

# ProtectionDB

**Flexible User-customisable  
Protection Database with all  
the data fields you need!**

## ***ProtectionDB - For Windows XP / Vista & 7.0***

Designed to meet the needs of protection design and maintenance staff and operating personnel in factories, heavy industries, power stations and electrical utilities. Available initially as a stand alone PS-based application or, optionally integrated with Datashares “**ViewNet**” Single-line Diagram and / or “**RELCORD**” protection coordination software.

### ***Flexible Design***

Instead of restricting users to a fixed data format and requiring all types of protection devices to be fitted into this format ... with ProtectionDB the user organisation can decide for themselves just what they will store – and still make changes later, if they find they need to!

### ***Full History Maintained***

Setting ‘ON’ an option for automatic logging will cause all changes made to protection settings – as well as other assets details – to be automatically added to the history files, ensuring a full history of each device is always maintained

### ***Protection Setting Instructions***

Protection setting instructions (PSI's) are created from within the database, with direct access to the details of the device and related assets (C.T.s, V.T.s etc) from the database. The PST's are also stored in the database and facilities are provided for the management of the settings change process.

### ***Related Assets Details***

Details of related assets can also be stored in the database e.f. C.T.s, V.T.s., circuit breakers, transformers, motors etc. “ProtectionDB” also enables the user to associate (link) protection devices with these other assets for ease of access to them, and to link to other relevant information about, for example, the protected circuit, or to location details about the device (Substation, control panels, etc)

(e.g. makes, manuals, schematic drawings, local instructions, propriety settings files, fault files etc.).

### ***Two Standard modules***

Two software modules are supplied to separate the functionality needed by the general user from that needed for the configuration and management of the system.

#### ***User Module***

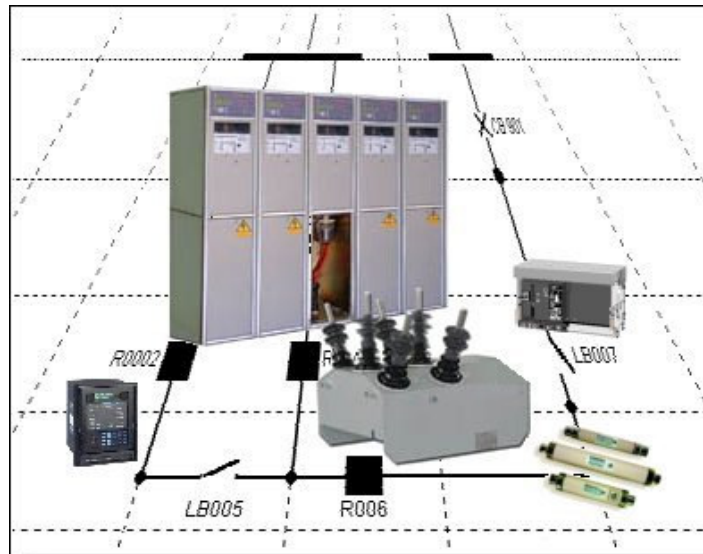
For general users who need to view and, if authorised

changedata; to add and delete protection devices to/from the database; and to define links between devices and other equipment. A variety of printed reports can be output.

#### ***Administration Module***

Used to configure the system and customise it for the organisations own requirements. It is also used to define or modify device templates and attribute sets, etc. The

administration module is also used to perform administrative tasks such as archiving and purging of records etc.



### ***Integrated access to all Protection information***

All information relating to the protection device can be stored and accessed via “ProtectionDB”

## Product Specification

### Application

**ProtectionDB** is designed to meet the needs of Electrical Utilities, Power stations, Mines and other Heavy Industry and manufacturing companies where electrical staff have responsibilities for the management of protection systems.

It is especially useful where, as part of their responsibilities, they need to have up-to date records of present protection device settings and to maintain an audit trail of changes made over time.

