

# IEC TR 63358-1

Edition 1.0 2023-02

# TECHNICAL REPORT



Graphical symbols for diagrams – Part 1: General, qualifying and generic symbols

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ICS 01.080.10 ISBN 978-2-8322-6436-2

Warning! Make sure that you obtained this publication from an authorized distributor.

## CONTENTS

FO	REW	DRD	3
INT	ROD	UCTION	5
1	Sco	pe	6
2	Normative references		
3	Terms and definitions		
4	Clas	sification of graphical symbols	7
4	1.1	General symbols	7
4	1.2	Qualifying symbols	20
4	1.3	Generic symbols for common use	40
Bib	liogra	phy	46
Fig	ure 1	– Relationship among types of graphical symbols for diagrams	5
Tab	le 1 -	- Examples of general symbols applicable in all domains	7
Tab	le 2 -	- Examples of applicable general symbols specific to binary logic elements	17
Tab	le 3 -	- Examples of qualifying symbols	20
Tab	le 4 -	- Examples of generic symbols	41

#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

#### **GRAPHICAL SYMBOLS FOR DIAGRAMS -**

#### Part 1: General, qualifying and generic symbols

#### **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 itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 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.

IEC TR 63358-1 has been prepared by IEC technical committee 3: Documentation, graphical symbols and representations of technical information. It is a Technical Report.

The text of this Technical Report is based on the following documents:

Draft	Report on voting
3/1488/DTR	3/1539/RVDTR

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this Technical Report is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at <a href="https://www.iec.ch/members\_experts/refdocs">www.iec.ch/members\_experts/refdocs</a>. The main document types developed by IEC are described in greater detail at <a href="https://www.iec.ch/standardsdev/publications">www.iec.ch/standardsdev/publications</a>.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- · withdrawn,
- replaced by a revised edition, or
- amended.

IMPORTANT – The "colour inside" logo on the cover page of this document indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

#### INTRODUCTION

Initial work was done by TC 3 Maintenance Team 60617 with the aim to clarify the terminology used in the naming of some of the graphical symbols for diagrams standardized in IEC 60617. This document also highlights improved naming of some graphical symbols categorized according to the concepts of generic symbol, general symbol and qualifying symbol, where the symbol "name" is recognized as giving a short description of the meaning of the graphical symbol for diagrams. Figure 1 provides the relationship among types of graphical symbols for diagrams.

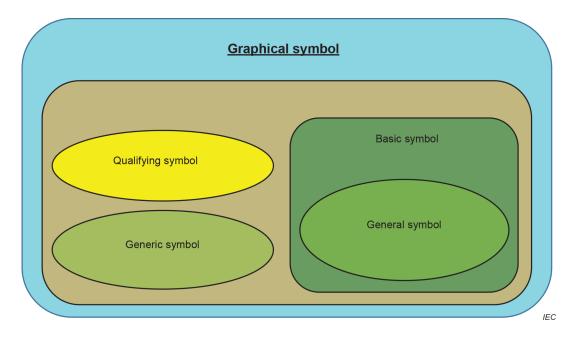


Figure 1 - Relationship among types of graphical symbols for diagrams

#### **GRAPHICAL SYMBOLS FOR DIAGRAMS -**

### Part 1: General, qualifying and generic symbols

#### 1 Scope

This document contains, by way of example, a collection of generic symbols, general symbols and qualifying symbols for diagrams taken from IEC 60617. Some of the wording of entries in the IEC 60617 database are annotated and/or modified for the purpose of clarification. Existing symbols in the IEC 60617 database are classified according to the classification proposed in this document.

#### 2 Normative references

There are no normative references in this document.