



Low Voltage Systems

Safety Rules ■

LV Safety Instructions ■

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FOREWORD

Quartzelec Ltd provide a wide range of services to owners of low voltage electro - mechanical systems and equipment. The safe and effective delivery of these services requires the application of a robust safety management system and safe system of work. The Safety Rules and Procedures within this handbook are designed to provide an effective and flexible approach to the provision of safety management and the safe systems of work required to meet the needs of all client interfaces.

The Quartzelec Ltd Safety Rules - Low Voltage Systems, authorised by the Managing Director Quartzelec Ltd, and approved by a committee of Managers of Business Units and Health & Safety specialists, are to ensure that persons working on the Customer electro - mechanical systems and equipment to which these Safety Rules apply are safeguarded from hazards arising from those electro-mechanical systems.

These Safety Rules and Procedures once formally adopted and implemented by a Quartzelec Ltd Business Unit will become mandatory. They are made up of a series of documents relating to the safety precautions and procedures to be used covering various LV working situations. The application of the Safety Rules and Procedures are supported by LV Safety Instructions, Health & Safety Procedures, and where necessary specialised procedures and guidance documents.

A copy of the Quartzelec Ltd Safety Rules - Low Voltage Systems shall be made available to all persons concerned with working on LV Systems or LV Installations and associated equipment for which Quartzelec Ltd has responsibility.

It is the duty of all persons who may be concerned with control, preparation and carrying out of work on electro-mechanical systems to which these Safety Rules and Procedures apply, to make themselves thoroughly familiar with them and the appropriate support documents. In addition, all such persons have a general duty to be conversant with, and have due regard to the statutory requirements relating to and governing any activities with which they have an involvement.

ISSUE AUTHORITY

D. Laval Managing Director Quartzelec Ltd

SPECIFIED MEANINGS

Shall

Where 'shall' is used in these rules with no qualification, this indicates a mandatory requirement with no discretion permitted and no judgement to be made.

Shall, where practicable

Where 'shall' is qualified only by the word 'practicable', a slightly less strict standard is imposed. It means that where it is possible to achieve in the light of current knowledge and invention, but bearing in mind the hazards associated with work to be undertaken, then the requirement must be met. One is not allowed to avoid the requirement on the grounds of difficulty, inconvenience or cost.

Shall where reasonably practicable

Where 'shall, where reasonably practicable' is used to qualify a requirement then a judgement must be made as to what is reasonable, taking into account the magnitude of the risk on the one hand and the cost, time and trouble, or effort necessary for averting the risk on the other hand.

Bold Type

Where words or terms appear in bold type in this Safety Rules Handbook - Low Voltage Systems their meaning as defined in Section 7 – Definitions shall be applied.

POLICY

The Health and Safety at Work etc Act 1974 and other legislation require Quartzelec Ltd to provide safe places of work and Safe Systems of Work. The Quartzelec Ltd Safety Rules - Low Voltage Systems, associated Procedures and Safety Instructions form part of such a safe system of work for work on Customer Low Voltage electro-mechanical systems and equipment.

These Safety Rules and Procedures are not sufficient on their own to provide a complete safe system of work; rather they address safety of the individual from hazards inherent within the electro-mechanical systems. Additional precautions will be required in any specific situation to address danger arising from the working environment and not associated with the electro-mechanical system. Such precautions should be arrived at following an assessment of the risks in any particular circumstance

The Person in charge of the various stages of the work or activity shall have the appropriate competence and authority and shall understand the Quartzelec Ltd Safety Rules - Low Voltage Systems, related documents and procedures, the methods of work and any local instructions. Such Persons shall understand the Dangers that might arise and the precautions to be taken over the whole period of the work or activity.

All Persons at work will be adequately instructed, supervised and competent to avoid Danger, according to the circumstances of the work they are doing.

Employees, whilst at work, are required to take all reasonable care to avoid injury to themselves and others by their work activities and to cooperate with Quartzelec Ltd in meeting statutory requirements. This includes complying with these Safety Rules and Procedures.

