AS 1018-1970 UDC 621.3.082.77

Australian Standard 1018–1970

DOIATION

22 DEC 1070 MELBOURNE LIBRARY

RECOMMENDATIONS FOR PARTIAL DISCHARGE MEASUREMENTS

1985

METRIC UNITS



STANDARDS

STANDARDS ASSOCIATION OF AUSTRALIA

1.60

THE FOLLOWING SCIENTIFIC, INDUSTRIAL AND GOVERNMENTAL ORGANIZATIONS were officially represented on the committee entrusted with the preparation of this standard:

Associated Chambers of Manufactures of Australia

Australian-British Trade Association

Australian and New Zealand Railways Conferences

Electricity Supply Association of Australia

The Institution of Engineers, Australia

This standard, prepared by Committee EL/7 Power Switchgear, was approved on behalf of the Council of the Standards Association of Australia on 7 September 1970.

In order to keep abreast of progress in the industries concerned Australian standards are subject to periodical review. Suggestions for improvements, addressed to the head office of the Association, will be welcomed. AUSTRALIAN STANDARD

RECOMMENDATIONS FOR PARTIAL DISCHARGE MEASUREMENTS

AS 1018-1970

First published 1970

Registered in Australia for transmission by post as a book.

PUBLISHED BY THE STANDARDS ASSOCIATION OF AUSTRALIA STANDARDS HOUSE, 80 ARTHUR ST., NTH SYDNEY, N.S.W. (Copyright)

PREFACE

The preparation of this standard was undertaken by a subcommittee of the Committee on Power Switchgear.

This standard is substantially in agreement with IEC Publication 270, Partial Discharge Measurements, which has been amended by additions considered necessary, by editorial actions not involving change of basic meanings and by renumbering and rearrangement of clauses to conform with the format of Australian standards.

The standard describes recommended methods of measurement of partial discharges and is intended principally as a guide for use in the preparation of the relevant standard specifications for particular types of equipment.

In the application of this standard, reference to the following standards may be necessary:

AS C328 High Voltage Testing Techniques

AS C348 Part 1 Specification for CISPR Radio Interference Measuring Apparatus for the Frequency Range of 0.15 MHz to 30 MHz

CISPR Publication 1A: First Supplement to CISPR Publication 1.

This Australian standard is one of a series in which the requirements are expressed solely in metric units. Certain new metric standards, including revised standards formerly expressed in imperial units, are identified by a four-digit reference without a prefix letter.

CONTENTS

•

						÷	•			Page
Forewo	RD	••	••	••	••	••	••	• •	••	-4
Section	1. Scope, 1	Purpos	e and	Defini	TIONS					
1.1	Scope			••	••	••	••		••	5
1.2	Purpose	••	••	••	••	••	••	••	• • -	5
1.3	Definitions		••	••	••	••	••	••	••	5
Section 2. Test Circuits and Measuring Instruments										
2.1	General Re									8
2.2	Test Circui	•					••			8
2.3	Measuring		nents				,		•••	9
2.4	0			of Dete	ction	••	• •		•••	10
0							4			,
	3. CALIBR/	ATION A	ND CF	IECKING	3					
3.1	General	••	••	1,1 A 4	• •		••	••	••	12
· 3.2										
3.3	Calibration ment		Instru	iment i	n the (Comple	te Test	Arran	ge-	13
3.4			••	••	••	••	•• '	••	••	14
J.1	Disturbanc		••	••	••	••	••	••	••	14
SECTION	4. Tests									
4.1		-				••	••	••	••	16
4.2		-		•		••	••	••	••	16
4.3	1				age	••	••	••	••	16
4.4	Choice of 7	Fest Pr	ocedui	e	••	••	••	••	••	16
4.5	Measureme	ents on	Test (Object [•]	with W	'inding	8		••	18
4.6	Measureme	ents on	Large	Power	Capac	itors	••		••	18
APPEND	ICES									
Α	Test Circuit	\$								[^] 19
B	Summary of		iring T	nstrum	ents an	id Metl	hods		•••	23
Ċ	Measuremer		-		•					24
D	The Use of			•		-				
2	Partial							·		25
Ε	Minimum N		-	antitie	s	••	••		••	27
F	Methods for Measurement of Partial Discharge Power 28									
G	Corona Disc						••	••	••	31
н	Partial Dis	-				ing Te	sts wi	th Di	rect	
	Voltage		••	••	••		••	••	••	.32



This is a free preview. Purchase the entire publication at the link below:

Product Page

S Looking for additional Standards? Visit Intertek Inform Infostore

> Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation