

THE ENGINEERING EQUIPMENT AND MATERIALS USERS' ASSOCIATION

Electrical Safety of Instruments, Instrument/ Control Panels and Control Systems

A Design Guide

PUBLICATION 178

Edition 2

Copyright © 2009 The Engineering Equipment and Materials Users' Association
A company limited by guarantee. Registered in England. Company number 477838.

ISBN 0 85931 167 8

Imprint reference 02-2009

Registered and Trading Address
10-12 Lovat Lane London EC3R 8DN
Telephone: +44 (0)20 7621 0011
Fax: +44 (0)20 7621 0022
E-mail: sales@eemua.org
Website: www.eemua.org



[This is a preview. Click here to purchase the full publication.](#)

ENGINEERING EQUIPMENT AND MATERIALS USERS' ASSOCIATION

The Engineering Equipment and Materials Users' Association, more commonly known as EEMUA, is a European non-profit membership Association helping companies that own or operate industrial facilities - the *users* of engineering equipment and materials.

EEMUA aims to improve the safety, environmental and operating performance of industrial facilities in the most cost-effective way, thereby demonstrating and pursuing leadership in asset management.

EEMUA Members pursue these aims through collaboration for mutual benefit, sharing engineering experiences and expertise and by promoting their distinct interests as the users of engineering products.

Specifically, the aims of EEMUA Member companies are achieved by:

- providing the organisation within which networking, information sharing and collaboration on non-competitive technical matters can take place;
- influencing the way written regulations are interpreted and applied in practice;
- presenting and promoting Members' views, and encouraging the application of good, sound engineering practices;
- developing user guides, specifications, training and competency schemes;
- facilitating Members' participation in national and international standards making;
- influencing relevant national and European legislation and regulations.

Formed in 1949 as the Engineering Equipment Users Association, and re-named in 1983 (as a result of taking over the materials association, OCMA), EEMUA has for more than fifty years given companies that own and operate process plants, power stations and other significant industrial facilities, a collaborative voice in addressing technical and engineering related issues that impact on good integrity management and asset management practices. The Association is open to companies of all sizes that meet its 'engineering user' criteria. Further details of current Members of EEMUA is available on the Association's website, www.eemua.org.

EEMUA activities often lead to the production of publications. These are prepared for Members' use and are often offered for sale as well.

A list of EEMUA publications for sale is given at the end of this Publication. The full list is also on the Association's website, including details of on-line shopping facilities.

To enquire about corporate Membership, write to enquiries@eemua.org or call +44 (0)20 7621 0011.

ABOUT THIS PUBLICATION

Legal Aspects

All rights, title and interest in this Publication shall belong to EEMUA. All rights are reserved. No part of this Publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means: electronic, mechanical, photocopying, recording or other, without the express prior written agreement of the EEMUA Executive Director.

Infringement of copyright is illegal and also reduces the Association's income thereby jeopardising its ability to fund the production of future publications.

It has been assumed in the preparation of this Publication that: the user will ensure selection of those parts of its contents appropriate to the intended application; and that such selection and application will be correctly carried out by appropriately qualified and competent persons for whose guidance this Publication has been prepared. EEMUA and the individual members of the Work Group that prepared this EEMUA Publication do not, and indeed cannot, make any representation or give any warranty or guarantee in connection with material contained herein. EEMUA and the individual members of the Work Group that prepared this EEMUA Publication expressly disclaim any liability or responsibility for damage or loss resulting from the use or reliance on this Publication. Any recommendations contained herein are based on the most authoritative information available at the time of writing and on current good engineering practice, but it is essential for the user to take account of pertinent subsequent developments and/or legislation.

Any person who encounters an inaccuracy or ambiguity when making use of this Publication is asked to notify EEMUA without delay so that the matter may be investigated and appropriate action taken.

Consultation and Feedback

EEMUA encourages constructive comments on this Publication from both Members of the Association and others.

Comments should be sent on the standard feedback form, a copy of which is provided towards the end of this Publication. An electronic version of the feedback form is available from EEMUA - e-mail your request for a copy to enquiries@eemua.org, telephone your request to +44 (0)20 7621 0011, or download the form from the EEMUA website at www.eemua.org. Submit comments by e-mail (preferred) or post.

Comments will be considered by the relevant EEMUA Technical Committee and may be incorporated in future editions of this Publication. New editions will be publicised on the EEMUA website.