SECTION 1

LV SAFETY MANAGEMENT SYSTEMS AND SAFE SYSTEMS OF WORK

1.1 Determination of the LV Safe System of Work

1.1.2 Unless otherwise instructed, all operations, work on or testing of **Customer LV Systems** Installations or **Equipment** by Quartzelec Ltd employees shall be carried out in accordance with the Quartzelec Ltd Safety Rules - Low Voltage Systems and associated Procedures.

1.1.3 Some prospective **Customers**, e.g. Distribution Network Operators, power stations, oil refineries and manufacturers already have their own defined safety management systems and safe systems of work in place. It is permissible in these situations for Quartzelec Ltd employees to be inducted by the **Customer** and in some cases authorised by the **Customer** under their 'safety rules and procedures'. It must be realised however that Quartzelec Ltd still has a duty of care for their employees and must ensure that the **Customer's** 'safety rules and procedures' are adequate for the work undertaken. In all cases where the Quartzelec Ltd Safety Rules - Low Voltage Systems and associated Procedures are NOT the agreed safe system of work the following actions shall be taken:

- (i) A suitably experienced Quartzelec Ltd **Authorised Person** shall be nominated as being responsible for the determination of the safe system of work with the **Customer**.
- (ii) The safe system of work and associated safety rules and procedures to be used shall be formally agreed between Quartzelec Ltd and the **Customer**.
- (iii) Controlled copies of all relevant safety rules, procedures etc shall be issued to Quartzelec Ltd by the **Customer**.
- (iv) Prior to the commencement of works, all Quartzelec Ltd employees who are required to operate, carry out work on or test the **Customer's LV System**, Installation or **Equipment** shall be inducted, authorised or suitably familiarised with the **Customers LV** safe system of work.
- (v) A record shall be kept detailing all inductions, authorisations or familiarisations completed.

1.1.4 The Quartzelec Ltd Safety Rules - Low Voltage Systems and associated Procedures are intended to be the basis on which all work on **Customer LV Systems** by all Quartzelec Ltd employees is carried out. It is a requirement therefore that the **Customer's** 'safety rules and procedures,' are at least equivalent to these.

1.1.5 There may be **Customers**, (asset owners), who require Quartzelec Ltd to act as a delegated Duty Holder of their **LV System**. In such cases Quartzelec Ltd and the **Customer** shall establish the Safety Management System to be used together with the various duties and responsibilities of the nominated individuals.

1.1.6 There may be **Customers**, (asset owners), who require Quartzelec Ltd, as the delegated Duty holder of their **LV System**, to provide **Isolation** of part of their **LV System** to allow other Contractors to work under the Contractor's own safe system of work. In these situations Quartzelec Ltd can provide an Isolation Certificate to the Contractor.

1.1.7 There may be **Customers**, (asset owners), who due to their own safety management system do not allow Contractors or **LV Service Providers** to operate or switch on their **LV System**. In such circumstances when Quartzelec Ltd has works to complete, Quartzelec Ltd can allow the **Customer** to provide the necessary **Isolation** prior to the commencement of works. **Isolations** and other safety precautions can be documented on the Quartzelec Ltd LV Isolation Certificate. All works can then be carried out under Quartzelec Ltd Safety Rules - Low Voltage Systems and associated Procedures.

1.2 LV Operational Safety Management

1.2.1 For all major works or contracts an **Authorised Person** shall be appointed, with responsibility for the supervision of the installation of switchgear, **Equipment**, cables, jointing, etc. throughout the period of the works or contract. The **Authorised Person** shall also have responsibility for the safe working of Quartzelec Ltd employees as well the control of agency staff and any appointed sub-contractors.

1.2.2 The **Authorised Person** can delegate responsibility for particular installation works to the leaders of Quartzelec Ltd working parties or other **Competent Persons** having the required Quartzelec Ltd work authorisation/s. The extent of all such works and delegated responsibilities shall be discussed in detail between the **Authorised Person** and the delegated **Person** and described within the appropriate Quartzelec Ltd job instruction.

1.2.3 For all other works a **Competent Person** with the appropriate Quartzelec Ltd work authorisation/s will be nominated as the leader of the working party.