characteristics of products according to the ENEC PLUS certification procedure (based on EN standards and specifications of the ENEC PLUS procedure)
1.11		<b>IECQ CECC Mark</b>	Electronic components according to the IECQ procedure (based on IEC standards, IECQ/CECC specifications)
1.12	 038	<b>KEYMARK</b>	Performance characteristics of Heat Pumps (based on EN standards and specification of the KEYMARK procedure)

<b>2 Further Certification Marks</b> (Certificate and scope of testing are published under the ID number on the homepage of the VDE Institute.)			
2.1	 Example VDEInfo.com ID. 40090000	<b>Special Certificates</b>	Proof of special product attributes (based on relevant EU Directives, laws, standards and special specifications)
2.2	 Example VDEInfo.com ID. 40090000	<b>VDE Quality Tested</b>	Usability of electrotechnical products (includes safety, EMC and usability based on standards, laws and other technical specifications)
2.3	 Example VDEInfo.com	<b>System Certificate</b>	Certification of systems and processes (based on relevant standards, laws and special specifications)
2.4	 0031	<b>G Mark</b>	Type Examination for Low Voltage Electrical Products and Appliances in the Middle East. (based on GSO or IEC standards and specification of the GSO procedure)



<b>3 Certificates without Certification Marks</b>		
3.1	CB Test Certificate	Electrotechnical products (based on IEC standards in the IECEE CB procedure)
3.2	CCA Notification of Test Results	Electrotechnical products (auf Basis von EN-/HD-Normen)
3.3	Statement of Conformity	Statement on the conformity of electrotechnical products to determined requirements.
3.4	Factory Certificate	VDE-recognition of Factories (based on the European factory inspection procedure)
3.5	TSM-Certificate	Confirmation of the compliance with the requirements for the qualification and the organisation of enterprises for the operation of energy supply networks (based on laws, FNN Guidelines and VDE application rules)

<b>4 Attestation of Testing</b>		
4.1	VDE Expert Report	Expert testing/examination (based on VDE-/EN-/IEC-/HD-/CISPR standards and other technical specifications)
4.2	VDE Test Report for the information of the customer	Informative testing (based on VDE-/EN-/IEC-/HD-/CISPR standards and other technical specifications)
4.3	Expertise	Testing according to the requirements of the customer

<b>5 Other Services</b>		
5.1	Directive search	Identification of the European Directive(s) applicable to a product (scope of the directive; does not include references to standards)
5.2	Draft of an EU Declaration of Conformity	List of the applicable European directives and the evaluation principles used to demonstrate compliance with the protection objectives.

The marks from 1.1 to 1.8 as well as the acronym **VDE** registered as a collective mark (association mark) are registered trademarks of the VDE Verband der Elektrotechnik Elektronik Infor-mationstechnik e.V.

### Explanations

CENELEC	European Committee for Electrotechnical Standardization
CCA <sup>1)</sup>	CENELEC Certification Agreement
CISPR	International standards for electromagnetic interferences (COMITÉ INTERNATIONAL SPÉCIAL DES PERTURBATIONS RADIOÉLECTRIQUES)
EMC	Electromagnetic compatibility
EN, HD	European Norm, Harmonization Document
ENEC <sup>1)</sup>	Certification based on EN standards and specification of the ENEC procedure (EUROPEAN NORMS ELECTRICAL CERTIFICATION)
EU	European Union
GSO	Standardization Organization of the Cooperation Council for Standardization Organization of the Cooperation Council for the Arab States of the Gulf the Arab States of the Gulf
GS-Zeichen	Safety Mark according to the German Product Safety Act (ProdSG)
HAR <sup>1)</sup>	European Certification Program for HARmonized cable and cords
IEC	International Electrotechnical Commission
IECEE	IEC Certification Program for electrotechnical products
CB-Zertifikat	Certificate and Test Report of a Certification Body participating in the IEC Certification Program for electrtechnical products (IECEE)
IECQ	IEC Certification Program for electronic components, processes and related materials
KEYMARK	Mark of the European Committee for Electrotechnical Standardization (CEN)
LOVAG	Low Voltage Agreement Group
ProdSG	German Product Safety Act – Act on making products available on the market
TSM	Technical Safety Management for energy supply network

<sup>1)</sup> Further information on the European certification programs (CCA, ENEC and HAR) can be found under [www.etics.org](http://www.etics.org).