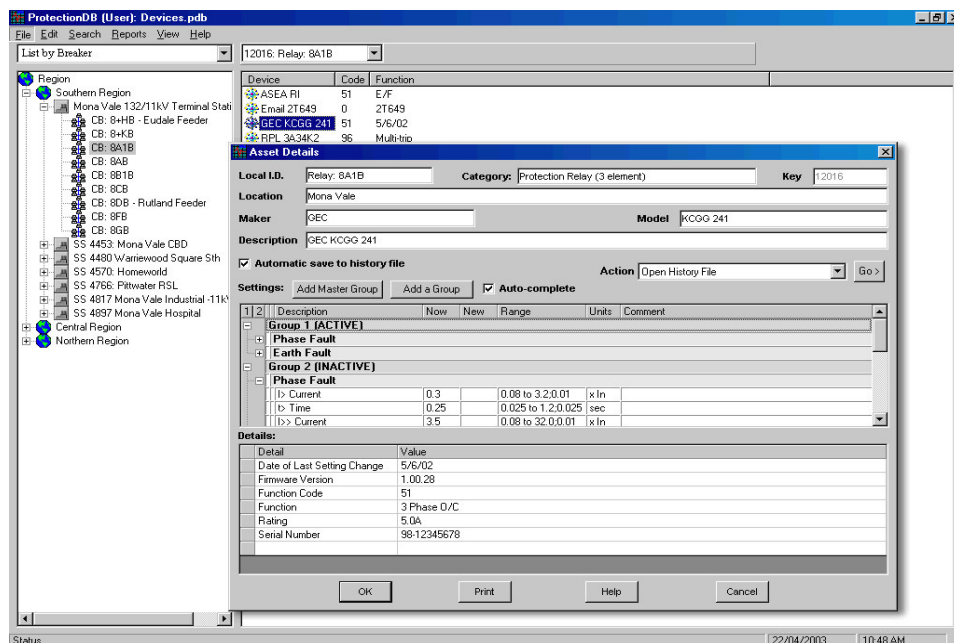
In Addition “ProtectionDB” enables users to quickly and efficiently access all the information available on their protection devices.

Relay makers proprietary settings files may also be stored within the “ProtectionDB” database and, in some cases depending on the degree of support available from the makers proprietary settings software-direct interaction with the makers’ software may be possible to automate the unloading and recovery of edited settings files.

### Features

Features of the **User Module** include:

- Intuitive access to all database data through a Windows Explorer –type tree view panel the allows the user, with a few mouse clicks, to step through from a high level view of the network data to an individual protection device and its associated equipment.
- Multiple data access hierarchies are supported so the user can simply select from a list of defined hierarchies to use the most appropriate data access method for the task at hand. (Custom hierarchies are to be defined in the Admin Module -see below).
- Security settings on the database determine the type of access rights each individual user has – either:
  - User – Read Only
  - User – Read / Write
  - Admin – Read / Write
- Users with Read Only access rights can view all the data but are unable to make changes to any data.
- Read / Write access allows the user to :
  - Add or delete protection devices or other assets to/from the database. (Note that deleted assets are only tagged as being deleted until deletion is confirmed through the admin module (see below)
  - Change any protection device settings, or asset attribute data.
  - Create and edit associations (links) between assets (protection devices and other network components, or other physical assets, or “virtual” assets e.g. a protection group.



- Create and manage Protection setting instructions (PSI's). All PSI's in the database can be accessed directly from the display of details for the protection device they refer to, by their identification number , or through a management function
- Search for Protection Devices by:
  - Asset or Protection Device details, including settings details
  - Protection Settings Instructions
  - History file details (with optional filtering by data range and entry type) ... and more !

Features of the **Admin Module** include:

- Maintaining a Device Catalogue of protection devices.
- Creation and editing of protection device and other asset categories and defining the detail attributes to be stored for each category. The number of attributes that can be defined for any device category is virtually unlimited.
- Creating *Settings Templates* for particular make & model of protection devices
- Setting up various data lists used by “ProtectionDB”
- Defining data access hierarchies based on an ordered series of links defined between assets in the database. For example a standard hierarchy supplied with “ProtectionDB” is one that traces

lines from *Regions-to-Substations-to-Circuit Breakers-to-Protection Devices*. (see the left hand panel of the main window of the User Module interface shown above). Any data access hierarchy so defined can be immediately made available to all users of “ProtectionDB” or restricted to users of the *Admin Module*.

- Add documents of any kind (doc, pdf, dwg, dxf, xls, etc) to the database and link them to a particular *make/model* or *make/series* of protection device. All documents will then be immediately accessible to users from any instance of that *Make/Model* or *Make/Series* of device.
- Archiving and purging of:
  - Old History File Data
  - Old Protection Setting Instructions
  - Deleted assets (assets tagged as deleted by users)

### Customisation

Pre-delivery customisation of some features is available (details on request)

### Data Importation/Translation

A data importation/translation service is available to transfer existing computerised protection data to “ProtectionDB” (details/quotations available on request)

### System Requirements

- IBM compatible computer with Windows XP / Vista or 7.0
- At least the minimum memory required by the operating system
- Approximately 16mb Hard disk space
- Printer or plotter (Colour preferred)