

1 INTRODUCTION

The relay is a well known and widely used component. Applications range from classic panel built control systems to modern interfaces between control microprocessors and their power circuits or any application where reliable galvanic separation is required between different circuits.

Although considered to be a relatively simple component, the electromechanical relay and its technology is complex and often misunderstood.

The reason for this is that relay technology is not restricted to a single type of engineering discipline such as electrical engineering. It is a component which, almost unlike any other, embraces many different aspects of engineering technology and displays complex and highly inter-related electrical, chemical and mechanical effects.

Advanced technologies used in modern applications has led to increased requirements for the relays' specification and the need for a wider knowledge of it as a component.

The correct selection and application of the modern relay requires more and more specific information and technical knowledge to ensure that the relay selected for an application will meet all requirements.

Application data and the information given in the relay catalogue may no longer be sufficient to make the correct choice.

This book contains the knowledge of the expert - the relay manufacturer, and gives a detailed insight into the relay as a component.

It gives essential information to the relay user, design engineer and technician. In it you will find technical information on the main subsystems found within the relay. The contact, magnetic, and mechanical systems as well as the important interrelated electrical, mechanical and chemical effects are explained in greater detail than found in data sheets.

It provides the necessary technical information to enable you to specify the right relay for the job. The operational and functional parameters of the relay are explained in detail.

Application advice regarding the contact and magnetic systems will help you avoid known pitfalls in certain relay applications.

Check-lists throughout and at the end of this book give extra help in selecting the right relay.

POWER RELAYS

General information on handling, production procedures, quality and International Standards complete the book.

Used as a reference, this book will give you the necessary information to select the correct relay and find the optimum technical solution for your specific application.