**Ref 1.3, 1.4, 1.5 and 1.6**

The following requirements are to be observed when using VDE certification marks for cables and insulated cords:

- The VDE Cable Mark resp. the VDE HARmonization Marking can alternatively be used as an imprint or stamping on a wire or the sheathing of a cable or on an insulated cord as horizontal or vertical lettering.
- The VDE HARmonization Marking is assigned to the VDE Institute in colour lengths of 3 cm black – 1 cm red – 1 cm yellow, in other colour lengths for foreign certification bodies.
- For more information we refer to the relevant notifications in the "etz Elektrotechnik + Automation".
- If the VDE Cable Mark is not applied or the VDE Identification Thread (colours black-red) can not be inserted, the mark as per 1.1 may be applied on a tag for bundle delivery and on an adhesive label for coil delivery.
- For cables and cords that bear the mark as per 1.3, 1.4, 1.5 or 1.6, the VDE Mark according to 1.1 may be used on the packaging.

**Ref 2**

For continuously manufactured products, testing can be combined with surveillance of the production. The customer then receives a "Certificate of Conformity in conjunction with factory surveillance". However, this certificate can only be issued for those products for which no approval for use of certification mark according to 1 can be granted, because

- the subject assembled product does not necessarily completely fulfil the requirements of VDE specifications, but rather only in case of a special use, e.g. as component in an appliance or
- a valid standard resp. a draft standard does not exist, or
- in case of deviations from a valid standard without impacting the safety.

For Certificates of Conformity in conjunction with factory surveillance, the same general requirements apply as for marks approvals; however, instead of a certification mark as per 1, a certification mark in the form of a VDE Registration Number is assigned. The use of one of the three illustrations is optional.

**Ref 3.3**

The VDE Institute conducts testing for attestation of conformity in the frame of accreditations and notifications on the basis of EU Directives. The testing is conducted according to the relevant annexes of the EU Directives, generally using the mandated EN standards. In case of positive test results, the customer receives the Certificate of Conformity as specified in the EU Directive, e.g. EC Type-examination Certificate. The certificate only applies to the samples of the respective product presented for testing. The Certificate of Conformity does not entitle to use a certification mark according to 1 or 2. The corresponding products may also not be identified as "tested/certified according to VDE", "tested/certified by VDE", "VDE certified", "as per VDE", "VDE approved", "according to VDE", "in compliance with VDE" or the like.

**Ref 4.1 and 4.3**

Testing can be conducted on individual samples, models, mass-produced or not mass-produced products, machines or installations. In case of positive test results, the customer receives the Certificate of Conformity. The certificate of conformity only applies to the samples of the respective product presented for testing. It does not represent a generally applicable judgment concerning the attributes of these products from continuous manufacture.

Attestations of testing are given by the VDE Institute if deemed possible on the basis of testing according to annexes of respective EU Directives and their implementation into national law, VDE Specifications, DIN Standards, European Norms, IEC Publications, foreign test specifications, technical terms of delivery or the like. A certificate of conformity contains the results of the complete test according to the respective underlying test specifications.

In the case of expertise, the results may be limited to certain aspects of the underlying test specifications or other basis for the assessment to the extent sufficient for the clarification of the issue for which the expertise is requested.

These kinds of attestation do not entitle to use a VDE Certification Mark, a VDE Registration Number or other VDE Certification Marks. The corresponding products may also not be identified as "tested/certified according to VDE", "tested/certified by VDE", "VDE certified", "as per VDE", "VDE approved", "according to VDE", "in compliance with VDE" or the like.

**Ref 4.2**

The VDE Institute conducts tests if deemed possible and - if necessary - under limitation to individual clauses of VDE Specifications or other generally recognized rules of technology or according to test specifications provided by the customer. The results of such tests are presented as a "VDE Test Report for the information of the customer". This document does not entitle to use a VDE Certification Mark, a VDE Registration Number or other VDE Certification Marks. The corresponding products may also not be identified as "tested/certified according to VDE", "tested/certified by VDE", "VDE certified", "as per VDE", "VDE approved", "according to VDE", "in compliance with VDE" or similar.