

**PUBLICLY
AVAILABLE
SPECIFICATION**

**IEC
PAS 60099-7**

First edition
2004-04

Surge arresters –

**Part 7:
Glossary of terms and definitions
from IEC publications 60099-1, 60099-4,
60099-6, 61643-1, 61643-12, 61643-21,
61643-311, 61643-321, 61643-331
and 61643-341**

© IEC 2004 — Copyright - all rights reserved

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Electrotechnical Commission, 3, rue de Varembé, PO Box 131, CH-1211 Geneva 20, Switzerland
Telephone: +41 22 919 02 11 Telefax: +41 22 919 03 00 E-mail: inmail@iec.ch Web: www.iec.ch



Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

PRICE CODE **XA**

For price, see current catalogue

CONTENTS

FOREWORD.....	3
1 Scope	4
2 Surge arresters – Non-linear resistor type gapped surge arresters for a.c. systems (IEC 60099-1:1991+A1:1999).....	4
3 Surge arresters – Metal-oxide surge arresters without gaps for a.c. systems (IEC 60099-4:1991+A1:1998+A2:2001).....	9
4 Surge protective devices connected to low-voltage power distribution systems – Performance requirements and testing methods (IEC 61643-1:1998+A1:2001).....	16
5 Low-voltage surge protective devices – Surge protective devices connected to telecommunications and signalling networks – Performance requirements and testing methods (IEC 61643-21:2000)	21
6 Components for low-voltage surge protective devices – Specification for gas discharge tubes (GDT) (IEC 61643-311:2001).....	24
7 Components for low-voltage surge protective devices – Specifications for avalanche breakdown diode (ABD) (IEC 61643-321:2001).....	26
8 Components for low-voltage surge protective devices – Specification for metal oxide varistors (MOV) (IEC 61643-331:2001)	28
9 Components for low-voltage surge protective devices – Specification for thyristor surge suppressors (TSS) (IEC 61643-341:2003).....	30
10 Low-voltage surge protective devices – Surge protective devices connected to low-voltage power distribution systems – Selection and application principles (IEC 61643-12:2002)	40
11 Surge arresters – Surge arresters containing both series and parallel gapped structures – Rated 52 kV and less (IEC 60099-6:2002).....	46

INTERNATIONAL ELECTROTECHNICAL COMMISSION

SURGE ARRESTERS –**Part 7: Glossary of terms and definitions from IEC publications
60099-1, 60099-4, 60099-6, 61643-1, 61643-12, 61643-21,
61643-311, 61643-321, 61643-331 and 61643-341**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with an IEC Publication.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

A PAS is a technical specification not fulfilling the requirements for a standard but made available to the public.

IEC-PAS 60099-7 has been processed by IEC technical committee 37: Surge arresters.

The text of this PAS is based on the following document:

This PAS was approved for publication by the P-members of the committee concerned as indicated in the following document

Draft PAS	Report on voting
37/291/NP	37/296/RVN

This PAS shall remain valid for an initial maximum period of three years starting from 2004-05. The validity may be extended for a single three-year period, following which it shall be revised to become another type of normative document or shall be withdrawn.

SURGE ARRESTERS –
Part 7: Glossary of terms and definitions from IEC publications
60099-1, 60099-4, 60099-6, 61643-1, 61643-12, 61643-21,
61643-311, 61643-321, 61643-331 and 61643-341

1 Scope

This PAS compiles a list of terms and definitions relative to IEC publications from IEC technical committee 37: Surge arresters, and subcommittees 37A: Surge protective devices, and 37B: Surge protective components, current at the date of this publication.