SWITCHBOARD MEASURING INSTRUMENTS FOR CONTINUOUS AND POLYPHASE SYSTEMS

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649517343

Switchboard Measuring Instruments for Continuous and Polyphase Systems by $\,$ John C. Connan

Except for use in any review, the reproduction or utilisation of this work in whole or in part in any form by any electronic, mechanical or other means, now known or hereafter invented, including xerography, photocopying and recording, or in any information storage or retrieval system, is forbidden without the permission of the publisher, Trieste Publishing Pty Ltd, PO Box 1576 Collingwood, Victoria 3066 Australia.

All rights reserved.

Edited by Trieste Publishing Pty Ltd. Cover @ 2017

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

www.triestepublishing.com

JOHN C. CONNAN

SWITCHBOARD MEASURING INSTRUMENTS FOR CONTINUOUS AND POLYPHASE SYSTEMS



SWITCHBOARD MEASURING INSTRUMENTS

SWITCHBOARD MEASURING INSTRUMENTS

FOR

Continuous and Polyphase Systems

BY

JOHN C: CONNAN



Tondon

E. & F. N. SPON, LIMITED, 57 HAYMARKET

SPON & CHAMBERLAIN, 123 LIBERTY STREET

1908

2 2 2 - 5

PREFACE.

THE object of the following pages is to supply, what has long been felt by those most interested in the subject of electrical instruments, the need of a short volume dealing with the design and construction of this type of apparatus. Their substance, as may be seen from the Appendix, has been collected from numerous reviews, magazines, and papers read before various learned societies; and is arranged in a form which, it is hoped, may prove to be concise, convenient, and easily intelligible. In the descriptions of the various instruments, as much of the details of construction as have been thought necessary to a correct understanding of the subject, have been given. But exact information of any particular make, has, as far as possible, been avoided; such figures as there are, may be taken as representing average practice.

My thanks are due to Prof. S. P. THOMPSON, D.Sc. F.R.S., for his kindly encouragement and help; to Dr. DRYSDALE, D.Sc., for much information and assistance; and to Mr. HOWGRAVE-GRAHAM for suggested alterations and improvements and for kindly looking through the sheets.

I have further to thank the numerous manufacturers whose names appear in the text or on the blocks, for their kindness in supplying me with particular information on, and illustrations of, the various instruments of their manufacture.

LONDON, March, 1908.

CONTENTS.

ŀ

7

CHAPTER									PAGE
I,	DEFINITIONS OF	TERMS	AND	PRI	NCIPI	ES O	F C	oN-	
	STRUCTION		1		8			•	1
II.	REMARKS ON MA				ion .	AND (CHAR	AC-	8
	TRRISTICS OF	VARIOUS	FARI		755	58	800	39	9
III.	TYPE A INSTRUM		AGNET	o-Dy	NAMI	c Pr	INCIP	LE,	
	MOVING COIL	System	5.0	32	355	V.S	55	α	38
IV.	Type B, Instruk	MENTS: E	LECTE	o-Dy	MAM	ic Pr	INCIP	LE,	
	MOVING COIL	System	\$0	8	33	ŧ.		4	51
v.	Type B. Instru	MENTS: E	LECTR	o-Dy	NAMI	c Pr	INCIP	LE,	
	INDUCTION SY	STEM, SI	HIFTIN	c Fi	ELD (LASS	16.5	19	80
VI.	TYPE B. INSTRUM	ENTS : E	LECTR	o-Dy	NAM	c Pr	INCLE	LE,	
	INDUCTION SY	erem, Ro	TATIN	G F	ELD	CLASS	•	٠	97
VII.	TYPE C INSTRUM	ENTS: E	LECTRO	-MA	GNET	ic Pr	INCIP	ι.E,	
	MOVING IRON	System	•	35		1	37	3	105
VIII.	TYPE D INSTRU	MENTS:	FLECT	ROTH	ERMI	c Pr	INCIE	LE,	
	HOT WIRE SY	STEM ·	•	58	. *(\$6			119
IX.	TYPE E INSTRU	MENTS:	ELEC	TROS	TATIO	PR	INCIP	LE,	
	MOVING VANE	SYSTEM			*	100	•		127
X.	TYPE F INSTRUM	ENTS: RE	SONA	ICE P	RINC	IPLE,	Vibr	AT-	
	ING REED SYS	STEM .	•	٠		<u>.</u>		37	1 35
APPE	NDIX	. 8	28	10	<u>.</u>	23	7.50		141
	10.70.0370 (I	103							OFFICE AND A
****	**								

. . 35 2.3 .52 28